

Neighborhood Perceptions and Well-being across the Early Life Course

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To my mother, MarKay, who gave me my start  
and  
To my future wife, Amy, who gave me my reason to continue

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# CHAPTER I

## INTRODUCTION

Neighborhoods, which are defined by the geographical and social contexts in which most people experience their day to day lives, have a profound effect on the ability of individuals to be productive and healthy. Neighborhoods play a vital role in determining access to jobs, food, good schools, healthcare, leisure activities, and social groups. The communities in which people live can be a significant source of or escape from daily stressors (Ross and Mirowsky 2001; Weden, Carpiano, and Robert 2008). Neighborhoods structure the availability of housing, access to helpful social networks, and exposure to crime and environmental hazards (Leventhal and Brooks-Gunn 2000; Sampson, Morenoff, and Gannon-Rowley 2002; Turney and Harknett 2010). However, the distribution of resources across different neighborhoods are influenced by major social forces that tend to concentrate wealth and opportunity in certain geographical locations while other areas have relatively little to offer residents (Wilson 1987, 1996). Economic factors, race and ethnicity, and government policies all converge to create major disparities in wealth, safety, and disorder across different neighborhoods (Massey and Denton 1993; Oliver and Shapiro 2006). Consequently, it is through the daily interactions with neighborhood people and places that many people feel the harmful or beneficial effects of their hierarchical position in the social structure.

The ways that individuals interact with and perceive their neighborhoods changes across the life course. Children's living situations are largely governed by the choices and constraints of their parents. Neighborhood context shifts upon leaving the parental home to start school, to begin a family of creation, or to live independently, either by choice or by necessity. Changing circumstances throughout adulthood continue to compel people to change their residence.

Employment, marriage, and parenthood create the impetus to find new homes in new locations. Economic fluctuations can also be powerful influences on neighborhood choices as well (Guzzo 2006; Mcauley and Nutty 1982). For example, when major employers in an area relocate their offices or during massive financial upheavals like the 2008 mortgage crisis, families may find themselves forced to move (Burgard, Seefeldt, and Zelner 2012).

Neighborhood context also intersects with social class, an important determinant of neighborhood type and location. With enough economic capital, a family with young children might choose to leave the hectic city for the quiet, safety, and better schools of the suburbs. Alternatively, a single college graduate might find the density, activity, and nightlife of urban environs to be the ideal place to begin professional life after completing school. Others may prefer the comfort of a small town or home that they knew growing up. Still others have little or no choice about where they live; poor families may be confined to areas with cheap accommodations, insufficient job prospects, and few of the amenities that middle-class or wealthy suburban families enjoy (Wilson 1987, 1996). In addition to social class, race and ethnicity are powerful determinants of the neighborhood context. Existing research shows racial and ethnic differences in rates of homeownership, neighborhood quality, and types of household living arrangements (Christie-Mizell, Steelman, and Stewart 2003; Freeman 2005; Geis and Ross 1998; Kamo 2000). Differences in neighborhood context reflect the larger social structure in which households are embedded. A history of redlining practices and white flight from urban areas has ensured that minority families live separately from whites and in areas characterized by poor housing stock, low rates of homeownership, and relatively few public and private resources (Massey and Denton 1993; Oliver and Shapiro 2006; Shapiro 2004). For these reasons,

neighborhoods represent a key site for understanding how race and class inequality structure the everyday lives of individuals and create race and class disparities in health and well-being.

Despite clear evidence across a number of studies that neighborhoods are associated with a variety of well-being outcomes, there are still major gaps in knowledge about these relationships. Specifically, very little neighborhood research has accounted for neighborhood influences across the life course. Socioeconomic disadvantage in childhood creates long lasting deficits in achievement, psychosocial resources, health, and well-being throughout life (e.g., Dannefer 2003; Elder, Shanahan, and Jennings 2015; Goosby 2007, 2013; Hargrove and Brown 2015). To date, though, only a few studies have specifically acknowledged the independent influence that neighborhoods might have in creating well-being disparities across the life course (e.g., Vartanian and Houser 2010; Wheaton and Clarke 2003; Wickrama and Noh 2010). Additionally, it remains unclear exactly what processes translate neighborhood differences into well-being disparities (Murry et al. 2011). Neighborhood disadvantage does not necessarily directly create differences in well-being outcomes. Instead, neighborhoods structure social contexts in ways that influence interpersonal behavior and psychosocial conditions that ultimately lead to health differentials.

## **RESEARCH QUESTIONS**

In this dissertation, I explore ways that perceptions of neighborhood disorder and disadvantage are associated with well-being throughout the life course in an effort to better elucidate the processes that link neighborhoods to health disparities. This project is made up of three separate but related studies that each examine a different period in the life course: childhood, adolescence, and young adulthood. Each paper offers insight into possible processual

linkages between neighborhood perceptions and well-being that are particularly relevant to the life course stage under study.

Each study is guided by a research question relating the stage of life to a theoretically derived process expected to create neighborhood-linked differences in well-being.

- 1) Does neighborhood context influence parent-child relationships, and does this influence affect children's well-being?
- 2) Does childhood neighborhood context influence the growth and development of self-concept during adolescence?
- 3) Do childhood neighborhood experiences influence well-being in young adulthood? Is this relationship mediated by neighborhood influences on psychosocial resources?

Before describing the theoretical frameworks that informed the dissertation, it is necessary to provide a few notes about terminology used in this chapter. The primary neighborhood variables used throughout the three studies in this dissertation are neighborhood perceptions which are subjective measures of disorder, safety, and interpersonal relationships in neighborhoods. In this chapter, however, I use *neighborhood context* as a broad term to refer to both the objective and subjective qualities by which neighborhoods are characterized. This terminology allows me to succinctly discuss research that incorporates either type of neighborhood measurement without resorting to long explanations of which measures were used in each study. As discussed later on, while the distinction between objective and subjective measures is an important one, neighborhood research has consistently found that objective neighborhood characteristics primarily influence the health of individuals through the ways that they *perceive* those characteristics as disordered or unsafe (Christie-Mizell et al. 2003; Geis and Ross 1998; Haney 2007; Ross and Mirowsky 2001). Additionally, neighborhood context has

wide-ranging consequences for behavior and health. In order to discuss the scope of these consequences, I use the term *well-being* in this proposal to represent an array of individual outcomes including mental health (e.g., depressive symptomatology, drinking), self-concept (e.g., mastery, self-esteem), and physical health. However, well-being as used here does not include such outcomes as economic prosperity or academic achievement and is intended to capture only social psychological, health, and interpersonal outcomes.

## **BACKGROUND AND THEORY**

In this project, I employ elements from social capital theory (Christie-Mizell et al. 2011; Coleman 1988), social disorganization theory (Hwang and Sampson 2014; Sampson and Raudenbush 1999), and stress process theory (Pearlin et al. 1981; Turner 2010) to explain the impact of neighborhood context on individual well-being. In addition, the life course framework (Elder, Johnson, and Crosnoe 2003; Elder 1998) and cumulative disadvantage theory (Brown, O’Rand, and Adkins 2012; Dannefer 2003) help guide and structure the research questions and analytic models. The life course perspective also provides a connective link between the three studies which demonstrate the disparate impact that residence has throughout different stages of life from childhood to young adulthood.

The social capital approach to neighborhood effects suggests that neighborhoods are an important source of social ties (Geis and Ross 1998; Sampson et al. 2002). Outside of families and workplaces, neighborhoods are key sites of daily interaction where people develop friendships with neighbors and come to rely on them for support. Support from neighbors can be actual or perceived—that is, either help received, such as borrowing items or childcare, or the belief that neighbors will be able to help when called upon (Turner and Brown 2010; Turney and Harknett 2010). Neighbors may also keep watch over neighborhood children and enforce norms

of acceptable behavior that prevent unhealthy behaviors and unhealthy social environments (Coleman 1988; Sampson and Raudenbush 1999). Social support, in turn, has beneficial effects on individual well-being, but varies according to social context (Turner and Brown 2010). Residence in disadvantaged or unstable neighborhoods is associated with lower levels of social support (Schieman 2005; Turney and Harknett 2010). However, having social ties in the neighborhood can also protect against feelings of powerlessness and depression that are brought about by neighborhood disorder (Geis and Ross 1998; Haines, Beggs, and Hurlbert 2011). Through a combination of actual social ties and trust in those around them, individuals rely on the support of their neighbors as a protective factor against damaging social forces both within and outside of the neighborhood.

Though neighborhoods can provide positive benefits through social connections, social disorganization theory (Sampson and Raudenbush 1999) and Wilson's underclass model (Wilson and Taub 2006; Wilson 1987, 1996) posit that neighborhoods have negative effects on well-being caused by lack of opportunity and outward signs that the people in the neighborhood do not have the ability to maintain order. When jobs are scarce, schools are bad, and stores offer unhealthy goods and services, the impact of concentrated poverty can have detrimental effects on a neighborhood's residents (Wilson 1987, 1996). Disordered and disadvantaged neighborhoods are also sources of environmental and social stress (Sampson and Raudenbush 1999; Wheaton and Clarke 2003). Neighborhood social stressors can include crime, fear of victimization, gang activity, racial discrimination, or troublesome neighbors. Environmental hazards and irritants in neighborhoods can include toxic chemicals and trash, loud noise, dangerous street traffic, and lack of safe pedestrian or transit routes. Daily exposure to these stressors and a general belief that

people are not concerned with one another erodes health and well-being in residents of disordered neighborhoods.

Neighborhood stressors are more likely found in urban, poor, and minority neighborhoods, due in part to the loss of quality jobs, white flight, lack of investment, and formal and informal government policies that have led to concentrated disadvantage (Massey and Denton 1993; Oliver and Shapiro 2006; Sampson and Raudenbush 1999, 2004; Wilson 1987, 1996). Alternatively, affluent neighborhoods tend to offer a wide variety of activities and goods, offer quality schools and ample access to jobs, and they are likely to benefit residents and families in a variety of ways (Dupere et al. 2010; Finch et al. 2010; Swisher, Sweet, and Moen 2004). A family that finds itself in hard times and that lives in a neighborhood with many resources is likely to have a much easier time raising children, finding work, and buying good food compared to a similarly hard hit family in a poor and disorganized neighborhood. In addition to a lack of resources, the family in the poor neighborhood will face numerous stressors endemic to their neighborhood that further negatively impact their health. Neighborhood inequality in resources and stressors helps explain how the social structure of these communities differentially impacts individual well-being.

Researchers working from a neighborhood disadvantage perspective rely on measures of subjective and objective physical and social disorder to measure the toll that disordered neighborhoods take on residents (Sampson and Raudenbush 1999). Objective neighborhood disorder is often defined as the presence of visible indicators of social and physical disorder such as trash, graffiti, drug use, buildings in disrepair, and criminal activity. Objective disorder measures are typically derived from Census data and other official reports of unemployment, poverty, and crime, though researchers have more recently begun measuring visual signs of

disorder as well (Hwang and Sampson 2014; Sampson and Raudenbush 1999). Higher levels of objective neighborhood disorder, including those mentioned above, have been linked to worse physical and mental health, strained social relationships, and higher levels of substance use (Cutrona et al. 2003; Finch et al. 2010; Hill and Angel 2005; Kim 2010; Ross 2000).

An influential early theory of neighborhood disorder suggested that when small signs of disorder—such as a broken window—are left untended, more and worse signs of disorderly conduct will accumulate until people no longer feel safe using their neighborhoods as they once did (Wilson and Kelling 1982). While this idea is linked to an objective feature of the neighborhood (i.e., the broken windows), it relies on residents' *perceptions* of that feature as disorder before these features create distress. Subjective perceptions of neighborhood disorder may be a more important mechanism that influences residents' well-being. The perception that one's surroundings are disorderly and unsafe are more proximal to the kinds of psychosocial processes that are expected to influence individual well-being than are measures of objective disorder (Christie-Mizell et al. 2003; Weden et al. 2008). Measures of perceived neighborhood disorder allow residents to define the meaningful boundaries of their neighborhood unlike measures of objective disorder. Perceived boundaries of neighborhoods are those that are actually experienced by residents and which have the most salience to their daily lives. Research on perceived neighborhood disorder has indeed shown that higher levels of disorder lead to deficits in self-concept (Christie-Mizell and Erickson 2007; Geis and Ross 1998; Ross, Mirowsky, and Pribesh 2001; Ross and Mirowsky 2009) and worse mental health (Christie-Mizell et al. 2003; Ross and Mirowsky 2001, 2009; Schieman, Pearlin, and Meersman 2006). In some instances, perceived disorder also moderates or exacerbates the negative effects of



objective structural disadvantage (e.g., high unemployment rates) on well-being outcomes (Christie-Mizell and Erickson 2007; Ross et al. 2001).

Perceived and objective neighborhood disorder are related and positively correlated (Christie-Mizell and Erickson 2007; Geis and Ross 1998). Even net of other neighborhood characteristics that influence neighborhood perceptions, objective measures of disorder maintain a significant association with perceived disorder (Sampson and Raudenbush 2004). These findings suggest that the residents' perceptions and objective measurements of neighborhood characteristics are reliably aligned. Because perceptions of disorder are so strongly connected to psychosocial processes and to objective measures of disorder, the primary neighborhood measures utilized are neighborhood perceptions. In part, this represents a limitation of the data which did not include many objective neighborhood measures. However, each study does include some measures of objective neighborhood location such as urban, suburban, or rural location as well as region.

Theories of neighborhood social capital and disadvantage do not function independently of one another nor do they offer mutually exclusive explanations for how neighborhood context impacts well-being. Stress process theory (Pearlin 1999; Pearlin et al. 1981) provides a useful framework to understand how social capital and contextual disadvantage jointly influence the individual. The stress process model involves three interrelated concepts: stressors, mediators/moderators, and health outcomes (Turner 2010). In this model, stressors are thought to diminish health outcomes such as psychological and physical well-being. Personal and social resources typically act as mediators that intervene between stressors and distressful outcomes or moderators that alter the severity of distressful outcomes (Turner, Lloyd, and Roszell 1999; Turner and Roszell 1994; Turner 2010). Stressors do not impact all individuals equally, but can

instead be mitigated by personal and social resources such as social support, coping skills and a positive self-concept. Stressors can also damage these resources and diminish one's ability to cope with challenges which in turn leads to worse physical and mental health. Location in the social structure has a profound impact on the presence and type of stressors as well as the ability to successfully build and maintain personal and social resources (Pearlin 1999; Turner and Avison 2003). An individual occupying a privileged position in the social structure is likely to have fewer day to day stressors and more resources—both personal and material—to cope with these stressors which will ultimately result in less harm to health.

Neighborhood context is influential in the stress process framework because it is a proximal source of stressors—including crime, fear, dangerous physical environments and other signs of disorder—but it can also provide the context for the growth and maintenance of social networks and other psychosocial resources (Haines et al. 2011; Pearlin 1999). A highly disordered neighborhood without social cohesion presents more challenges to everyday life in the form of crime and fewer opportunities and also limits the availability of strong social supports that might help individuals weather these problems. A similar neighborhood characterized by high crime and low opportunities but with strong social ties and institutions such as church and neighborhood organizations may be less detrimental to its residents. The stress process model is useful for studies of neighborhood context and well-being because it allows for processes associated with neighborhood social capital and disorganization to act on individuals simultaneously.

### **RESIDENCE ACROSS THE LIFE COURSE**

In addition to the theories about neighborhoods and well-being presented above, this research is guided by the life course framework (Elder 1998). The impact of neighborhood

context changes alongside various stages of life and transitions that people experience as they age. Characteristics of the neighborhood can shift in importance through different life stages in several ways. Peer networks are more readily formed in neighborhoods and schools in childhood than they are in adulthood, for instance (Crosnoe 2000). The meaning or salience of certain aspects of neighborhood context can shift throughout life as well. For example, a child may not notice the signs of disorder in her neighborhood, but these signs will become important to her when she has children of her own.

Several aspects of the life course framework are especially helpful for understanding the impact of neighborhood context on well-being. The concept of “linked lives” and the importance of the timing of major life events are two aspects that are particularly useful in this research (Elder 1998). The idea of “linked lives” suggests that individuals are not isolated from one another in their experiences of life events and social contexts. The impacts of neighborhood context on one person are also likely to be felt by their significant others as well, both directly and indirectly. The life course framework’s emphasis on linked lives implies that the effects of neighborhoods on well-being will be intergenerational (Sharkey and Elwert 2011). A mother’s fear for her child’s safety in the neighborhood may manifest in the child as anxiety, for instance. Life course timing influences the impact of neighborhood context on individuals because the salience of certain neighborhood characteristics is contingent on the stage of life. Neighborhoods are experienced differently by those who have obtained certain typical life course milestones such as marriage and parenthood compared to their single, non-parent counterparts. Thus, a single neighborhood stressor may be interpreted differently by residents—representing a major issue for one, but only a benign nuisance to another. For instance, living in a noisy area might mean little to a young, single person who spends a lot of time out of the house, but might cause

significant distress to a family with a young baby. Relatedly, major life course transitions like marriage, parenthood, and employment influence the timing of neighborhood changes and precipitate moves to new homes and locations (Guzzo 2006; Mcauley and Nutty 1982).

In addition to linked lives and timing, accumulation of advantages or disadvantages is another feature of the life course that is closely linked to residence. As people transition from one stage in the life course to the next, the effects of prior experiences impact later ones. Negative childhood experiences manifest in adolescent decisions which impact adult opportunities. Early advantage sets the course for later success. As advantage and disadvantage accumulate throughout peoples' lives, they lead to disparities between individuals and social groups (Dannefer 2003). Because early neighborhood context affects both development and later neighborhood context, cumulative advantages/disadvantages are key to understanding the impact of neighborhoods on well-being throughout the life course. Researchers have found evidence for the cumulative effects of neighborhood disadvantage and neighborhood processes such that early disadvantage leads to later negative outcomes (Crowder and South 2011; Fauth, Leventhal, and Brooks-Gunn 2007; Sharkey and Elwert 2011; Wheaton and Clarke 2003). However, the studies that examine the mediating and moderating effects of residence on neighborhood disadvantage are few in number.

### *Childhood and Adolescence.*

Neighborhoods are important for the socialization of young people (Murry et al. 2011). Peers, schools, significant others, and non-academic activities for children and adolescents are often neighborhood-dependent. Children in low-income and working class homes are especially likely to find their activities after school and during the summer bounded by their homes and neighborhoods (Lareau 2002). Disparities in neighborhood resources can have impacts on

children when they are most vulnerable. Social ties and social control mechanisms in neighborhoods can help keep children on track to succeed in school and to stay out of trouble. If children live in neighborhoods characterized by a lack of social cohesion and limited opportunities, children may easily be diverted onto less healthy life courses. In fact, research shows that neighborhood disadvantage is associated with lower academic achievement, poorer mental health, and higher rates of violent behaviors among youth (Leventhal and Brooks-Gunn 2000; Murry et al. 2011). Wheaton and Clarke (2003) note that neighborhood disadvantage in childhood has important influences on externalizing behaviors as people grow up. These negative effects may be a result of the lack of social ties and social control in disordered neighborhoods.

In their review of neighborhoods and adolescent development, Murry and her colleagues (2011) call for more attention to be focused on the *processes* through which neighborhoods affect children. In other words, neighborhoods themselves do not create internalizing or externalizing problems in children, but they provide the context through which other forces take their toll. The aggregation of poverty and disorder or affluence and cohesion that characterizes certain neighborhoods creates environments that are experienced as stressful or beneficial through mechanisms such as social ties (Haines et al. 2011), self-concept (Christie-Mizell and Erickson 2007; Geis and Ross 1998), emotions (Schieman et al. 2006), collective efficacy (Sampson and Raudenbush 1999), and stability (Ross, Reynolds, and Geis 2000). Each of these mechanisms is associated with possible processes that link residence and child well-being. Here, I focus on two potential processes that are theorized to translate neighborhood context into differential outcomes for children and adolescents: parenting and the development of self-concept.

*Parenting.* Neighborhoods may affect children indirectly by influencing the well-being of their parents. In terms of psychosocial well-being, perceptions of neighborhood disorder can be especially distressing for mothers. For example, Christie-Mizell, Steelman, and Stewart (2003) found that mothers who perceive high neighborhood disorder experience significantly more distress than those who do not, net of a host of other confounding factors. Others have found higher neighborhood disorder and lower social cohesion to be associated with increased parenting stress (Franco, Pottick, and Huang 2010). Parents who have moved from poor to more affluent neighborhoods feel less parenting and neighborhood-related stress and less personal distress (DeLuca and Dayton 2009). One possible explanation for mothers' diminished emotional state may be a response to lowered mastery or the sense of control over their environment—an element of self-concept that is an important buffer against stress. In fact, perceived neighborhood disorder has been found to lower mothers' mastery (Christie-Mizell and Erickson 2007). Parents who are distressed and who find their coping capacities taxed may have difficulty cultivating a warm, consistent parenting style, and this can in turn influence their children's health and behavior (Jocson and McLoyd 2015; Klebanov, Brooks-Gunn, and Duncan 1994). When parents have more social capital in the form of stronger ties to their neighbors, they have higher mastery and fewer negative effects from the strains of parenting (Carpiano and Kimbro 2012). Concerns about neighborhood disorder can cause parents to fear for their children's safety in poor neighborhoods (Chin and Phillips 2004; Kimbro and Schachter 2011). This fear may be one reason that disorder has such a consistent negative effect on parental well-being. Fear of one's neighborhood can also limit the freedom that parents give their children when they are unable to find or afford other activities for them to do (Chin and Phillips 2004). Such "limiting" can, in turn, impinge on children's developmental trajectories (e.g., establishing independence) (Chuang

et al. 2005). Taken together, the evidence suggest that poor and disorganized neighborhoods can have harmful effects on the well-being of parents which can impact the quality of their parenting which in turn impacts their children's well-being.

*Self-Concept.* As mentioned previously, the stress process suggests that neighborhood context creates health disparities because of increased stressors in structurally disadvantaged areas (Pearlin 1999; Turner 2010). However, neighborhoods may also damage the capacity of individuals to cope with stress. Self-concept is one of the psychosocial resources that has been hypothesized to be an important coping or buffering mechanism in the intraindividual processes linking stressors to distress. Two evaluative dimensions of self-concept are often considered in the sociological literature: self-esteem and mastery. Self-esteem is a global appraisal of how positively a person feels about their self (Rosenberg 1965; Turner et al. 1999) while mastery (also known as self-efficacy or personal control) is typically defined as the amount of control that one perceives over the immediate environment and important outcomes in life (Bandura 1977; Pearlin et al. 1981).

Neighborhood disorder has been associated with lower self-esteem and mastery in several studies. High levels of objective and perceived neighborhood disorder are related to lower levels of mastery and self-esteem among adults (Boardman and Robert 2000; Christie-Mizell and Erickson 2007; Haney 2007). Self-concept is somewhat fluid throughout childhood and adolescence. Experiences of success and failure, education, and relationships with peers during this period of the life course are highly influential in determining the availability of these personal resources throughout adulthood (Demo 1992; Falci 2011; Mirowsky and Ross 2007). Given the importance of neighborhood effects on self-esteem and mastery in adulthood, it is likely the case that neighborhood context also plays an important role in determining self-

concept while it is still developing. In turn, self-concept development has important implications for well-being later in life.

### *Young Adulthood*

Individuals typically make their first independent decisions about their neighborhood context when they are young adults. A number of changes occur during this period that influence these decisions such as finishing mandatory schooling, starting college, leaving the family home, entering serious romantic partnerships, and having children. As they take on new roles and responsibilities, young adults move into new neighborhood contexts that might be very different than those they experienced in childhood (Guzzo 2006). Neighborhoods can influence the timing of entrance into some of these roles by structuring marriage markets or opportunities to have children, for instance (South and Crowder 1999, 2000). Thus, young adulthood, with its myriad transitions related to neighborhood context, provides a critical point at which to understand the impact of neighborhoods on well-being.

Research suggests that neighborhood disadvantage can adversely affect young adult well-being. Neighborhood disadvantage is associated with higher levels of externalizing and internalizing problems (Schulz et al. 2000; Wheaton and Clarke 2003) as well as physical health (Ross and Mirowsky 2001) and substance abuse problems (Hill and Angel 2005). Perceptions of neighborhood disorder can increase levels of distress as well (Christie-Mizell et al. 2003). The link between contemporaneous neighborhood disorder and mental and behavioral well-being outcomes in adults is well established. Several longitudinal studies have also demonstrated lingering effects of childhood residence independent of contemporaneous effects. The long lasting impact of early neighborhood disadvantage on young adults may lead to lowered educational attainment, poorer mental health (Wheaton and Clarke 2003; Wickrama and Noh



2010), and worse physical health (Vartanian and Houser 2010). These contemporaneous and long-term consequences impact health through late life and exacerbate health inequalities (Johnson, Schoeni, and Rogowski 2012). Though limited research directly examines the impact of neighborhood context on young adults, this period appears to have great potential for understanding neighborhood effects throughout the life course.

### **GAPS IN THE LITERATURE**

The theoretical mechanisms presented above (e.g., social capital, social disorganization, stress process) do not fully explain differences in well-being, nor do they offer complete explanations of possible processes linking neighborhoods to outcomes. Having social ties in the neighborhood is important to well-being or academic achievement, for instance, but those ties must be activated in order to be useful (Coleman 1988). Each theory provides potentially useful leverage for gaining a fuller understanding of neighborhood context and well-being, however. In addition to bringing these theories to bear on the problem, in this dissertation, I expand the literature on neighborhoods and well-being in three important ways: 1) I use nationally representative, longitudinal data rather than localized samples; 2) I focus on the *processes* that are hypothesized to connect residence to well-being rather than simply examining differences; and 3) I contextualize these processes using a life course framework.

#### *Longitudinal Data*

Research on neighborhood effects and family living arrangements abounds in the recent sociological literature, but these studies often focus on short periods of time and fail to capture a broad range of household and neighborhood level influences on individual and family well-being. Longitudinal investigations of neighborhood effects are becoming more prevalent, but many longitudinal studies still rely on relatively short periods of time between measuring

neighborhood characteristics and measuring outcomes of interest. Murry and colleagues (2011) note that longitudinal studies in this area are still lacking despite a call to increase focus on long term effects a decade earlier (Leventhal and Brooks-Gunn 2000). In part, the lack of longitudinal research may be due to a lack of data. The kind of long term, multigenerational data that allow for in-depth neighborhood research have only become available relatively recently. Furthermore, much of the data that includes detailed neighborhood information comes from regional datasets and lacks generalizability to the national population.

Studies that have taken longer term and more nuanced approaches to the study of neighborhood effects over time have found evidence that neighborhood effects may be stronger and more substantial than previously believed (Crowder and South 2011; Wodtke, Harding, and Elwert 2011). These studies have demonstrated that measuring neighborhood context over the life course provides more explanatory power and can uncover significant effects that are otherwise suppressed when looking at shorter time periods. Researchers have also noted the value of understanding intergenerational impacts that neighborhood context has on children and adults (Sharkey and Elwert 2011). However, these studies primarily focus on academic outcomes and more research is needed on the long term effects of neighborhood context on psychosocial well-being and mental health.

### *Neighborhood Processes*

Lack of longitudinal data is not the only problem for many studies of neighborhood context. These studies also often rely on data that come solely or primarily from low-income neighborhoods, thus limiting the generalizability of the findings on the effects of neighborhood context. A narrow focus on one type of neighborhood can underspecify neighborhood effects (Leventhal and Brooks-Gunn 2000), and it can also limit the ability of researchers to find

important group differences and interactive effects. The same neighborhood processes that might be found time and again among low-income residents may not hold for higher-income residents or those who have lived in both low and high-income areas. Relatedly, the range of variables under consideration in neighborhood research is often limited to neighborhood SES and race-ethnic composition. Although these variables have been shown to have notable effects on well-being and behavior (Leventhal and Brooks-Gunn 2000), the process through which they act is often left unspecified. For instance, though they find strong longitudinal and multigenerational neighborhood, Sharkey and Elwert admit that they “stop short of assessing the role of specific mechanisms in mediating the effect of parent’s childhood neighborhoods on their children’s cognitive ability” (2011:1970). Given the fairly consistent finding that neighborhood context matters for a variety of outcomes, the next step for researchers is to determine how and why they matter by explicitly examining process.

### *Life Course Paradigm*

This project considers neighborhood context effects at several distinct points in the early life course: childhood, adolescence, and young adulthood. In the three studies, I focus on outcomes and processes that are particularly salient at each of these stages. The project as a whole is sensitive to the issues of linked lives, timing, and cumulative disadvantage (Dannefer 2003; Elder 1998). In childhood, for instance, the parent-child bond is an important determinant of child well-being, and understanding how parents and their children jointly experience their residence is crucial to studying this life stage. In adolescence, neighborhoods may have particularly strong effects when aspects of well-being such as self-concept are particularly vulnerable to change. Young adulthood represents a shift from one major stage of life to the next, and the cumulative effects of childhood and adolescent contexts in this period set the stage for

the way individuals will experience the rest of their adult lives. In addition to being sensitive to life course issues, this study examines roughly the same sample of individuals across all three stages. The findings thus represent a cohort's experience with neighborhoods as it grows up. While a few studies have considered neighborhood context effects across longer periods of the life course (Johnson et al. 2012; Vartanian and Houser 2010; Wheaton and Clarke 2003; Wickrama and Noh 2010), few have gone in-depth into each stage to understand how neighborhoods have specific impacts in different periods.

In the studies that follow, I answer my research questions using intergenerational, longitudinal data to examine how neighborhood context across the early life course impacts the well-being of individuals in childhood, adolescence, and young adulthood. Though distinct, these studies are related to one another by the life course thread that weaves them together. Each study explores one piece of the overall process that translates disparities in neighborhood context into disparities in well-being throughout the life course. Ultimately, the goal of this project is to provide evidence for the pervasive influence that neighborhood contexts have on the health and well-being of young people from the time they are just entering grade school to marriage, careers, and beyond. A better understanding of the life course context of neighborhood effects benefits neighborhood research, but it also offers key insights into the translation of social structural disparities to well-being disparities at the level of the individual.

## **CHAPTER II**

### Neighborhood Impacts on Child Anxiety and Depression:

#### The Influences of Maternal Well-Being and Mother-Child Relationships

### **ABSTRACT**

Disordered neighborhoods have been consistently linked with worse well-being for resident children compared to those who live in more advantaged neighborhoods. Though this finding is robust across studies, less is known about how neighborhood characteristics translate into poor psychosocial function in children and how these effects endure throughout childhood. In this paper, I examine one possible process linking disordered neighborhoods to child distress through neighborhood effects on maternal well-being and parent-child relationships. Using four waves of nationally representative parent and child data from the National Longitudinal Survey of Youth – 1979 and Child samples, I estimate structural equation models that suggest disordered neighborhoods increase child distress in several ways. First, disordered neighborhoods are associated with increased maternal distress which in turn is associated with increased mother-child arguments. I also find that mothers in disordered neighborhoods punish their children more frequently. Increased mother-child arguments and punishments are both associated with higher levels of child distress across multiple waves of data. These findings demonstrate how structural inequalities at the neighborhood-level and the negative consequences they have for interpersonal relationships can create deleterious effects throughout childhood.

## INTRODUCTION

The challenges associated with living in a poor and disordered neighborhood have negative implications for child mental health (Leventhal and Brooks-Gunn 2000, 2011; Murry et al. 2011). Children in disadvantaged neighborhoods experience the stresses, limited opportunities, and dangers of living in a disordered place during a critical period in their development, and these early experiences have lasting consequences (Fauth et al. 2007; Sampson, Sharkey, and Raudenbush 2008; Vartanian and Houser 2010; Wheaton and Clarke 2003). Children who experience this constellation of neighborhood-related stressors and interpersonal problems manifest problems in a variety of ways, but they are particularly prone to poor mental health and behavioral outcomes. Compared to their more advantaged counterparts, children in poor neighborhoods have higher levels of internalizing problems like depression and anxiety as well as higher levels of externalizing problems such as hyperactivity and aggression (Brooks-Gunn et al. 1993; Caughy, O'Campo, and Muntaner 2003; Roosa et al. 2005; Xue et al. 2005). Children who live in resource deprived areas are especially vulnerable to neighborhood disorder because they spend more of their time interacting with their neighborhoods for lack of other opportunities (Chin and Phillips 2004).

Neighborhood researchers tend to agree that characteristics of disordered neighborhoods are associated with a range of negative outcomes for children, but the processes that link neighborhoods to child mental health outcomes are not as thoroughly understood (Leventhal and Brooks-Gunn 2000). A variety of reasons have been proposed for these relationships at the neighborhood level—such as neighborhood stressors, socioeconomic resources, and residential stability—and at the household level—such as parent-child conflict and parenting quality (Brooks-Gunn et al. 1993; Brooks-Gunn, Duncan, and Aber 1997; Jocson and McLoyd 2015;

Roosa et al. 2005). A promising avenue of research in this area focuses on the influence that neighborhoods have on parent-child relationships which, in turn, have a major impact on child well-being. Children's neighborhood experiences are largely shaped by their parents or guardians who set the parameters of their interaction with neighboring people and places (Kimbrow and Schachter 2011; Lareau 2002). Parents are themselves influenced by disorder in their residential context in ways that affect their ability to nurture and develop healthy relationships with their children (Leventhal and Brooks-Gunn 2000; Murry et al. 2011). Thus, residence is likely to affect well-being in childhood indirectly through the impacts of residence on parental well-being and parent-child relationship quality. Residential contexts that support parental well-being should have beneficial effects on children through better parent-child relationships, while residential contexts that create distress for parents can have negative impacts on child behavior and mental health.

In this paper, I investigate the influence that neighborhoods exert on child well-being both directly and through the mother-child relationship. This study aims to enhance the literature on neighborhood effects in two ways. First, it uses longitudinal and intergenerational data, heeding the call for neighborhood research to make serious consideration of the temporal aspects of neighborhood effects (Sharkey and Elwert 2011; Wheaton and Clarke 2003). Second, examining the link between neighborhoods, parenting, and child well-being also emphasizes the need to better specify the processes through which neighborhood disadvantage results in unequal outcomes for children (Leventhal and Brooks-Gunn 2000; Murry et al. 2011; Sampson et al. 2002).

## **BACKGROUND AND THEORY**

As a theoretical framework, this study employs elements from social disorganization and stress process theories. Social disorganization theory posits that both objective and subjective characteristics of the neighborhood can jeopardize the health of residents (Sampson and Raudenbush 1999). Neighborhood disadvantage can be especially harmful where concentrated poverty creates conditions where residents have few job prospects, people fear for their safety on a daily basis, and outward signs of disorder are prevalent (Sampson and Raudenbush 1999, 2004; Wilson and Taub 2006; Wilson 1987). Seeing and experiencing neighborhood disorder damages the psychosocial well-being of residents who experience fear, a lowered sense of efficacy, and worse relationships with their neighbors (Christie-Mizell et al. 2003; Geis and Ross 1998; Sampson and Raudenbush 1999). Children who live in distressed or disordered neighborhoods are exposed to more dangerous situations and ambient stressors than their counterparts in advantaged neighborhoods (Leventhal and Brooks-Gunn 2000). These neighborhood stressors include violence, drug use, gang activity, and environmental hazards such as noise and air pollution. Conversely, children growing up in relatively advantaged neighborhoods enjoy safer areas to play, lower crime, and access to more resources and activities which promote healthy development (Dupere et al. 2010; Finch et al. 2010; Swisher et al. 2004). Using social disorganization theory, I expect that higher levels of neighborhood disorder and disorganization will lead to worse mental health and well-being outcomes for children who live in disadvantaged neighborhoods compared to their counterparts living in more advantaged neighborhoods.

Stress process theory (Pearlin et al. 1981; Turner 2010) similarly predicts that the stressors present in disordered and disorganized neighborhoods will have negative influences on residents. However, according to the stress process, stressors are harmful because they can



diminish one's resources and abilities (e.g., self-esteem, mastery, social support) to cope with stressful events and circumstances. Under this paradigm, living with the stressors associated with disordered neighborhoods decreases the personal and social resources one has to buffer such impacts. In turn, this inability to shield oneself from stressors makes residents in disadvantaged areas prone to higher levels of individual distress. Disordered neighborhoods represent a context in which stressors are likely to be long-term and insidious (McLean and Link 1994). While an individual may have enough personal resources in reserve to successfully confront relatively short-term stressors such as job loss or the break-up of a romantic relationship, neighborhood stressors may be more difficult to escape. Escape from neighborhood stressors is especially difficult for people with few socioeconomic resources or who, because of race or ethnicity, have been prevented from living in more advantaged areas (Ross et al. 2000; Wilson and Taub 2006). Therefore, residents of disordered neighborhoods are subject to more day to day stressors that erode coping resources and mental health.

An important buffering mechanism in the stress process model is social support, or the interpersonal resources people have that help them weather difficult times and circumstances (Turner and Brown 2010; Turner and Lloyd 1999). An early and important source of social support for children comes from the mother-child relationship (Boyce 1985; Gayman et al. 2011). Mother-child relationships that are marked with high levels of conflict are associated with worse child mental health, while those that are supportive have a positive impact on child well-being (Gutman, McLoyd, and Tokoyawa 2005; Schofield et al. 2012). Neighborhood disorder can be especially distressing for mothers who may feel that their ability to perform their maternal role is jeopardized by the dangers their children face in the neighborhood (Christie-Mizell and Erickson 2007; Christie-Mizell et al. 2003). For example, Christie-Mizell, Steelman, and Stewart

(2003) found that mothers who perceive high neighborhood disorder experience significantly more distress than those who do not, even after controlling for objective residential characteristics. Poor mental health has a major effect on a mother's ability to give children the warm, nurturing support that leads to positive child outcomes. Mothers who are distressed and who find their coping capacities taxed may have difficulty cultivating a warm, positive relationship with their children, and this can in turn influence their children's health and behavior (Jocson and McLoyd 2015; Klebanov et al. 1994; Meadows, McLanahan, and Brooks-Gunn 2007; Turney 2011). Unsupportive and harsh parenting behaviors are likewise associated with poor mental health in children (Amato and Fowler 2002; Christie-Mizell, Pryor, and Grossman 2008; Dallaire et al. 2006). When neighborhoods have a distressing effect on maternal well-being, these residential contexts are more likely to also have a distressing effect on children through negative mother-child interactions.

Several studies have explored the link between neighborhood disorder, mother-child relationships and children's mental health. One such study found that African American mothers living in disordered neighborhoods had higher levels of distress which were associated with more negative and less positive interactions between parent and child (Gutman et al. 2005). Children who had less supportive relationships with parents reported lower levels of positive adjustment and more signs of negative adjustment. Another study using a sample of Mexican American and white children found a link between neighborhood disorder and child internalizing behavior that was mediated by family cohesion (Deng et al. 2006). Jocson and McLoyd (2015) found neighborhood disorder to increase parental distress which in turn was associated with more harsh and inconsistent discipline and ultimately worse child internalizing symptoms.

The evidence suggests, then, that neighborhood disorder has the potential to negatively affect children through the deterioration of the mother-child relationship. What is less clear is what aspects of the mother-child relationship specifically mediate the neighborhood to distress link. Several parenting behaviors have been included in the literature on neighborhoods, parenting and child distress including parental warmth/support, harsh or inconsistent punishments, and parent-child or family conflict. Supportive parenting and family behaviors (e.g., praise, shared activities, positive interactions) have been found to mediate the relationship between neighborhood disorder and child well-being in some studies (Deng et al. 2006; Gutman et al. 2005) but not others (Jocson and McLoyd 2015). Harsh or inconsistent discipline appears to be reliably associated with neighborhood disorder and negative child outcomes (Gutman et al. 2005; Jocson and McLoyd 2015; Pinderhughes et al. 2007). While parent-child conflict is associated with worse child internalizing symptoms (e.g., Bradford, Vaughn, and Barber 2008), the relation between neighborhoods and conflict is less clear. Parent-child or family conflict is sometimes considered a component of negative parent-child relations and sometimes considered separately which makes it somewhat difficult to determine conflict's role in the process linking neighborhood disorder to child distress. Some studies have failed to find that neighborhood disorder is associated with increased parent-child conflict (Deng et al. 2006). Overall, however, conflict—and parenting behavior constructs which include it—tend to be associated with higher neighborhood disorder and worse child outcomes (Barajas-Gonzalez and Brooks-Gunn 2014; Jocson and McLoyd 2015).

Concerns about neighborhood disorder can cause mothers to fear for their children's safety which may cause mothers to limit their children's freedom to interact with the neighborhood (Chin and Phillips 2004; Kimbro and Schachter 2011). One way that mothers

might limit their children's interactions with dangerous neighborhoods is through punishments that are designed to restrict their child's freedom of movement. A mother living in a disadvantaged neighborhood, fearing for her child's safety and with few alternatives to keep the child out of the neighborhood, might ground him or otherwise prevent him from leaving the house. In turn, limiting children in this way might impinge on their developmental trajectories (e.g., their ability to establish independence) (Chuang et al. 2005) and could ultimately lead to children developing worse mental health than their peers who do not experience such restrictions. Even punishments that are not necessarily harsh and inconsistent, but that exert control over children's freedom of movement, may have a negative impact on child mental health. Taken together, the evidence suggests that poor and disorganized neighborhoods can have harmful effects on the well-being of parents which can impact the quality of their parenting and relationships with their children which in turn impacts their children's well-being.

### **SUMMARY AND HYPOTHESES**

Strong evidence exists for interrelated neighborhood and parenting effects on child well-being. In particular, neighborhood disorder represents a set of stressors that create distress in mothers which can have a negative impact on the ability of mothers to maintain positive relationships with their children. Because of the importance of the mother-child relationship for children's well-being, relationships characterized by high levels of conflict and more punishment intended to control child behaviors is likely to result in worse mental health for children.

A number of studies have demonstrated links between neighborhood disorder, maternal distress, parenting, and child well-being. Many of these studies focus on short time periods and localized samples which can minimize or mask the longer term effects of residence on well-being (Wheaton and Clarke 2003). Further, it still remains unclear what specific parenting

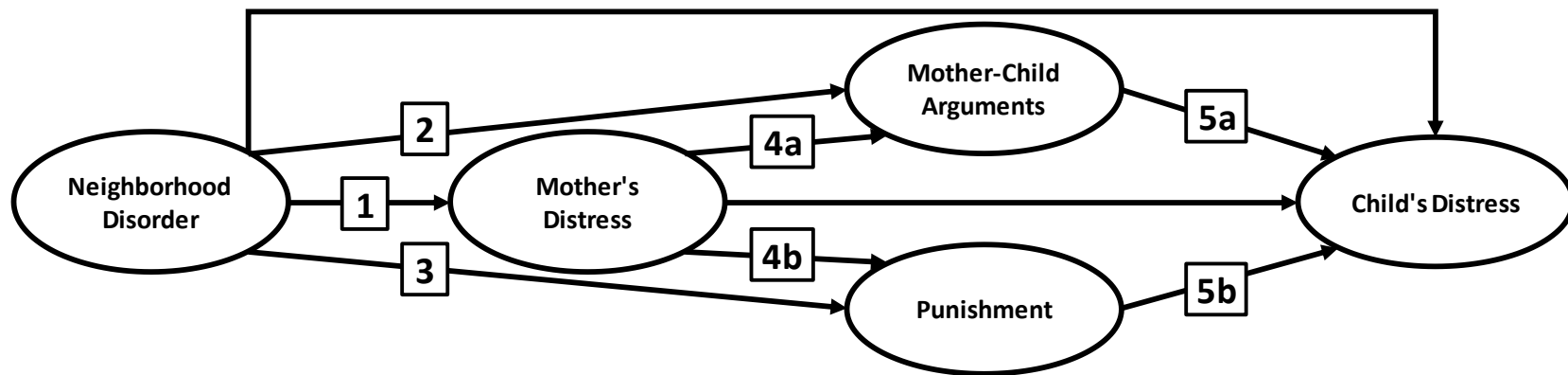
behaviors mediate these associations. In order to support the findings of existing literature, I model these relationships with nationally representative data that spans a number of years and focuses specifically on mother-child conflict and punishments that limit or control child behaviors and movements.

Guided by social disorganization and stress process theories along with the extant literature, the analyses for this study test five primary hypotheses about the influence that neighborhood disorder exerts on child well-being:

- H1. Mothers living in disordered neighborhoods will have higher levels of distress.
- H2. Mothers and children living in disordered neighborhoods will have more arguments.
- H3. Mothers living in disordered neighborhoods will use more punishments designed to limit child movement.
- H4a-b. Distressed mother will have more arguments with their children (H4a) and use punishments designed to limit child movement more frequently (H4b).
- H5a-b. Children who argue more with their mothers (H5a) and who are punished more frequently (H5b) will have higher levels of distress.

A conceptual model linking each of the major variables is presented in Figure 1. Pathways related to each hypothesis are labeled with the respective hypothesis number. In this model, which guided the analyses below, neighborhood disorder and maternal distress are both allowed to have direct impacts on child distress to reflect the likelihood that features of the neighborhood and maternal distress can still have an influence on child distress.

**Figure 1. Conceptual model of relationships between neighborhood disorder, maternal distress, mother-child arguments, punishments, and child distress. Hypotheses 1-5 noted in the squares below.**



## DATA AND METHODS

### *Data*

The data for this study come from the National Longitudinal Survey of Youth 1979 (NLSY79) and National Longitudinal Survey of Youth – Child (NLSY-C) samples. These surveys provide nationally representative panel data spanning three decades and two generations. The surveys are administered by the Center for Human Resource Research on behalf of the Bureau of Labor Statistics. The NLSY79 began in 1979 as a survey of youth from age 14 to 21 that asked a variety of questions regarding school, work, family life, and self-assessed well-being. Respondents were interviewed annually until 1994 and biennially since. The NLSY-C is a separate survey administered to the children of the mothers in the NLSY79 which began in 1986 and has been administered biennially thereafter. The NLSY79 data are advantageous for studies of neighborhood effects because they are nationally representative for this particular cohort and for children born to women of this cohort. The sample is not constricted to a single geographical area or limited to a low-income sample as in many neighborhood studies. However, black, Hispanic, and low-income respondents were oversampled which allows for better specification of group differences in statistical analyses. Because the NLSY-C was only administered to the children of the women in the NLSY79, analyses for this study are necessarily limited to the relationship between child and mother.

The data for the present study come from survey years 1992 through 1998 which represent 4 waves of data collection. Because many of the NLSY-C respondents were born in the 1980s, these waves capture the bulk of the respondents when they are the appropriate ages for this study. Additionally, the key measures of maternal distress were measured only in 1992 and 1994, thus limiting the years available for study. Data are further limited to children who were 6

to 8 years of age in the first wave (1992). The NLSY-C includes age-graded versions of many child and parenting behavior scales which tend to become more complex as children mature, so limiting respondents to these ages ensured that the same sets of questions were asked for each respondent at each wave. Limiting analyses to this cohort resulted in a final sample size of 1,805 children. The analyses described below use full information maximum likelihood estimation which allows me to retain incomplete cases in all analyses and which is a robust method for handling missing data under assumptions that data are missing at random (Enders and Bandalos 2001).

### *Measures*

Perceived neighborhood disorder was measured in each year (1992, 1994, 1996, and 1998) using an 8-item scale which asked mothers how much of a problem are various aspects of their neighborhoods (average  $\alpha = .85$ ). The scale includes items such as “people do not respect rules and laws”, “there is too much crime and violence,” and “too many parents don’t supervise their children” and is rated on a scale from no problem (coded 0) to big problem (coded 2).

Though perceived neighborhood disorder does not directly measure objective characteristics of neighborhood disorder, it has been consistently found to mediate the link between neighborhood characteristics and psychosocial outcomes (e.g., Christie-Mizell et al. 2003; Geis and Ross 1998). Respondents are relatively reliable observers of their surroundings, and this measure taps into the neighborhood features that are most salient to them, making it a useful metric by which to assess neighborhood conditions.

Maternal distress was measured in 1992 and 1994 using the well-known 7-item Center for Epidemiologic Studies – Depression scale (CES-D; Radloff 1977). The CES-D asks respondents how often they experience various symptoms of depression including poor appetite,



sadness, and restless sleep on a scale ranging from rarely (0) to most of the time (3) (average  $\alpha = .80$ ). Respondents of the NLSY79 were administered the CES-D scale during only these two years and when they reached age 40. Therefore, I was unable to measure maternal distress over each year of the study. The 1992 measure of distress acts as an important control in the final model on the level of distress in 1994.

Mother-child arguments were measured only in 1996 and 1998 using a 4-item argument scale that asks children how often they argue with their parents about watching TV, about the child's whereabouts, about homework, and about dating. Responses on this scale range from hardly ever (1) to often (3). Earlier measures of mother-child arguments were unavailable as children were only asked to respond to this scale from ages 10 to 14 (average  $\alpha = .68$ ).

Punishments used to control child movement came from a 3-item scale of non-corporal punishment that was measured in all four waves. The punishment scale asks mothers how often in the last week they took privileges away from their child, grounded their child, or sent their child to his or her room. Mothers provided a count for each item of the punishment scale. This scale was top-coded at 14 times in the last week (i.e., about two times per day; average  $\alpha = .76$ ).

Child distress was measured in all four waves using the 5-item anxiety and depression subscale of the Behavioral Problems Index (BPI; Peterson and Zill 1986). The BPI is a 28 question mother-reported scale that asks about their child's behavior across six subscales. The five items for the anxiety and depression subscale asks each mother if her child: "1) has sudden changes in mood or feeling"; 2) "feels/complains no one loves him/her"; 3) "is too fearful or anxious"; 4) "feels worthless or inferior"; and 5) "is unhappy, sad, or depressed." Mothers rate how true each statement is for their child from not true (0) to very true (2) (average  $\alpha = .71$ ).

Race is measured as dummy variables that distinguish among blacks, Hispanics, and whites. In the analyses below, whites are the reference category. Sex is coded dichotomously as well, 1 if the child is male and 0 if she is female. Age in 1992, for both the mother and the child, is measured in years. Mother's education and marital status were measured only in the first wave, 1992, because they demonstrated very low variation across the study period. Mother's education is measured in years as the highest grade completed in years. Mother's marital status is coded dichotomously such that women who were never married in 1992 are 1 and 0 otherwise. Marital disruption is measured in each wave and coded 1 if the mother experienced a separation, divorce, or death of her spouse and 0 otherwise. Income for each wave is measured as the gross family income in the previous year as reported by the mother, and it includes her wages, spousal wages, and other forms of income. The family income variable was logged in all analyses. Wealth, the value of a family's assets minus debts, is a dichotomous measure from each wave which indicates if the mother is above the sample's median wealth (1) or below it (0). Two measures of residential location were measured in each wave as well. Urban and rural residence are dichotomous variables indicating if the respondent lived in the central city or a rural locale; the reference category is residence in suburban areas. The southern residence variable indicates that the respondent lived in the southern region of the U.S. (1) or outside of the south (0).

### *Analytic Strategy*

Structural equation modeling using full information maximum likelihood estimation was used to analyze the hypothesized associations between the major study variables. Because data are available over multiple waves, I use a longitudinal panel design for modeling mediation (Cole and Maxwell 2003; Little et al. 2007). The five main variables of interest—perceived neighborhood disorder, maternal distress, punishment, mother-child arguments, and child

distress—were treated as latent variables made up of their respective indicator variables. Errors for the indicators were allowed to covary with their counterparts at each wave to account for shared variance (Cole and Maxwell 2003).

Where available, the equations for each of these latent constructs has a two-year prior measure included as a control for the influence of omitted variables and as an indicator of its stability over time. The first wave (1992) latent variables that represent perceived neighborhood disorder, maternal distress, punishments, and maternal distress are all treated as exogenous to the model. The direction of proposed causal pathways in the final model is similar to those presented in the simplified conceptual model in Figure 1. All two-year prior (i.e., the minimum amount of time between waves in the NLSY survey) “upstream” measures are included in the equations for the “downstream” variables. For instance, the wave 3 (1996) measure of child distress is regressed on wave 2 (1994) perceived neighborhood disorder, maternal distress, and punishments.

Two strategies were used to control for the selected demographic and socioeconomic variables. Variables measured only in the first wave (i.e., sex, race, mother’s education, mother’s and child’s age, and never married status) were included in the regression equations for the wave 2 (1994) variables with the exception of arguments which included these controls on the wave 3 (1996) variable. The effects of these controls are assumed to operate through prior measures of the variables and are no longer included in regressions for the later measures (Little et al. 2007). The time-varying controls (i.e., income, wealth, marital disruption, area of residence) were included in the equations for their contemporaneous measure (i.e., income in the 1994 wave is in the equation for maternal distress in 1994). Table 1 presents means and standard deviations or proportions for each control variable.

## RESULTS

Before estimating the structural model, I estimated the measurement model in order to ensure that the indicators reliably measured the latent variables. The measurement model fit the data well according to conventional measures of fit with a comparative fit index (CFI) of .937 and a root mean square error of approximation (RMSEA) of .023, 90% CI [.022, .024], ( $\chi^2/df = 1.97$ ). All loadings are above .40 except one indicator of perceived neighborhood disorder which consistently falls below .30. This item asks respondents to rate how problematic the availability of public transit is in their neighborhood. It is unsurprising that it loads much lower than other indicators since public transit is likely a salient issue only to those respondents without personal transportation. Auxiliary analyses, not shown for the sake of brevity, show that this item has minimal effect on the fit of the measurement model or the final structural model. I have included this item in all analyses. All correlations between latent variables are positive and significant ( $p < .05$ ) indicating that all variables are related to each other at the bivariate level.

Confident that the measurement model sufficiently measured the constructs of interest, I next estimated the full structural model. The structural model with standardized path coefficients for all statistically significant paths is presented graphically in Figure 1 and the estimated path coefficients for the primary pathways are presented in Table 2. This full model demonstrates good fit to the data with an RMSEA of .025, 90% CI [.024,.025] ( $\chi^2/df = 2.10$ ). At .89, the CFI falls slightly below what is generally considered a good level of fit, however, in models where the RMSEA for the null model is less than .158, as this model demonstrates, CFI is a less reliable indicator of fit (Kenny, Kaniskan, and McCoach 2015). Repeated measures appear to be reliable over the period of study as all pathways between similar measures are relatively large and significant.

**Table 1. Sample Means, Percentages and Standard Deviations for Control Variables.  $N=1,805$ .**

<b>Variable</b>	<b>Mean</b>	<b>SD</b>
Male <sup>a</sup>	50.7%	
Black <sup>b</sup>	31.9%	
Hispanic	24.2%	
Mother's Age (1992)	31.2	2.27
Child's Age (1992)	7.6	1.95
Mother's Education (1992)	12.2	2.13
Family Income 1994	33,699	30,562
Family Income 1996	46,226	102,819
Family Income 1998	39,343	34,472
Mother Never Married (1992)	16.7%	
Marital Disruption 1994 <sup>c</sup>	25.0%	
Marital Disruption 1996	24.4%	
Marital Disruption 1998	23.5%	
Urban 1994 <sup>d</sup>	43.1%	
Urban 1996	42.3%	
Urban 1998	28.9%	
Rural 1994 <sup>d</sup>	20.8%	
Rural 1996	22.2%	
Rural 1998	30.1%	
South 1994	37.5%	
South 1996	36.8%	
South 1998	33.6%	

<sup>a</sup> Female is the reference category.

<sup>b</sup> White is the reference category.

<sup>c</sup> Includes separation, divorce, and death of spouse.

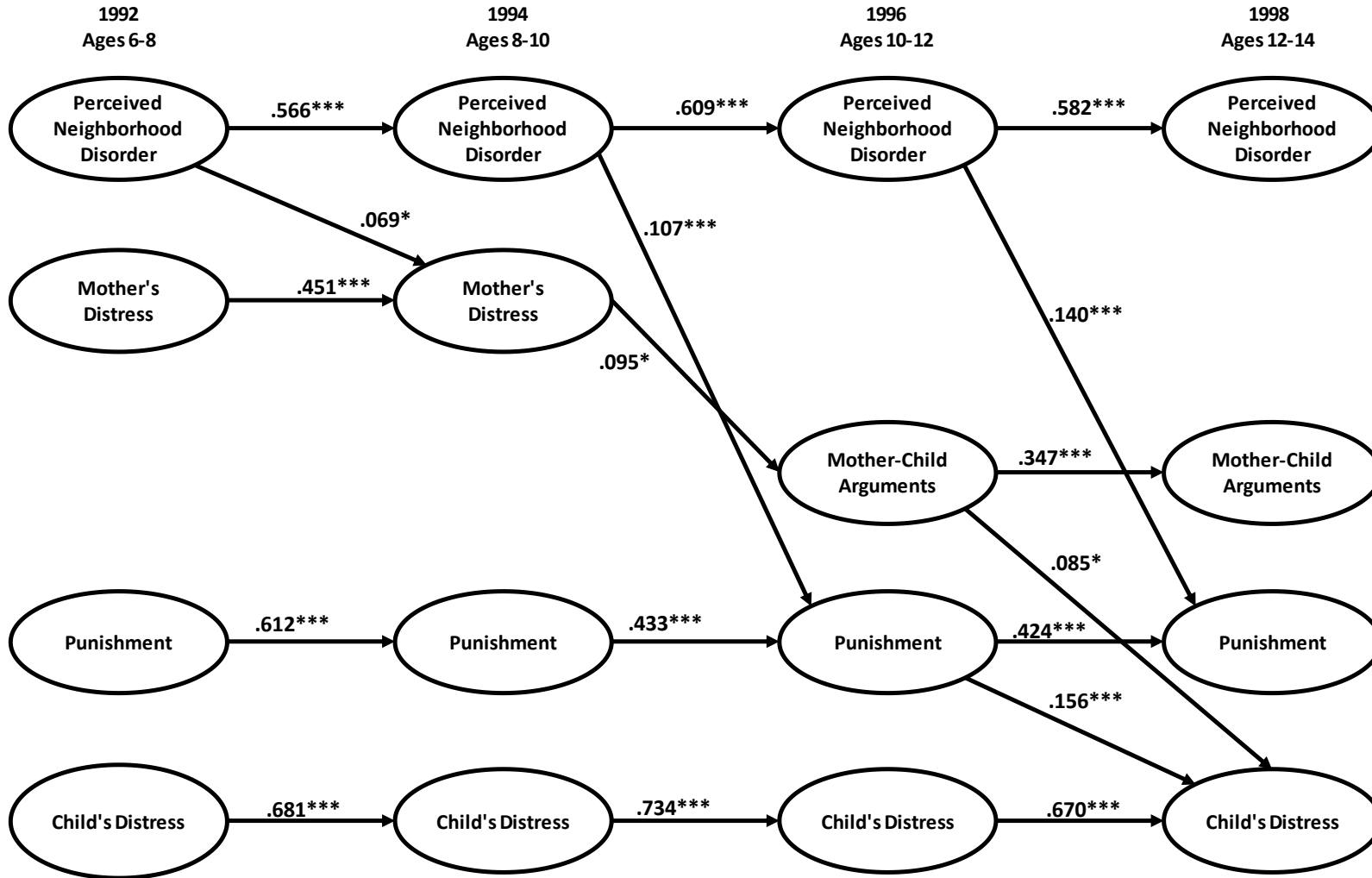
<sup>d</sup> Suburban is the reference category.

*Note:* Wealth above the median is also controlled in all models.

As expected in hypothesis 1, perceived neighborhood disorder in 1992 is significantly and positively associated with maternal distress in 1994 when controlling for prior levels of maternal distress. Hypothesis 2 is not supported. In neither 1996 nor 1998 is there a significant association between perceived neighborhood disorder and mother-child arguments. In both the 1996 and 1998 waves, earlier perceived neighborhood disorder is positively associated with punishment frequency which supports hypothesis 3. Punishment and child distress in 1994, however, are not associated with perceived neighborhood disorder. The coefficient between neighborhood disorder in 1996 and punishment in 1998 is higher than the same pathway in the prior waves. This change suggests that as children grow older, the association between perceptions of neighborhood disorder and punishments increases. Though the direct associations between neighborhood disorder and child distress were the focus of my major hypotheses, child distress is not directly associated with perceived neighborhood disorder in any wave. This pattern indicates that maternal distress and the modeled aspects of the mother-child relationship fully mediate this association.

Hypothesis 4a, which predicts a positive association between maternal distress and arguments, is supported by the model. Though this relationship was modeled across only two of the waves, the association is positive and significant. While perceived neighborhood disorder does not have a direct association with arguments, it may be indirectly responsible by increasing levels of maternal distress which in turn lead to more arguments. Hypothesis 4b, conversely, was not supported. Increased levels of maternal distress are not associated with more punishment in either 1994 or 1996.

**Figure 2. Structural equation model of perceived neighborhood disorder, child/parent arguments and punishment frequency predicting child anxiety/depression with standardized path coefficients.**



Note: Control variables, latent variable indicators, non-significant pathways and correlations between latent variables not shown for the sake of clarity.

Model fit: RMSEA = .025; CFI = .888;  $\chi^2 = 11479.91$ ,  $df = 5456$ ; SRMR = .063

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

**Table 2. Standardized parameter estimates for key variables in simultaneous equation regressions.  $N=1,805$ .**

<i>Independent Variables</i>	<b>Mother's Distress 1994</b>	<b>Punishment 1994</b>	<b>Child Distress 1994</b>
Neighborhood Disorder 1992	.069*	-.014	-.011
Mother's Distress 1992	.451***	.019	.053
Punishment 1992		.612***	.038
Child's Distress 1992			.681***
$R^2$	.26	.41	.52

<i>Independent Variables</i>	<b>Arguments 1996</b>	<b>Punishment 1996</b>	<b>Child Distress 1996</b>
Neighborhood Disorder 1994	.032	.107***	.019
Mother's Distress 1994	.095*	.027	-.003
Punishment 1994		.433***	-.006
Child's Distress 1994			.734***
$R^2$	.13	.24	.56

<i>Independent Variables</i>	<b>Arguments 1998</b>	<b>Punishment 1998</b>	<b>Child Distress 1998</b>
Neighborhood Disorder 1996	.053	.140***	.002
Arguments 1996	.347***		.085*
Punishment 1996		.424***	.156***
Child's Distress 1996			.670***
$R^2$	.16	.25	.55

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .



Finally, hypothesis 5a predicts an association between increased arguments and higher levels of child distress. This was supported across the two waves where data were available. Likewise, hypothesis 5b was supported in the final waves as well. More frequent punishments were associated with higher levels of child distress. In earlier waves, punishment frequency was not associated with children's distress. Again, this could potentially suggest an age-related component to this association.

## **DISCUSSION AND CONCLUSIONS**

The main goals of this study were to examine the roles that maternal distress and mother-child relationships play in the association between neighborhood disorder and child distress. Additionally, this study specified two mother-child relationship and parenting behaviors hypothesized as processual linkages between neighborhood disorder and child well-being. Furthermore, this study examined how these effects persist over a longer period than previous studies. My findings show that the mother-child relationship is vulnerable to the kinds of stressors that are present in disordered and disorganized neighborhoods beyond the effects of socioeconomic standing and race or ethnicity. According to the results of this study, neighborhood disorder does not appear to lead directly to increased arguments between parents and children, which is consistent with some prior research (Deng et al. 2006). However, disorder may have negative impacts on maternal well-being. The positive pathways between neighborhood disorder, mother's distress, and mother-child arguments indicate that disordered neighborhoods exert at least some influence on turmoil in parent-child relationships by decreasing maternal well-being. Worse mother-child relationships, as indicated by increased arguing, are in turn associated with worse child distress. In this model, maternal distress did not

affect child distress directly, but did increase arguing which was ultimately associated with higher levels of distress in children.

Neighborhood disorder is also associated with higher levels of punishment which suggests that one important way that neighborhoods might contribute to poor child outcomes is by causing parents to be more controlling of their child's movements and behaviors. Prior research has demonstrated that neighborhood disadvantage can lead to higher levels of fear for children's safety (Kimbrow and Schachter 2011). Mothers may respond to perceived levels of neighborhood disorder by limiting their child's ability to interact with dangerous people, places and activities in their nearby environment. Each of the items that makes up the punishment scale (sending the child to his room, grounding him, and taking away privileges) are potential tools mothers can use to protect their children from the dangers they perceive in their residential surroundings. Unfortunately, these same tools may lead to deleterious outcomes for children later on as those who experience more punishment end up with more anxiety and depressed mood.

Parents who have more resources may be able to structure their children's time and activities in ways that prevent child interaction with potentially dangerous neighborhoods (Lareau 2002). Children from more advantaged homes have the opportunity to engage in after school programs, sports, tutoring and other activities that keep them occupied while parents are at work. Parents who lack resources to provide such activities for their children may be more reliant on neighborhood activities and friendships to keep their children busy while they are working. Punishments that limit freedom of movement may be one of the few options left to these parents to prevent their children from associating with dangerous people or from being involved in harmful activities. This supposition is supported by the findings in this study that

mothers with lower incomes and less education are more likely to use these non-corporal punishments.

Parents who have resources to keep their children occupied also have the resources to live in neighborhoods that are safer and offer the kinds of activities they can afford, while those with few resources for child activities are more likely to live in disordered neighborhoods. There is significant overlap in neighborhoods, resources, and methods for keeping children away from danger that is difficult to disentangle. The findings from this study lend support to the predictions of social disorganization theory and the stress process theory that both predict that neighborhood disadvantage is a major source of structural inequalities (Sampson and Raudenbush 2004; Turner 2010). Structural disadvantage takes multiple tolls on families who live in disordered neighborhoods. Not only are mothers and children vulnerable to the stressors inherent in living in disadvantaged neighborhoods, but their relationships with each other suffer as well. Thus, while neighborhoods may not have a direct association with levels of child distress, they may have very real impacts on the relationships between mothers and their children which manifests in worse well-being.

This study's findings are also noteworthy because of the timing of these effects. When the children were between 8 and 10 years of age, perceived neighborhood disorder had no discernable relationship with punishments or child distress. However, once children were ten or older, these relationships manifested. The change across age may lend credence to the notion that mothers are using punishments as a result of their concern for the neighborhood. Children at this age have more freedom from their parents and may be more likely to interact with the neighborhood on their own terms. Furthermore, these findings demonstrate that even

neighborhood disorder during young childhood can have lasting influences on children as they age.

Although research has clearly demonstrated the connection between neighborhood disadvantage and poor well-being in childhood, the processes that underlie this link are not as well understood. Exploring the deleterious effects of neighborhoods on parenting behaviors and parent-child relationships has been a promising avenue of study linking neighborhoods to child outcomes. The findings from this study support this line of research. Further, they support the expectations of the social disorganization and stress process literatures. Neighborhood disorder appears to have a negative influence on maternal well-being which increases turmoil in the mother-child relationship. Children who argue more with their mothers and who receive more punishment have worse health than their peers with less tumultuous relationships with their mothers. Neighborhood disorder also alters parenting behaviors such that parents are more likely to punish their children. Punishment may be a reaction to the dangers presented by disordered neighborhoods. Although increasing punishments could protect children from neighborhood harm, it ultimately leads to worse mental health.

Despite the evidence that this study adds to the growing neighborhood effects literature, it does have some limitations. Not all measures were available for each wave during the study period. It could be that the effects of neighborhood disorder on maternal well-being are more or less pronounced when children are older. Unfortunately, due to data availability issues, I was only able to test this association across two waves rather than all four. Similarly, the argument measure was unavailable for all waves which. Including these measures across each wave would present a more robust model of neighborhood effects, especially as they relate to the development of children. It was apparent from the model presented in this study that the

interrelations between neighborhood disorder, maternal well-being, mother-child interactions, and child well-being changed as children became older. This likely reflects the children's changing relationship to their residential context as they grow older.

There are several potential avenues for further study regarding the link between neighborhoods, parenting, and child well-being. Relatively advantaged neighborhoods may actually increase parenting efficacy which leads to better mental health or more positive parenting styles (Christie-Mizell and Erickson 2007; Kotchick, Dorsey, and Heller 2005). Children are also heavily influenced by peers and schools which differ considerably by neighborhood and which can create differential health outcomes for children (Chuang et al. 2005; Roosa et al. 2005). Because neighborhoods structure access to so many people, activities, and opportunities that affect child well-being, adequately constructing a model that accounts for the myriad possibilities is difficult. Nonetheless, understanding neighborhood effects on child well-being is an important place to understand how social structural inequalities shape psychosocial functioning from a young age and persist throughout life.

## **CHAPTER III**

### **Early Neighborhood Perceptions and Self-concept Trajectories in Adolescence and the Transition to Adulthood: A Growth Curve Analysis of Self-esteem and Mastery**

#### **ABSTRACT**

Individuals who perceive disorder in their neighborhoods tend to have lower levels of self-esteem and mastery—two evaluative dimensions of self-concept that help buffer the negative effects of stressors on health. Little is known about how growth in self-esteem and mastery are influenced by neighborhood perceptions. While prior research has investigated trajectories of self-esteem and mastery in adolescence, none has emphasized the effects of early and contemporaneous neighborhood perceptions. This research uses multilevel growth curve analyses with a nationally representative sample across ages 14 to 25 to examine the relationship between childhood, adolescent, and young adult perceptions of neighborhoods and self-concept growth. I find that, in general, perceptions of disorder and safety in childhood are associated with lower levels of self-esteem and mastery that endure through young adulthood. Childhood perceptions of neighborhood safety may not have long-term consequences on levels of mastery, however. Contemporaneous perceptions of neighborhood safety also diminish levels of self-esteem and mastery. These findings suggest a potential mechanism that links neighborhoods to disparities in adult well-being by limiting individuals' capacity to cope with stressors.

## INTRODUCTION

Neighborhoods are an important context of socialization for adolescents and young adults that have wide-ranging implications for achievement, physical health and social psychological well-being (Dupéré, Leventhal, and Vitaro 2012; Leventhal and Brooks-Gunn 2000). Early neighborhood experiences have been shown to have profound effects on the well-being of young adults, even decades later (Wheaton and Clarke 2003; Wickrama and Noh 2010). Young people living in an environment perceived as having low social control, being unsafe, and having few resources are likely to have difficulty thinking of themselves as positively as their counterparts in advantaged areas. These diminished self-ideas can impact young people's ability to cope with stressors later in life which in turn increases vulnerability to internalizing and externalizing symptoms, lower academic achievement, and worse physical health (Aneshensel and Sucoff 1996; Boardman 2004; Dupéré et al. 2012; Wickrama and Noh 2010).

Research consistently finds that adults who live in disordered and disorganized neighborhoods characterized by high crime, high poverty, and a sense that people are not looking out for one another have lower levels of self-concept which consists of one's ideas and evaluations about one's self (Boardman and Robert 2000; Christie-Mizell and Erickson 2007; Christie-Mizell et al. 2003; Geis and Ross 1998; Haney 2007). However, these relationships are not as thoroughly understood in adolescence, nor is the possibility that early experiences of neighborhood disorder have effects that last into subsequent stages of the life course. Social psychologists have begun to use advanced models to describe the ways that self-concept changes throughout this period (Baldwin and Hoffmann 2002; Falci 2011; Mirowsky and Ross 2007). These studies of self-concept through the life course do not incorporate neighborhood variables that might have important effects on self-concept growth over time.

Neighborhoods are likely to be particularly relevant to self-concept growth during adolescence and the transition to adulthood. Self-concept experiences a great deal of change during adolescence, as young people become more educated and adopt new roles and responsibilities (Conger et al. 2009; Falci 2011). During the teen years, young people are given more freedom to interact with their neighborhoods. They begin to take jobs, start driving, and they experience less parental control over their schedules which increases their reliance on neighborhood social ties and resources. Thus, the way young people experience their neighborhoods has the potential to play an important part in the growth of self-concept during this period.

The purpose of this research is to assess the relationship between childhood and contemporaneous neighborhood perceptions on the trajectories of self-concept growth during adolescence and the transition to adulthood. This study contributes to neighborhood and social psychological literature by focusing on a potential process that translates neighborhood differences into health disparities. Furthermore, it acknowledges that neighborhood influences may have distinct effects at different stages of social and psychological development. Additionally, it uses nationally representative data to examine eleven years of self-concept growth and includes multiple measures of neighborhood perceptions to more accurately understand the influence that these perceptions have on self-concept development.

## **BACKGROUND AND THEORY**

This study is guided by social disorganization theory and the stress process framework. Social disorganization theory emphasizes the importance that visible signs of neighborhood disorder have on the social psychology of the individual. This theory posits that neighborhoods that are high in visible signs of disorder have a demoralizing effect on residents (Sampson et al.



2002; Sampson and Raudenbush 1999). Neighborhood disorder is defined by low social control and few interpersonal relationships between residents, and it can also include visible signs such as crime, trash, graffiti, and drug use (Ross 2000). When people see these indicators of disorganization and low social control, they come to believe that their neighbors do not care for one another and this sense of low social cohesion can be distressing. Many American neighborhoods have been particularly hard hit by policies and social trends that have created pockets of concentrated poverty, especially in inner cities (Wilson and Taub 2006; Wilson 1987, 1996). Such neighborhoods, which have a disproportionate number of minority residents, lack the opportunities that are present in more affluent areas. Residents in these extremely disordered neighborhoods are effectively isolated from resource rich people and places, and this isolation is conducive to poor mental health outcomes.

Stress process theory links social disorganization to the social psychology of the individual. According to the stress process framework (Pearlin et al. 1981; Turner 2010), the major reason that inequalities in health outcomes exist is due to the unequal experience of stressors and availability of personal resources at different locations in the social structure. In other words, people who experience the difficulties associated with poverty and other disadvantaged social statuses experience more stressors like challenging life events and day-to-day problems. They may also have less opportunity to develop personal resources that protect them from the harmful effects of stressors, such as feeling good about themselves and feeling in control of their lives. Neighborhoods are implicated in this process because they are a key source of stressors and they are strongly linked to an individual's standing in social structural hierarchies. From the stress process perspective, poor and highly disordered neighborhoods

present more challenges to personal resources than affluent and organized neighborhoods, and are therefore likely to be damaging to the mental health of individuals.

A key personal resource in the stress process is self-concept. Self-concept consists of all of the individual's "thoughts, attitudes, images, schemas, or theories regarding the self as an object" (Demo 1992:304). It is a product of reflected appraisals (i.e., how one thinks others perceive him/herself) and prior experiences of success and failure in social contexts (Felson 1985; Turner and Roszell 1994). While it might be difficult for a person to define self in general, it is much easier for them to describe key aspects upon which they consider their self-concept to be dependent. As such, several empirically measureable aspects of self-concept have emerged out of social psychological theories of self. Two major aspects of self-concept that are typically studied in sociological social psychological research are self-esteem and mastery. Self-esteem is an evaluation of global self-worth, or how positively one feels about one's overall self (Gecas and Burke 1995). Mastery is the evaluation of the level of agency that individuals believe they can exert over the events and circumstances that are important in their life (Bandura 1977; Pearlin et al. 1981).

Self-esteem and mastery represent two major protective personal resources often included in the stress process model (Pearlin 1999; Pearlin et al. 1981; Turner 2010). These dimensions of self-concept act as buffers or coping mechanisms which guard against the damaging effects of both major and day-to-day stressors that people experience throughout their lives. High self-esteem, for instance, might lessen the blow of setbacks at work or in school if a person can still generally perceive him or herself as a person of worth (see e.g., Turner and Roszell 1994). Similarly, people with a high degree of mastery believe they have the ability to change their circumstances for the better (see e.g., Pearlin 1999). Studies on the stress process have found

ample evidence that self-concept has a protective effect against stressful experiences (Pearlin et al. 1981; Turner and Lloyd 1999; Turner, Taylor, and Van Gundy 2004).

Research investigating the effects of neighborhood context on self-concept tends to support the idea that disorder and disadvantage are associated with lower levels of both self-esteem and mastery (Ross et al. 2001, 2000; Ross and Mirowsky 2009). Haney (2007) found that objective and perceived measures of neighborhood disorder have a negative relationship to self-esteem in a sample of adult urban residents. Christie-Mizell and Erickson (2007) similarly found that, for mothers, as neighborhood disorder increases, feelings of mastery decrease. These authors explored this relationship further and found that perceived disorder moderates the effects of income and neighborhood poverty. Both studies contend that perceived disorder in particular appears to have the largest effects on self-concept. This finding suggests that proximal neighborhood stressors—that is, those felt most keenly by residents—damage self-assessments.

Alternatively, neighborhoods have the potential to boost or protect self-concept. Neighborhoods with strong perceived social control and more opportunities may be beneficial to self-concept. Because a sense of self is reliant on reflected appraisals and social comparisons, positive social connections in neighborhoods may improve self-concept (Carpiano and Kimbro 2012; Geis and Ross 1998). Relatedly, highly stable neighborhoods may be beneficial to self-concept, but only when other aspects of the neighborhood support self-concept growth (Ross et al. 2001). Urban residents also experience higher levels of self-concept, possibly because they have more opportunities for self-concept building experiences such as more employment opportunities, more public transportation, or more interactions with other people (Christie-Mizell and Erickson 2007; Debies-Carl and Huggins 2009). Ultimately, whether residence is beneficial

or harmful to levels of self-concept may be contingent on the amount of disadvantage, social order and social control that characterize the neighborhood.

Self-concept is generally believed to be stable across much of the life course, but during childhood and adolescence, it undergoes a great deal of development (Demo 1992). Educational experiences, physical development, peer group involvement, and individuation from the family of origin are all processes that can support or hinder the growth of self-concept. Self-esteem and mastery tend to increase across the teenage years and are strongly linked to educational experiences which provide a relatively safe context to experience success and failure (Baldwin and Hoffmann 2002; Falci 2011; Mirowsky and Ross 2007). However, girls and teens from poor families may have lower initial levels and slower growth than their male and affluent counterparts (Baldwin and Hoffmann 2002; Falci 2011). Though they tend to be at risk for conditions that are associated with lower self-concept, recent cohorts of blacks tend to demonstrate higher levels of self-esteem and mastery than their white and Hispanic counterparts once socioeconomic variation is controlled (Twenge and Crocker 2002; Tyndall and Christie-Mizell 2016). These race-ethnic, gender, and family socioeconomic differences suggest that social structural factors are important for self-concept development.

Adolescence is a time of changing self-concept, and it is also a time when young people begin to interact with their neighborhoods independently from their parents. Early neighborhood experiences are largely limited by parental rules and expectations (Chin and Phillips 2004). Parents who fear for their child's safety in their neighborhood are more likely to use harsh parenting styles (Barajas-Gonzalez and Brooks-Gunn 2014) that can ultimately influence the well-being of their children in late childhood and early adolescence (see Chapter 2). However, adolescents have the opportunity to more freely move about their neighborhoods and spend time

with the people who live nearby. School and leisure activities, friends, and romantic interests are all likely to draw teenagers into daily contact with their neighborhoods. Those who perceive their neighborhoods as unsafe or who have negative interactions with neighborhood peers may internalize these neighborhood features over time in ways that damage self-concept. A young person who is afraid to leave his house because of a fear of being bullied or victimized may come to believe that he is not a person of worth and has little control over how he lives his life.

A few researchers have explicitly considered relationships between neighborhood and adolescent self-concept. Dupéré and colleagues (2012) found that poverty and violence were associated with lowered mastery in adolescents, while teens who moved out of disordered neighborhoods had higher levels of mastery. However, using the same Chicago-based data, Ahlin and Antunes (2015) found no neighborhood effects once parenting and peer associations were taken into account. Two studies of Latino adolescents found perceptions of neighborhood disorder to be associated with lower self-esteem, especially for boys (Bámaca et al. 2005; Behnke et al. 2011). The small amount of literature available suggests that neighborhoods exert at least some amount of influence on adolescent self-concept development. To date, though, none have examined the implications that neighborhoods have on the growth of self-concept during this stage in the life course.

## **SUMMARY AND HYPOTHESES**

Two important evaluative aspects of self-concept, self-esteem and mastery, serve as important personal resources that protect individuals from experiencing mental and physical distress. Individuals who occupy a disadvantaged location in the social structure experience stressors that damage self-concept and limited opportunities for positive growth in self-concept, putting them at risk for worse health outcomes. Neighborhoods are a context in which structural

advantages and disadvantages are felt on a daily basis, so they are importantly linked to levels of self-concept. Furthermore, adolescence and the transition to adulthood are periods in which self-concept is in developmental flux. They are also periods when young people begin to interact with their neighborhoods independently and in new ways. Therefore, it is likely that neighborhoods have a relationship with growth in self-esteem and mastery. Previous research has investigated growth in self-concept during adolescence and the relationship of neighborhoods to self-concept. No studies, however, have explicitly examined how neighborhood perceptions are linked to change in self-concept during this stage of development.

Prior research suggests several hypotheses regarding the influence of neighborhood perceptions and mastery growth that were tested in this study:

H1a-b. Living in a neighborhood perceived as disordered during childhood will be associated with lower levels of self-esteem in early adolescence (H1a) and lower growth in self-esteem throughout adolescence and the transition to young adulthood (H1b).

H2a-b. Living in a neighborhood perceived as safe during childhood will be associated with higher levels of self-esteem in early adolescence (H2a) and higher growth in self-esteem throughout adolescence and the transition to adulthood (H2b).

H3a-b. Living in a neighborhood perceived as disordered during childhood will be associated with lower levels of mastery in early adolescence (H3a) and lower growth in mastery throughout adolescence and the transition to adulthood (H3b).

H4a-b. Living in a neighborhood perceived as safe during childhood will be associated with higher levels of mastery in early adolescence (H4a) and higher growth in mastery throughout adolescence and the transition to adulthood (H4b).

The relationships hypothesized above concern early perceptions of neighborhoods (i.e., in childhood), but the statistical models also included controls for contemporaneous effects of neighborhood perceptions of disorder. These contemporaneous effects are also expected to have negative relationships to concurrent levels of self-esteem and mastery. Including contemporaneous neighborhood perceptions in the statistical models allows for the investigation of possible spurious relations between childhood perceptions and later self-concept levels. In other words, it is possible that early perceptions might be related to later self-concept only through their relationship to later perceptions. If both early and later neighborhood perceptions have independent associations to self-concept, that would indicate evidence for a potential cumulative effect of neighborhoods on self-esteem and mastery. Put another way, children who live in neighborhoods perceived as disordered or unsafe who continue to live in neighborhoods perceived as unsafe may experience negative effects from both their past and current residence that puts them at a double disadvantage compared to peers in more low disorder, high safety neighborhoods.

In order to test these hypotheses, I used statistical techniques designed to estimate levels of self-esteem and mastery in early adolescence as well as their change over time. The analyses use a nationally representative sample of young people which allows me to control for race, ethnicity, urbanicity, and region of residence. The hypothesized relationships are expected to exist over and beyond the effects of other important influences on self-concept such as education and family income which are also controlled in the statistical models presented below.

## DATA AND METHODS

### *Data*

The data for this study come from the National Longitudinal Survey of Youth 1979 (NLSY79) and its subsequent Child (NLSY-C) and Young Adult (NLSY-YA) surveys. The NLSY79 is a nationally representative sample of young people who were 14 to 22 years of age in 1979 ( $N=12,686$ ). The NLSY79 was administered annually until 1994 and biennially thereafter. In 1986, the children of the mothers of the NLSY79 were administered a separate biennial survey, the NLSY-C, which included questions reflecting child growth and development and which can be linked to the mother's data ( $N=11,512$ ). In 1994, those children aged 14 and older were given a new survey, the NLSY-YA, with questions reflecting their transition to adulthood ( $N=7,612$ ). The NLSY79 and its related surveys are sponsored by the Bureau of Labor Statistics and maintained by the Center for Human Resource Research at The Ohio State University. These data offer a wide range of demographic information, several neighborhood perception variables, and measures of self-concept. The ongoing, longitudinal nature of the data are ideal for examining change in these variables over time. Additionally, the NLSY79 oversampled black, Hispanic, and low income white respondents to allow for more statistical power when including these characteristics as controls.

The sample used for this study came from the young adult survey (NLSY-YA) and consists of adolescents and young adults aged 14 to 25 across the nine survey waves administered from 1994 to 2010. The growth curve analyses described below require repeated measures data wherein time-linked observations are nested within individual respondents. Each individual in the sample therefore contributes between three and five data observations to the overall sample. Because of the nature of the NLSY-YA, individuals could enter the sample at



various ages as long as they were at least 14 years old. For various reasons, including budgetary constraints and nonresponse, data for the dependent variables are not available for all respondents in all years. Because of the shifting nature of the ages in the data and the planned missingness of the dependent variables, the data are said to be unbalanced (Raudenbush and Bryk 2002). In other words, one respondent may contribute data at ages 14, 16, 20, and 24 while another respondent only has data at ages 15, 19, and 23. The final sample size was 10,229 observations nested within 3,245 individuals, which means that on average, respondents contributed slightly more than 3 waves of eligible data. Additionally, due to the requirements for inclusion, the respondents represent a cohort of adolescents and young adults who were all born between 1979 and 1987.

### *Measures*

*Self-esteem* was measured in the NLSY-YA using the 10-item Rosenberg Self-Esteem Scale (Rosenberg 1965). Items in this measure ask respondents how much they agree to a series of questions about their self-worth where responses of 1 mean strongly disagree and responses of 4 mean strongly agree. Self-esteem items include: “I feel that I’m a person of worth, at least on an equal basis with others,” “I feel that I have a number of good qualities,” “All in all, I am inclined to feel that I am a failure,” “I am able to do things as well as most people,” “I feel that I do not have much to be proud of,” “I take a positive attitude toward myself,” “On the whole, I am satisfied with myself,” “I wish I could have more respect for myself,” “I certainly feel useless at times,” and “At times I think I am no good at all.” Responses were coded such that higher values correspond to higher self-esteem and then summed into a single score that ranges from 10-40. The average reliability for this scale across all waves was high ( $\alpha = .86$ ). The mean score on the self-esteem scale across all waves was 32.38 ( $sd = 4.00$ ).

*Mastery* was measured with the 7-item Pearlin Mastery Scale (Pearlin and Schooler 1978) which uses the same 4-point scale as the self-esteem items (1 = strongly disagree, 4 = strongly agree). Items on the mastery scale include: “There is really no way I can solve the problems I have,” “Sometimes I feel that I’m being pushed around in life,” “I have little control over the things that happen to me,” “I can do just about anything I really set my mind to,” “I often feel helpless in dealing with the problems of life,” “What happens to me in the future mostly depends on me,” and “There is little I can do to change many of the important things in my life.” Mastery items are coded such that higher mastery responses are given higher values and summed to create a score that ranges from 7 to 28. The average reliability for this scale across all waves was relatively high ( $\alpha = .74$ ). The mean score on the mastery scale across all waves was 22.07 ( $sd = 2.94$ ). Both self-esteem and mastery were measured at each wave the respondent was included in the sample.

*Neighborhood perceptions in childhood* were measured using reports from both the mother and the child. Both measures were taken at a single point from the survey wave immediately preceding the respondent’s entrance into the young adult sample which means the child was 10 to 13 years old when the perceptions were measured. Mother’s perceptions were taken from the mother’s survey (NLSY79) while child’s perceptions were derived from the child survey (NLSY-C).

*Mother’s perceptions of neighborhood disorder* were measured using an 8-item scale which asked mothers to rate how much of a problem were various aspects of their neighborhood (0 = not a problem, 1 = somewhat of a problem, 2 = a big problem). Items on this scale include: “People don’t have enough respect for rules and laws,” “Crime and violence,” “Abandoned or run-down buildings,” “Not enough police protection,” “Not enough public transportation,” “Too

many parents who don't supervise their children," "People keep to themselves and don't care what goes on in the neighborhood," and "Lots of people who can't find jobs." The items were summed and divided by the number of items resulting in scale ranging from 0 (no disorder) to 2 (higher disorder). Scale reliability was high ( $\alpha = .85$ ). The mean score on the mother's perceived neighborhood disorder scale was .43 ( $sd = .44$ ).

*Child's perception of neighborhood safety* was measured using a single item which asked children how safe they felt walking and playing in their neighborhood. The question was rated on a scale where 1 was coded as very unsafe and 4 was coded very safe. The mean score on this scale was 3.37 ( $sd = .79$ ).

*Contemporaneous perceptions of neighborhood disorder* were measured in the adolescent and young adult survey at each observed wave using the same 8-item scale administered to the mothers. Reliability for the contemporaneous perceptions was high ( $\alpha = .85$ ). The scale ranged from 0 to 2, and the mean score was .38 ( $sd = .42$ ).

Several control variables remain constant across each wave of the respondent's inclusion in the sample, and are considered *time-invariant*. Time-invariant controls include sex, race-ethnicity, and childhood family income. *Sex* is a dummy variable coded 1 if the respondent identifies as male and 0 if female. *Race-ethnicity* is a series of mutually exclusive dummy variables which are coded 1 if the respondent identifies as black, Hispanic, or white. White is the reference category in all analyses. *Childhood family income* is the logged income of the child's family as reported by the mother in the wave from which the mother's and child's neighborhood perceptions were recorded. This variable acts as an important control for the possibility that early neighborhood perceptions are merely proxies for family resources rather than having independent associations with the study variables.

A number of other control variables have the possibility of changing from wave to wave and are considered *time-varying*. The time-varying controls include indicators of objective neighborhood location (i.e., urbanicity and region), indicators of respondent education, and household income. *Urbanicity* is a set of mutually exclusive dummy variables indicating if the respondent lives in an urban, rural, or suburban area. Suburban residence is the reference group in all analyses. *Region* is a simple dummy variable which indicates if the respondent lived in the southern United States during that year, compared to all other regions. *Household income* is the net household income from the year prior to the survey in logged dollars. The household income was indicated by the respondent's mother if the adolescent or young adult still lived with parents, or by the young adult if living independently of parents.

Because of the age of the sample, there are several ways that education is measured. During the adolescent years, age and years of education are extremely highly correlated, making it difficult to separate these effects. Education plays an important role in the growth and development of self-concept, making it important to adequately include these variable in the models (Falci 2011; Mirowsky and Ross 2007). To overcome this limitation, *school enrollment* is measured as a dummy variable indicating whether the respondent was enrolled in any type of school that year. *High school graduates* were coded 1 in the years when respondents had their high school diplomas and 0 if they did not. And, finally, if the respondent went on to postsecondary education, *years of education beyond high school* are included as well.

**Table 1. Means, proportions, and standard deviations for study variables.**

<b>Variable</b>	<b>Mean</b>	<b>SD</b>
<i>Dependent Variables</i>		
Mastery	22.07	2.94
Self-esteem	32.38	4.00
<i>Time-Invariant Variables</i>		
Male	.51	—
Black	.19	—
Hispanic	.09	—
Mother's PND <sup>a</sup>	.43	.44
Child's PNS <sup>b</sup>	3.36	.79
Family Income in Childhood	\$47,450	\$51,091
<i>Time-Varying Variables</i>		
Contemporaneous PND <sup>a</sup>	.38	.42
Urban	.27	—
Rural	.30	—
South	.39	—
Household Income	\$48,416	\$46,106
Enrolled in School	.62	—
High School Graduate <sup>c</sup>	.43	—
Education beyond High School <sup>d</sup>	2.27	1.29

*Note:* Dependent and time-varying means/proportions presented across all observations ( $N = 10,229$ ). Time-invariant means/proportions presented for individuals ( $N = 3,245$ ).

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> PNS = Perceived Neighborhood Safety

<sup>c</sup> Proportion of high school graduates aged 18 or older = .78.

<sup>d</sup> Mean/SD only for those who attended any school beyond high school.

### *Analytic Strategy*

To investigate the relationships between neighborhood perceptions and the growth of self-esteem and mastery over time, I utilized growth curve analyses. Growth curve models estimate initial levels and change in the dependent variable using repeated measures over at least three points in time. Growth curves model a latent variable representing the mean intercept and one representing the mean slope of the dependent variable while estimating inter-individual variance (Raudenbush and Bryk 2002). Time-invariant variables (e.g., child's and mother's neighborhood perceptions, sex, race, childhood family income) are allowed to predict the intercept and slope while time-varying variables capture contemporaneous effects on individual levels of the dependent variable. Using a growth curve approach allows me to determine if perceptions of the childhood neighborhood influence the initial levels of self-esteem and mastery in early adolescence and if these perceptions influence change in self-esteem and mastery over time. By estimating inter-individual variance, estimates avoid bias introduced by using repeated measures data.

Due to the nature of the NLSY-YA's sample, I used a multilevel modeling approach to the growth curve analyses rather than a structural equation approach (Raudenbush and Bryk 2002). As noted previously, the data have an unbalanced structure where measures of the dependent variable were taken at various ages and different lags between ages. Though structural equation approaches are capable of accommodating these data, the multilevel approach is more amenable to this type of design. Multilevel modeling offers reliable estimates of the mean intercepts and slopes using all available data to model the intercept and each individual's growth over time to model overall trends in growth.

The equations below represent, in a simplified form, the multilevel equations used in the final models for both self-esteem and mastery.  $Y_{ti}$  represents the predicted level of self-esteem or mastery at time  $t$  for respondent  $i$ . Time is represented by the respondent  $i$ 's **age** in years at time  $t$ . Age has been given a zero point at 14 years old so that the intercept ( $\beta_{0i}$ ) represents levels of the dependent variables at age 14. All models include both an estimate of the linear effect of age on self-esteem and mastery ( $\beta_{1i}$ ) as well as the quadratic effect of age ( $\beta_{2i}$ ). Self-esteem and mastery are both expected to increase during this period of life, but the quadratic age term models the expected slowing of this growth as individuals enter young adulthood (Baldwin and Hoffmann 2002; Falci 2011; Mirowsky and Ross 2007). The influence of contemporaneous perceptions of neighborhood disorder (**CPND**) are represented by  $\beta_{3i}$ , and the remaining seven time-varying control variables (**TVCs**) are represented in these equations by coefficients indexed by  $j=4 \dots 10$ . The error term for the level-1 residuals is represented by  $\varepsilon_{ti}$  for which variance was estimated.

$$Y_{ti} = \beta_{0i} + \beta_{1i}(\mathbf{age}_{ti} - 14) + \beta_{2i}(\mathbf{age}_{ti} - 14)^2 + \beta_{3i}\mathbf{CPND}_{ti} + \sum_{j=4}^{10} \beta_{ji}\mathbf{TVCs}_{ti} + \varepsilon_{ti}$$

$$\beta_{0i} = \gamma_{00} + \gamma_{01}\mathbf{MPND}_{1i} + \gamma_{02}\mathbf{CPNS}_{2i} + \sum_{k=3}^6 \gamma_{0k}\mathbf{TICs}_{ki} + u_{0i}$$

$$\beta_{1i} = \gamma_{10} + \gamma_{11}\mathbf{MPND}_{1i} + \gamma_{12}\mathbf{CPNS}_{2i} + \sum_{k=3}^6 \gamma_{1k}\mathbf{TICs}_{ki} + u_{1i}$$

$$\beta_{2i} = \gamma_{20} + u_{2i}$$

$$\beta_{3i} = \gamma_{30} + u_{3i}$$

The remaining equations represent the level two or person-level equations for the intercept ( $\beta_{0i}$ ), linear slope ( $\beta_{1i}$ ), quadratic slope ( $\beta_{2i}$ ), and contemporaneous perceived neighborhood disorder ( $\beta_{3i}$ ). The equation for the intercept includes an estimate of the mean levels of self-esteem or mastery ( $\gamma_{00}$ ), estimated coefficients of the key independent variables of interest, namely mother's perceptions of perceived neighborhood disorder (*MPND*) and child's perceptions of neighborhood safety (*CPNS*), and estimates for the remaining time-invariant control variables (*TICs*), indexed by  $k = 3 \dots 6$ . The equation for the linear slope is identical to that of the intercept. Mean levels of the quadratic slope ( $\gamma_{20}$ ) and the slope of disorder ( $\gamma_{30}$ ) were estimated as well, but no additional variables were included in these equations. Model testing indicated that including level two covariates in the equations for the quadratic slope and disorder neither improved the fit of the models nor introduced any noteworthy findings or changes. Each equation at level two includes an estimate of the variance around the error. All models were estimated using the variance components covariance structure wherein only variances but no covariances between errors were estimated. Several alternative and more complex covariance structures were estimated, but none changed the substantive findings in any models. Therefore, in the interest of parsimony, the simplest covariance structure was retained for all models.

In order to adjust for the oversampling of minority and low income participants in the original NLSY79, all analyses were weighted with appropriate survey weights. All analyses use multiply imputed data to maintain observations in the sample and avoid bias that might result from excluding respondents with missing information (Allison 2001). Ten datasets were imputed and analyzed separately then pooled. The pooled results are presented in the tables that follow. Following Brown, O'Rand, and Adkins (2012), controls for birth year were included to ensure that age and cohort effects were not being confounded. The full model was tested with these



cohort controls and did not provide a better fit nor any substantive changes the effects discussed below. Thus, all models shown below do not include these cohort variables in the interest of concision.

## **RESULTS**

Descriptive statistics for all survey variables are presented in Table 1. Correlations can be found in Appendix A. Of note, the sample averaged relatively high levels of both self-esteem and mastery across all observations. Both self-esteem and mastery have positive and significant bivariate relationships with age. Additionally, self-esteem and mastery are correlated in the expected directions with both mother and child's perceptions of their neighborhoods as well as contemporaneous perceptions of neighborhood disorder.

The results for the growth curve analysis of self-esteem are presented in Table 2. Model 1 of Table 2 includes only estimates of the intercept, linear slope, quadratic slope, and associated variances. This model indicates that modeling growth in self-esteem across age is suitable and that the curvilinear effect proposed by prior research is appropriate for this sample and age range. Model 1 reveals that the average level of self-esteem at age 14 is as score of 31.864 on the self-esteem scale. The coefficient for the linear slope is positive and indicates a growth of about a fifth of a unit per year. The negative quadratic slope, however, indicates that this growth slows over time. These results show that self-esteem peaks around age 23.

**Table 2. Multilevel growth curve models of self-esteem regressed on study variables. *N* = 10,229**

Variable	Model 1		Model 2		Model 3	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
<b>Intercept</b>	31.864***	(.082)	30.897***	(.364)	30.781***	(.392)
Male			.330*	(.139)	.305*	(.138)
Black			.921***	(.176)	1.042***	(.183)
Hispanic			-.348	(.214)	-.313	(.215)
Mother's PND <sup>a</sup>			-.524**	(.172)	-.431*	(.172)
Child's PNS <sup>b</sup>			.241*	(.094)	.241*	(.096)
Family Income in Childhood			.084**	(.032)	.076*	(.031)
<b>Linear Slope (Age)</b>	.204***	(.034)	.259***	(.060)	.196**	(.064)
Male			-.036	(.021)	-.018	(.021)
Black			.004	(.027)	.011	(.027)
Hispanic			.092**	(.034)	.101**	(.033)
Mother's PND <sup>a</sup>			-.009	(.026)	.014	(.026)
Child's PNS <sup>b</sup>			-.013	(.013)	-.017	(.013)
Family Income in Childhood			-.002	(.006)	-.005	(.006)
<b>Quadratic Slope (Age<sup>2</sup>)</b>	-.011***	(.003)	-.011***	(.003)	-.011**	(.003)
<b>Time-Varying Controls</b>						
Contemporaneous PND <sup>a</sup>					-.505***	(.112)
Urban					.051	(.103)
Rural					-.024	(.103)
South					-.066	(.113)
Household Income					.023	(.023)
Enrolled in School					.353***	(.102)
High School Graduate					.448***	(.119)
Education beyond High School					.211***	(.048)
<b>Variances</b>						
Intercept	6.394***	(.268)	6.143***	(.260)	5.601***	(.254)
Linear Slope	.047***	(.009)	.047***	(.009)	.041***	(.008)
Quadratic Slope	.000**	(.000)	.000**	(.000)	.000**	(.000)
Disorder					1.531***	(.359)
Residual	7.811***	(.153)	7.794***	(.152)	7.656***	(.158)
-2 Log Likelihood	58267.40		58161.97		58042.89	

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> PNS = Perceived Neighborhood Safety.

\* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001

Model 2 of Table 2 includes time-invariant variables in the level two equations for the intercept and linear slope. These results show how personal characteristics before the period of study influence levels of self-esteem at age 14 and the linear growth in self-esteem from ages 14 to 25. The results show that male and black respondents each have higher levels of self-esteem in early adolescence while Hispanic respondents are no different than whites. Recall that hypotheses H1a predicted that mother's perceptions of neighborhood disorder would be related to lower self-esteem in early adolescence while H2a predicted that child's perceptions of neighborhood safety would be related to higher levels of self-esteem. The results of Model show that adolescents who lived in neighborhoods perceived by their mothers as higher in disorder had lower self-esteem than their counterparts in neighborhoods perceived as less disordered. Adolescents who perceived their childhood neighborhoods as safer had higher levels of self-esteem at age 14 than those who perceived unsafe neighborhoods. These neighborhood effects exist independently of family income, though children in higher income families did have higher levels of self-esteem at age 14. Therefore, in this model, hypotheses H1a and H2a are supported. The linear slope continues to be positive and significant in Model 2, though very few person-level characteristics have a significant influence. Hispanic respondents had higher levels of growth in self-esteem than their white counterparts. Importantly, neither mother's perceptions of neighborhood disorder nor child's perceptions of neighborhood safety have any significant relationship to growth in self-esteem across ages 14 to 25. Hypothesis H1b and H2b, which predicted that mother's and child's perceptions would impact growth in self-esteem, were not supported.

The final model, including all time-varying and time-invariant variables, is shown in under Model 3 of Table 2. Associations between the time-invariant variables and self-esteem at

age 14 remain substantively unchanged from the previous model. The inclusion of the time-varying variables diminished the association between mother's perceived neighborhood disorder and self-esteem slightly, but it remains significant and negative, as expected. Likewise, child's perceptions of neighborhood safety continue to be positively related to self-esteem at age 14. All relationships are substantively similar on the linear slope, compared to Model 2, as well.

The time-varying variables show some important relationships to self-esteem at each wave. All education variables are significantly and positively related to self-esteem growth, as indicated in prior literature. Importantly for this study, contemporaneous perceived neighborhood disorder has a strong negative relationship to ratings of self-esteem at each time point. The contemporaneous effects of neighborhood perceptions exist independently of earlier mother and child perceptions, meaning that both early and recent neighborhood experiences are associated with levels of self-esteem during adolescence and young adulthood.

Figure 1 graphically demonstrates the growth curves of self-esteem separated by the highest (a score of 2) and lowest (a score of 0) levels of mother's perceptions of neighborhood disorder. Adolescents whose mothers perceived low disorder had higher levels of self-esteem at age 14 than those whose mothers perceived high disorder. Both groups experienced an increase in self-esteem until the early 20's when growth levels off. The gap between both groups remains across the entire period of study. Figure 2 similarly shows the growth of self-esteem by levels of child's perceived neighborhood safety. Fourteen year olds who perceived high safety in childhood have higher levels of self-esteem than those who perceived low safety. Again, the gap between both groups remains across the entire age period.

Figure 1. Self-esteem growth from ages 14-25 by levels of mother's perceived neighborhood disorder (PND).

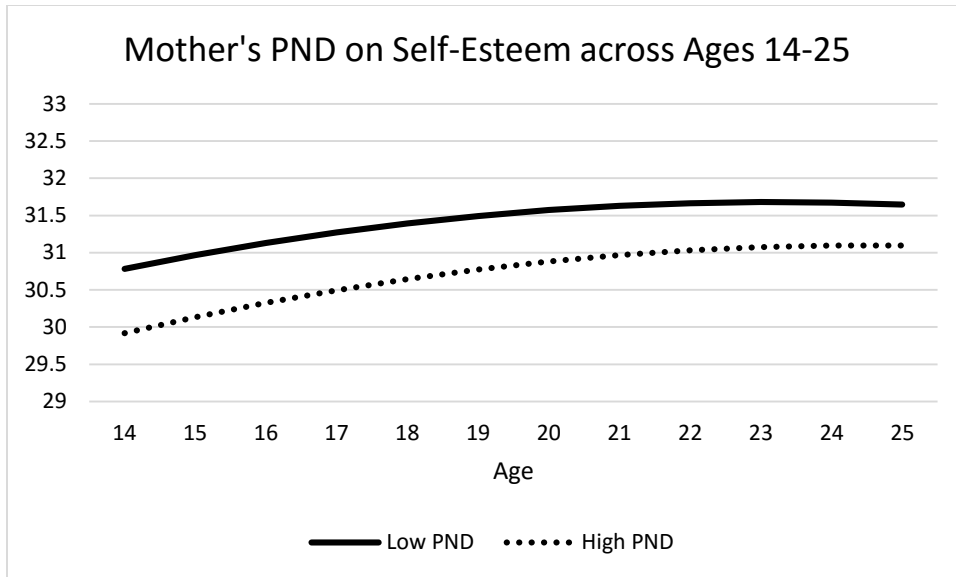
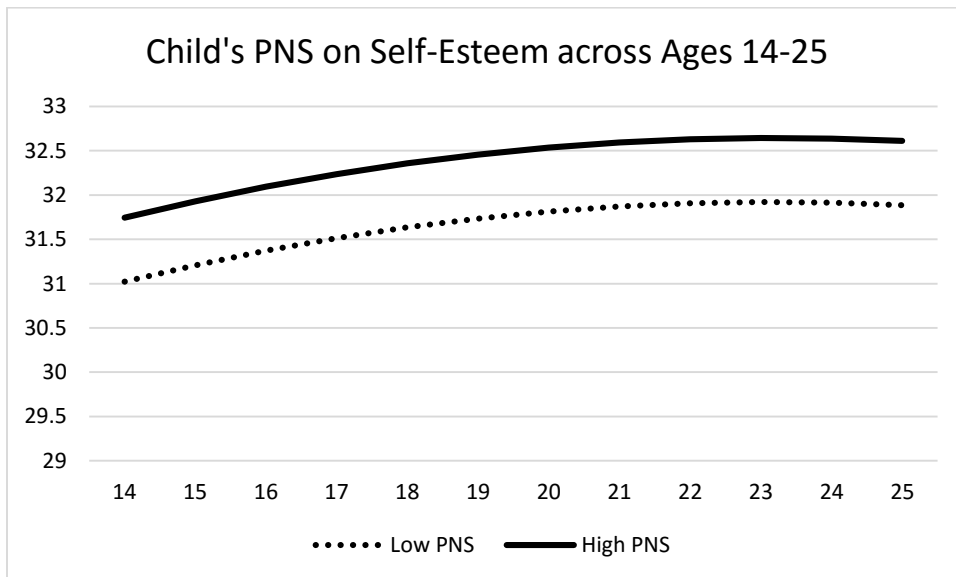


Figure 2. Self-esteem growth from ages 14-25 by levels of child's perceived neighborhood safety (PNS).



**Table 3. Multilevel growth curve models of mastery regressed on study variables. *N* = 10,229**

Variable	Model 1		Model 2		Model 3	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
<b>Intercept</b>	21.333***	(.061)	20.517***	(.263)	20.546***	(.277)
Male			.070	(.101)	.054	(.100)
Black			.142	(.129)	.295*	(.134)
Hispanic			-.201	(.158)	-.150	(.159)
Mother's PND <sup>a</sup>			-.402**	(.124)	-.264*	(.126)
Child's PNS <sup>b</sup>			.282***	(.069)	.272***	(.069)
Family Income in Childhood			.080**	(.027)	.064*	(.026)
<b>Linear Slope (Age)</b>	.251***	(.026)	.360***	(.046)	.316***	(.049)
Male			.007	(.016)	.018	(.015)
Black			.027	(.020)	.031	(.020)
Hispanic			.042	(.026)	.047	(.025)
Mother's PND <sup>a</sup>			-.048**	(.019)	-.032	(.019)
Child's PNS <sup>b</sup>			-.030**	(.010)	-.032**	(.010)
Family Income in Childhood			-.001	(.004)	-.003	(.004)
<b>Quadratic Slope (Age<sup>2</sup>)</b>	-.014***	(.002)	-.014***	(.002)	-.013***	(.003)
<b>Time-Varying Controls</b>						
Contemporaneous PND <sup>a</sup>					-.608***	(.084)
Urban					-.095	(.077)
Rural					-.132*	(.076)
South					-.069	(.081)
Household Income					.023	(.014)
Enrolled in School					.306***	(.076)
High School Graduate					.359***	(.090)
Education beyond High School					.138***	(.036)
<b>Variances</b>						
Intercept	3.020***	(.136)	2.848***	(.131)	2.540***	(.127)
Linear Slope	.021***	(.005)	.019***	(.005)	.017***	(.005)
Quadratic Slope	.000***	(.000)	.000***	(.000)	.000***	(.000)
Disorder					.784***	(.191)
Residual	4.542***	(.087)	4.540***	(.087)	4.444***	(.089)
-2 Log Likelihood	52271.30		52141.53		51964.52	

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> PNS = Perceived Neighborhood Safety.

\* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001

The growth curve analyses for mastery are shown in Table 3 and follow a similar progression to the results shown for self-esteem. Model 1 of Table 3 shows the intercept and growth trends without any additional variables. The mean level of mastery at age 14 is a score of 21.333. Levels of mastery increased by about a quarter point each year the respondents got older as shown by the linear slope. The quadratic slope is negative and significant which signifies the expected decrease in growth as the respondents entered young adulthood. Mastery peaks around age 23, much like self-esteem.

Model 2 in Table 3 gives the results for the growth curve including only the time-invariant variables, including the key neighborhood perception variables. Mother's perceptions of neighborhood disorder are negatively associated with mastery at age 14, as expected. Conversely, child's perceptions of neighborhood safety are positively associated with mastery at age 14. The neighborhood perception variables do not appear to be acting as proxies for family income, as it has an independent significant and positive effect on mastery in early adolescence. Hypothesis H3a predicted mother's perceptions of neighborhood disorder would be related to lower mastery at age 14 while H4a predicted that child's perceptions of safety would be related to higher mastery. Therefore, hypotheses H3a and H4a are supported in this model. In Model 2, mother's perceptions of neighborhood disorder are associated with lower growth in mastery from ages 14 to 25, as hypothesized (H3b). The child's perceptions of neighborhood safety are also negatively associated with mastery growth. Children who felt safe in their neighborhoods had slower growth in mastery than those who felt unsafe, contrary to what was hypothesized (H4b).

The full model for mastery is shown under Model 3 in Table 3. With the addition of the time-varying variables, there are several differences in the effects on the intercept. Being black is now significant and positively associated with mastery at age 14 which is a finding supported by

prior research (Christie-Mizell and Erickson 2007; Tyndall and Christie-Mizell 2016). Mother's perceptions of neighborhood disorder remain negatively associated with mastery at age 14, though the coefficient is nearly a third smaller with the inclusion of time-varying controls. The child's perceptions of neighborhood safety remain positively associated with mastery and in roughly the same degree as Model 2. On the linear slope, mother's perceptions of disorder are no longer associated with growth in mastery, thus disconfirming the hypothesis that it would be negatively associated with mastery growth (H3b). Childhood perceptions of neighborhood safety, however, continue to be negatively associated with mastery growth. The time-varying variables have similar associations to those found for self-esteem. All education variables are positively related to mastery at each time point. Rural residence is associated with lower mastery. Finally, as with self-esteem, contemporaneous perceptions of neighborhood disorder have a negative association with mastery that is independent of the earlier neighborhood experiences. In analyses not shown here, it appears that the association between mother's perceptions and postsecondary education is responsible for this change between models.



Figure 3. Mastery growth from ages 14-25 by levels of mother's perceived neighborhood disorder (PND).

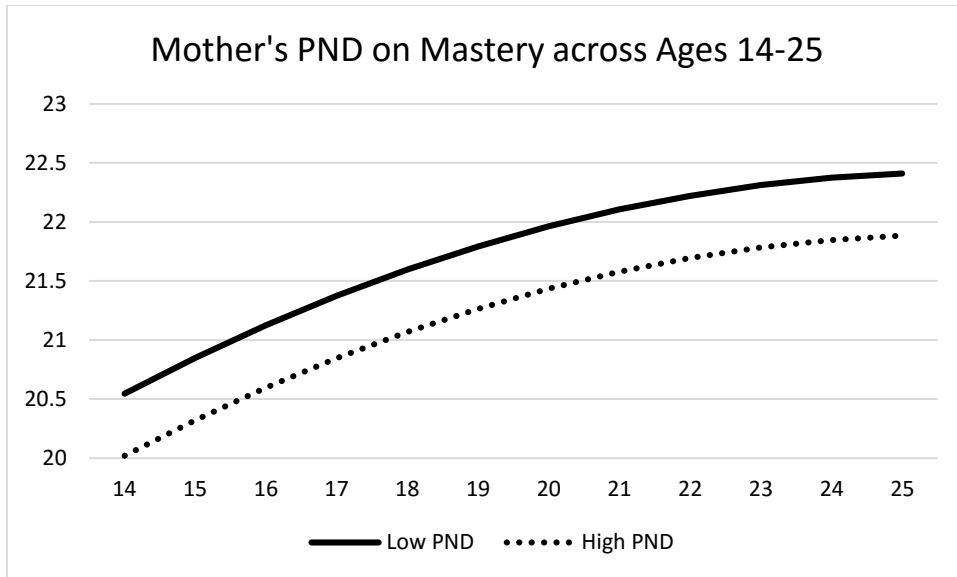
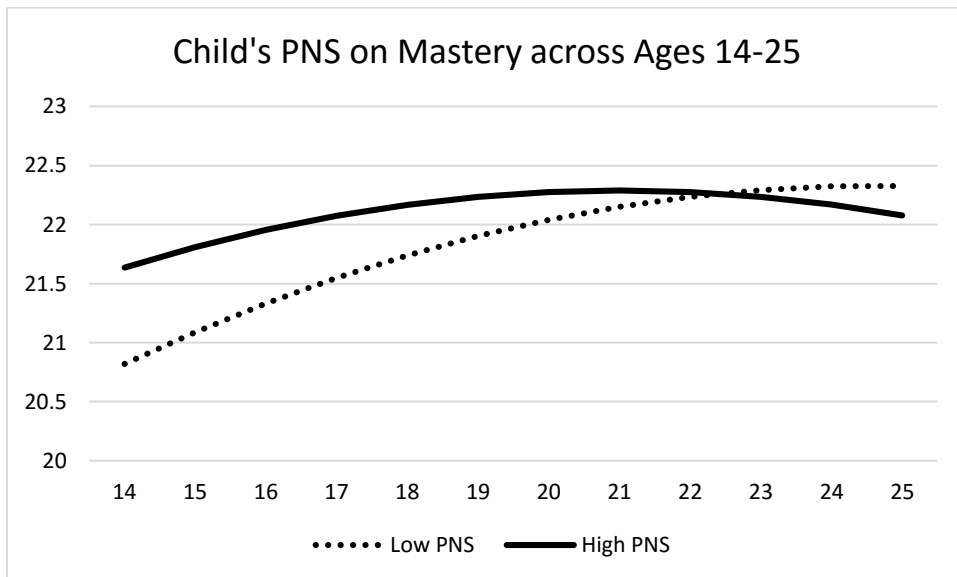


Figure 4. Mastery growth from ages 14-25 by levels of child's perceived neighborhood safety (PNS).



The growth trends for mastery are illustrated graphically in Figures 3 and 4. Figure 3 shows growth separated by levels of mother's perceived neighborhood disorder. As with self-esteem, those whose mothers perceived high disorder start out with lower levels of mastery at age 14 compared to those with mothers who perceived low disorder. Both groups experience growth in mastery that levels off in the early 20s, but the gap between the groups remains throughout the entire period of the study. Figure 4 demonstrates the unexpected finding that child's perceptions of neighborhood safety have a negative influence on mastery growth. At age 14, adolescents who perceived high safety have higher levels of mastery than those who perceived low safety. The group experiencing low perceived safety has a much faster rate of mastery growth than their counterparts, and by about age 22, both groups have nearly the same level of mastery. In other words, the early influence of perceptions of neighborhood safety no longer exists by the time the sample reached young adulthood.

## **DISCUSSION AND CONCLUSIONS**

Neighborhood perceptions have a documented association with self-esteem and mastery (Boardman and Robert 2000; Christie-Mizell and Erickson 2007; Geis and Ross 1998; Haney 2007; Tyndall and Christie-Mizell 2016). However, much less is known about how neighborhoods are associated with growth in these evaluative dimensions of self-concept. This study used social disorganization and stress process theories to guide the examination of neighborhood perceptions on the development of self-concept across adolescence and young adulthood. Neighborhoods that are high in disorder are likely to harm the individual's perceptions of self, because these residential contexts contain stressors and challenges that are ever-present in daily life. What people *perceive* as problematic or challenging has time and again been shown to be a more proximal indicator of the neighborhood characteristics that are most

likely to create problems for individuals (Christie-Mizell et al. 2003; Geis and Ross 1998; Haney 2007). Furthermore, adolescence and the transition to adulthood represent key stages in both the development of self-concept (Baldwin and Hoffmann 2002; Demo 1992; Falci 2011). These are also periods when people are beginning to have an awareness of and interact with their neighborhoods independently (Dupéré et al. 2012; Leventhal and Brooks-Gunn 2000).

The findings from this study extend previous research in several ways. First, it examines trajectories of self-concept growth across an 11-year period. Many previous studies rely on cross-sectional data or limit trajectories to much shorter periods of time. Second, it incorporates measures of both self-esteem and mastery, two of the widely studied aspects of self-concept as well as several measures of neighborhood perceptions. Studies of self-concept growth often focus on either self-esteem or mastery, but not both, and to date, these growth models have not employed measures of neighborhood perceptions. Finally, it uses a nationally representative sample with multigenerational data. Research on neighborhood effects very often use regional or targeted subsamples, and few implement parental perceptions of neighborhoods. Parents' perceptions are especially important when examining childhood neighborhood effects because parents shape the way children interact with their neighborhoods and the way children think about their surroundings.

The results of this study suggest that early neighborhood experiences, as measured by perceptions, are indeed associated with self-perceptions. This association has potentially long-lasting effects on the individual. A child who perceives living in a dangerous and unsafe place and who receives the same messages from her mother enters adolescence with deficits in self-esteem and mastery. Initially depressed self-concept can have lasting consequences that put these children at a disadvantage over a decade later. Conversely, children in safer and less disordered

neighborhoods enjoy the benefits of those neighborhoods because they buoy self-concept above their counterparts and ultimately lead them to higher levels of self-concept later on. In other words, early neighborhood experiences may be at least partially responsible for establishing “baseline” reserves of self-esteem and mastery which adolescents and young adults can call upon in coping with stressful situations. Those who are already vulnerable because they live in disordered areas are at an even greater disadvantage because of their lower levels of self-concept. Additionally, these early perceptions do not merely reflect the levels of personal resources available to the adolescent, as these neighborhood effects were significant even with the inclusion of family income and education.

While the hypotheses that early neighborhood perceptions would decrease self-esteem (H1b, H2b) and mastery growth (H3b, H4b) were unsupported, this finding still underscores the importance of early experiences on growth in self-concept. Children whose mothers perceived high disorder did not have lower growth in self-concept, but they were not able to catch up to their peers in lower perceived disorder neighborhoods either. While they experienced growth that was similar to their counterparts, these children ultimately experienced a self-concept deficit into their young adulthood and possibly even later. Mother’s perceptions of neighborhood disorder played a consistent role in its relationship to levels of both self-esteem and mastery in adolescence and the transition to adulthood. Mother’s perceptions may accurately reflect the kinds of day to day challenges that are more likely to influence the child’s perceptions of self. Mothers who perceive their neighborhoods as disordered are more likely to establish rules to control their children’s movements or create strains in mother-child relationships which might hinder or alter children’s self-concept (Byrnes et al. 2011; Kimbro and Schachter 2011; also see Chapter 2). Thus, while mother’s perceptions may not have a perfect correlation to child’s

perceptions, they play an important role in setting the limits of child and adolescent interactions with their neighborhoods. Mother's perceptions also appear to operate independently of the child's perceptions. When mothers and their children both see their neighborhoods as disordered and unsafe, then levels of self-concept in early adolescence will be at an even lower level than peers who disagree with their mother's assessments.

Children's perceptions of neighborhood safety present a more complicated picture in terms of growth. Those who felt unsafe in their neighborhoods also failed to catch up to their peers' level of self-esteem, much like those with high levels of mother's perceived disorder. In the case of mastery, though, children's early neighborhood perceptions may not have long term effects. As Figure 4 demonstrates, children who have early experiences of feeling unsafe have lower levels of mastery, but they manage to make up for that deficit by the time they are young adults. These childhood perceptions of safety may be borne out of concrete experiences in which children were bullied, witnessed crime, or were aware of environmental threats to their well-being. Events like these could have had an immediate negative impact on feelings of mastery, but they may have served as important life lessons that helped them avoid trouble and experience greater growth in mastery (Sharkey 2006). Alternatively, childhood perceptions of safety may "fade" from memory and no longer play a role in mastery growth later on, though it is important to note that perceptions of safety did have lingering effects on self-esteem. A third possibility is that children who felt unsafe do not experience a markedly increased growth in mastery, but their peers in very safe neighborhoods actually grow at a much slower rate than expected. In other words, children in very safe neighborhoods start out with such a high mastery advantage that they have very little capacity for any increase in mastery.

Early neighborhood experiences may play a part in establishing overall levels of self-esteem and mastery, but neighborhoods continue to be associated with both measures of self-concept into adolescence and young adulthood. As found in previous studies (Christie-Mizell and Erickson 2007; Dupéré et al. 2012; Geis and Ross 1998; Haney 2007), contemporaneous perceptions of neighborhood disorder appear to have an immediate negative influence on levels of self-concept. Relationships between contemporaneous neighborhood disorder and self-esteem and mastery were independent of education, income, and prior levels of neighborhood perceptions. These findings suggest that neighborhood perceptions could have a cumulative effect on self-concept (Dannefer 2003; Turner, Thomas, and Brown 2016). Children who live in unsafe or disordered neighborhoods and who continue to live in the same neighborhoods as teens and adults may have lower initial levels of self-concept and then have their self-concept depressed by their continuing circumstances.

A limitation of this study is that it relies almost exclusively on subjective measures of neighborhood disadvantage. Perceptions of neighborhood disorder are likely to elucidate neighborhood characteristics that are most important to the individual, but they cannot necessarily act as proxies for objective indicators. Nonetheless, a number of studies have discovered that the effects of objective neighborhood disorder are almost entirely mediated by subjective perceptions (Christie-Mizell and Erickson 2007; Christie-Mizell et al. 2003; Geis and Ross 1998; Ross and Mirowsky 2001; Ross et al. 2000). There is good reason to believe that perceptions of neighborhoods are more proximally related to self-perceptions than are objective features. While residents of a neighborhood may not know the precise number of single mother headed households, neighborhood poverty levels, or crime rates, they do form perceptions about

these characteristics. These perceptions influence behavior and interactions in neighborhoods which in turn form the experiences upon which self-concept is predicated.

One potential issue with measures of perceptions is that it is not possible with current data to understand the perceived boundaries of neighborhoods. One mother may have been responding about the problems on her block while the other took a more inclusive view of her neighborhood and included a much larger area like her zip code or her entire town. These perceived boundaries may play an important role in the relationship between neighborhoods and self-concept. Indeed, Browning and colleagues (2013) find evidence that the impact of neighborhood disorder is dependent on how one perceives disorder relative to other nearby areas. Given the demonstrated importance of neighborhood perception variables, future surveys should include additional questions that further define perceived boundaries of the neighborhood.

Furthermore, this study is limited in its ability to examine race and ethnic differences in these relationships. Only three broad groups (i.e., blacks, Hispanics, and whites) were compared. Future research should include other major race-ethnic categories (e.g., Asian-Americans) as well as more specific ethnic groups (e.g., Mexican Americans, Chinese Americans). These groups may interact with or perceive their neighborhoods in ways that create differences in self-concept that are not reflected in the present study (see e.g., Christie-Mizell et al. 2003; Gilster 2016; Turley 2003). In auxiliary statistical analyses, I tested interactions between black and Hispanics and the neighborhood perception variables. Save for a single significant effect, there was no evidence that race or ethnicity played a role in moderating these relationships. However, prior research indicates that neighborhoods do indeed have different impacts for young people based upon race and ethnicity (Barajas-Gonzalez and Brooks-Gunn 2014; Turley 2003). Future

studies of neighborhood impacts on self-concept would do well to take a focused approach to race-ethnic differences.

This study used social disorganization theory and the stress process model as frameworks that emphasizes the importance of social structural location on self-concept (Pearlin et al. 1981; Turner 2010). Researchers have increasingly recognized that neighborhoods are an important part of the processes that lead to health disparities, and the role neighborhoods play in the stress process may help to explain these disparities. Damage to self-concept may result in an inability to cope with future stressors and lead to worse well-being in the long run (Gadalla 2009; Turner and Lloyd 1999; Turner and Roszell 1994). The process by which neighborhoods influence self-concept early in the life course may help to explain findings which link early neighborhood experiences with worse mental health outcomes later in life (Wheaton and Clarke 2003; Wickrama and Noh 2010).

What is particularly striking about the findings in this research is the long lasting nature of the relationships between early perceptions of neighborhoods and self-concept. Neighborhood influences on self-concept represent an avenue through which inequality at macro- and meso-structural levels results in unequal well-being outcomes. While children and adolescents may have limited awareness of the social forces that structure their lives, they perceive the effects these forces have on their daily social context. Perceptions of the meso-context shape self-perceptions which have long term implications for health and well-being. The results of this study show that one important way to ameliorate inequalities in health among the adult population could be to ensure that young people feel safe in their neighborhood environments. When they perceive safety and disorder in their surroundings, adolescents are better able to develop more protective levels of self-concept that can prevent harmful outcomes later in life.



**Appendix A. Correlations between all study variables. *N* = 10,229.**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	1																
2. Self-esteem	.069*	1															
3. Mastery	.117*	.659*	1														
4. Male	.011	.039*	.034*	1													
5. Black	.003	.058*	-.007	-.033*	1												
6. Hispanic	.001	-.018	-.019	.005	—	1											
7. Mother's PND <sup>a</sup>	.013	-.054*	-.120*	-.031*	.291*	.080*	1										
8. Child's PNS <sup>b</sup>	-.010	.054*	.083*	.095*	-.150*	-.055*	-.282*	1									
9. Family Income in Childhood	-.019	.094*	.115*	.055*	-.173*	-.054*	-.232*	.132*	1								
10. Contemporaneous PND <sup>b</sup>	-.013	-.080*	-.133*	-.023*	.249*	.025*	.319*	-.189*	-.186*	1							
11. Urban	.067*	.003	-.020*	.001	.248*	.101*	.143*	-.126*	-.089*	.155*	1						
12. Rural	-.107*	-.034*	-.034*	.021*	-.159*	-.123*	-.061*	.124*	.004	-.068*	—	1					
13. South	.004	.019*	-.006	-.008	.193*	-.024*	.028*	.016	-.048*	-.029*	-.013	.087*	1				
14. Household Income	-.049*	.068*	.099*	.025*	-.170*	-.041*	-.222*	.116*	.538*	-.204*	-.116*	.024*	-.068*	1			
15. Enrolled in School	-.632*	.034*	.003	-.041*	-.022*	-.019*	-.078*	.059*	.099*	-.071*	-.040*	.057*	-.032*	.135*	1		
16. High School Graduate	.731*	.124*	.170*	-.023*	-.024*	-.027*	-.074*	.023*	.069*	-.074*	.027*	-.085*	-.028*	.039*	-.423*	1	
17. Education beyond High School	.479*	.144*	.161*	-.057*	-.067*	-.038*	-.120*	.078*	.137*	-.099*	.016	-.070*	-.046*	.086*	-.070*	.501*	1

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> PNS = Perceived Neighborhood Safety.

\*  $p < .05$

## **CHAPTER IV**

### **Childhood Perceptions of Neighborhood Disorder and Young Adult Well-being: The Intervening Role of Self-Concept**

#### **ABSTRACT**

A number of studies on neighborhood effects and adult well-being have found disadvantaged neighborhoods to be associated with lower levels of well-being over the short term. In particular, more depressive symptoms and worse self-rated health have been consistently associated with neighborhood disadvantage. Few studies have adequately examined how childhood neighborhood experiences influence adult well-being. This study advances previous literature in two ways. First, this investigation explores the mediating effects of self-concept on the long term relationship between childhood neighborhood perceptions and various well-being outcomes. Second, this work improves on existing research by incorporating multiple outcomes, including alcohol consumption, and the quality of interpersonal relationships, depressive symptoms, and self-rated health. Using nationally representative, longitudinal data from 2,224 young adults, structural equation models were estimated to test the hypotheses that higher childhood neighborhood perceptions of disorder are linked with worse young adult outcomes. The results show support for the early influence of neighborhood disorder and the mediating role of self-concept on depressive symptoms, self-rated health, and an indicator of poor relationship quality. These relationships did not exist for alcohol consumption and an indicator of healthy relationship quality. These findings support stress process theory which posits that the link between social context and health disparities is largely mediated by protective psychosocial resources such as self-concept.

## INTRODUCTION

The persistence of the effects of childhood experiences throughout the life course may, in part, explain health disparities in adult outcomes related to socioeconomic status. Numerous studies have established the importance of early socioeconomic disadvantage on later health and well-being (see e.g., Ferraro, Schafer, and Wilkinson 2016; Goosby 2013; Hargrove and Brown 2015; Turner, Thomas, and Brown 2016). Although neighborhood contexts are closely related to socioeconomic status (Sampson et al. 2002; Wilson 1987, 1996), less is known about how neighborhood experiences in childhood contribute to health and well-being outcomes later in the life course. Studies on neighborhood effects consistently find that over short periods of time, neighborhood context is associated with well-being (see e.g., Christie-Mizell, Steelman, and Stewart 2003; Haines, Beggs, and Hurlbert 2011; Leventhal and Brooks-Gunn 2000; Ross and Mirowsky 2009). In general, residents of neighborhoods with high levels of disorder and poverty are less healthy than those who live in more organized and affluent areas (see e.g., Leventhal and Brooks-Gunn 2000; Sampson, Morenoff, and Gannon-Rowley 2002).

A smaller body of literature has examined relationships between neighborhoods and well-being across longer periods of the life course (Johnson et al. 2012; Vartanian and Houser 2010; Wheaton and Clarke 2003; Wickrama and Noh 2010). Much like other indicators of socioeconomic status, childhood neighborhood context may have effects on health and well-being that linger into adulthood. The extant research shows that children who live in disadvantaged neighborhoods have worse mental and physical health as adults, though these early experiences do not appear to have direct effects on adult well-being. Rather, early neighborhood context creates inter- and intra-individual conditions that are more proximal in their influence on adult health. The relationship between childhood neighborhood context and

adult health appears to be mediated by interpersonal and social psychological processes such as family interactions, adolescent adjustment, and stress exposure (Wheaton and Clarke 2003; Wickrama and Noh 2010). These processes leave a child living in a disordered or disadvantaged neighborhood more vulnerable to stress during key developmental stages of life. In turn, this stress exposure leads to worse health in adulthood. Despite promising findings from these studies, research on other potential intervening mechanisms is still quite limited.

One possible mediating mechanism is self-concept—one's thoughts, evaluations, and opinions about oneself (Demo 1992). Self-concept is an important protective personal resource that can shield individuals from the harmful health effects of stressors (Pearlin et al. 1981; Turner and Roszell 1994; Turner et al. 2004). Prior research has consistently found relationships between neighborhood context and self-concept among adults across short periods of time (e.g., Christie-Mizell and Erickson 2007; Geis and Ross 1998; Tyndall and Christie-Mizell 2016). Children who live in neighborhoods perceived as disordered or unsafe have lower self-concept than their peers in more advantaged neighborhoods, and these effects can persist into adulthood (see Chapter 3). Thus, self-concept may be an important intervening process that connects early neighborhood contexts to later health.

In this study, I extend the literature on the long term effects of neighborhoods on well-being in several ways. First, I include self-concept as a key mediator linking early neighborhood experiences to disparities health outcomes in adulthood. Second, this study examines a number of possible health and behavioral outcomes. Social structural effects on well-being manifest across a range of domains, and focusing on a single consequence of early neighborhood experiences may limit the ability to detect these effects (Aneshensel 2005). Therefore, in this paper, I examine four different aspects of health and behavior. The outcomes under investigation

are depressive symptomatology, self-rated health, drinking behavior, and for those who are married or cohabiting, relationship quality. Each of these outcomes has been previously linked with residential context such that neighborhood disadvantage is associated with worse outcomes (Christie-Mizell et al. 2003; Cutrona et al. 2003; Franzini et al. 2005; Hill and Angel 2005). And finally, I investigate both short and long term influences of neighborhood perceptions on the aforementioned outcomes. This study explores the possibility that adult neighborhood perceptions arise from childhood neighborhood perceptions and simultaneously tests the relationships between early and contemporaneous neighborhood perceptions and well-being.

## **BACKGROUND AND THEORY**

A great deal of neighborhood literature has addressed the deleterious effects of disordered and disadvantaged neighborhoods on adult health and well-being. The abundant research on self-rated health and neighborhoods consistently shows that adult health is harmed by neighborhood poverty, residential instability, and perceptions of collective efficacy and disorder (Boardman 2004; Browning and Cagney 2002; Hill, Ross, and Angel 2005; Johnson et al. 2012; Ross and Mirowsky 2001). A similarly profuse literature documents the impact of neighborhoods on adult depression and depressive symptomatology. For instance, Ross (2000) finds that neighborhood disadvantage is associated with increased depressive symptoms in a sample of Chicagoans. Several studies, including Ross', find that perceptions of disorder mediate this relationship or are otherwise directly associated with higher levels of depressive symptoms (Christie-Mizell et al. 2003; Haines et al. 2011; Latkin and Curry 2003). The results of such studies suggest that neighborhood disadvantage—and especially perceived neighborhood disorder—are strongly and consistently associated with both self-rated health and depressive symptoms.

Many researchers that have found the link between neighborhood disadvantage and well-being theorize that this relationship is the result of distressing feelings generated by daily exposure to a stressful environment (Christie-Mizell et al. 2003; Latkin and Curry 2003; Ross 2000). Others have hypothesized that this association is created by a lack of social connectedness in disordered neighborhoods (Haines et al. 2011; Ross and Mirowsky 2009). Another related possibility is that negative neighborhood experiences diminish an individual's self-concept (Christie-Mizell and Erickson 2007; Geis and Ross 1998; Haney 2007; Ross et al. 2001, 2000; Tyndall and Christie-Mizell 2016). There is scant evidence, however, for a link between early neighborhood experiences and adult well-being operating through self-concept.

Findings supporting the negative impacts of neighborhoods on self-concept are consistent with stress process theory (Pearlin 1999; Pearlin et al. 1981; Turner 2010). Stress process theory proposes that disparities in health outcomes result from differential exposure to stressors. Stressors are the major events, day to day inconveniences, and chronic problems which tax one's capacity to cope with life. The number, kinds, and severity of stressors one faces are inextricably linked to one's hierarchical standing in the social structure (Pearlin 1999). For instance, living in poverty is assumed to be associated with a higher number and greater severity of stressors than being financially secure. Living below the poverty line may mean working contingent jobs and worrying about long-term employment, putting off necessary health care, and living in unhealthy or hazardous conditions. Each of these circumstances creates stress in the individual that manifests as physical and mental distress and may engender unhealthy behaviors (Hill and Angel 2005). However, people can cope with stressful conditions by relying on personal and social resources that mitigate the harmful effects of stressors (Thoits 1995, 2006; Turner and Brown 2010; Turner and Roszell 1994). These buffering mechanisms include actual and perceived

social support and a host of psychosocial resources such as coping behaviors and, of relevance to this study, self-concept.

Self-concept consists of the thoughts, attitudes, and beliefs that make up an individual's conception of her or himself as a socially embedded individual (Demo 1992; Falci 2011). Our self-concept arises from the way we see ourselves, the way we think others see us, and the way we would like to be seen (Felson 1985; Gecas and Seff 1990; Gecas 1989). If one believes they are a good, worthy, and capable person even in the face of difficult circumstances, then the stress arising from those circumstances is not as likely to manifest in harmful ways. Two of the widely studied and validated dimensions of self-concept are self-esteem and mastery. Self-esteem is a person's global sense of self-worth (Gecas and Burke 1995). Mastery is the degree to which an individual feels control over important life events (Bandura 1977; Pearlin and Schooler 1978).

Both self-esteem and mastery have been implicated in the stress process as important psychosocial resources that buffer the effects of stress on physical and mental health (Turner and Roszell 1994). In particular, higher levels of self-esteem and mastery have been linked to lower levels of depressive symptoms (Gadalla 2009; Turner et al. 1999; Turner and Lloyd 1999), higher self-rated health (Heard, Gorman, and Kapinus 2008; Pampalon et al. 2007; Poortinga, Dunstan, and Fone 2008), lower levels of alcohol consumption (Epstein, Griffin, and Botvin 2004), and higher levels of relationship satisfaction (Orth, Robins, and Widaman 2012). However, these relationships have not been tested in the context of childhood and young adult neighborhood experiences. Individuals living in highly disordered neighborhoods that have few social and economic resources have lower levels of both self-esteem and mastery (Boardman and Robert 2000; Christie-Mizell and Erickson 2007; Haney 2007; Mirowsky and Ross 2007; Ross et al. 2001, 2000). Children are likely to internalize early experiences of neighborhood disorder in

ways that diminish their overall levels of self-concept (see Chapter 3), thus decreasing their ability to cope with adulthood stressors, resulting in worse health.

Whereas researchers have gathered a fair amount of evidence for neighborhood effects on depressive symptoms and self-rated health, other outcomes are not as well represented in the neighborhood literature. Aneshensel (2005) argues that the consequences of social structural disadvantage for individuals are wide ranging and likely to be non-specific. Studies that focus only on depressive symptomatology may underestimate neighborhood effects by classifying those with few or no symptoms as “well” when in fact they may be experiencing other forms of distress. Therefore, it is important to extend the neighborhood effects literature by including other mental health and behavioral outcomes. Several existing studies have done this by including measures of anxiety, anger, or general measures of internalizing and externalizing behavior (Ross and Mirowsky 2009; Schieman et al. 2006; Wheaton and Clarke 2003). The results from these studies suggest that neighborhoods do indeed influence other aspects of adult mental health and well-being.

In addition to depressive symptoms and self-rated health, this study examines two adult outcomes that have received relatively little attention in neighborhood literature: alcohol consumption behaviors and romantic relationship quality. Men and women may manifest distress differently as a result of cultural norms regarding emotional expression (Simon 2002). As a result, women are more likely to experience depression, while men abuse alcohol as a result of similar stressors (Christie-Mizell et al. 2015). Assessing drinking behavior helps to ensure that these gender differences are not obscuring neighborhood effects as may be the case when researchers examine only depressive symptoms.



A relatively small number of studies have examined neighborhood-level factors and adult drinking patterns, and the results of this research are mixed. A few studies have found that neighborhood characteristics usually linked to better well-being actually lead to more alcohol consumption. Carpiano (2007) found that adults in Los Angeles were more likely to binge drink in neighborhoods with more social support, while Stockdale and colleagues (2007) found a positive association between neighborhood income and alcohol use disorders. Other studies have found little to no association between measures of neighborhood disadvantage and problematic alcohol use (Bryden et al. 2013; Carpiano 2007; Fauth, Leventhal, and Brooks-Gunn 2004). One study of older adults found neighborhood disorder to lead to higher levels of binge drinking among women but not men (Rudolph et al. 2013). Using a sample of low-income adults, Hill and Angel (2005) conclude that neighborhood disorder is associated with heavy drinking, but this relationship is largely mediated by anxiety and depression. Characteristics of advantaged neighborhoods such as higher incomes and stronger social ties may increase the ability to buy alcohol and the occasions to drink. Conversely, disorder may create stressors that encourage drinking as a coping mechanism. The evidence thus far for both of these possibilities is inconclusive. Unfortunately, no neighborhood and drinking studies appear to focus on an entirely young adult sample. However, young adulthood is characterized by a number of transitions that impact drinking behaviors, and patterns set during this period determine later levels of drinking (Christie-Mizell and Peralta 2009).

Romantic relationship quality, including both satisfaction and discord in romantic partnerships, is perhaps even less commonly studied in neighborhood research than adult drinking outcomes. Nonetheless, neighborhoods have the potential to influence relationship quality by increasing the amount of stressors that couples face and thereby creating more tension

in a relationship or by providing additional social ties that support relationships (Umberson et al. 2005). One study found a negative association between neighborhood disadvantage and marital quality and relationship warmth among married black couples (Cutrona et al. 2003). Another study examined the impact of having friends in the neighborhood and found that this form of social connection was associated with increased marital satisfaction for men (Hostetler et al. 2012). A pair of Utah-based studies found that neighborhood quality was positively associated with marital satisfaction, particularly for men (Mannon and Brooks 2006; Minnotte et al. 2008). However, there appears to be little or no research on the quality of cohabiting relationships which young adults are increasingly likely to enter before or instead of marriage (Cherlin 2010). Despite the dearth of research in this area, neighborhoods do appear to have at least some effect on young adult partnerships. Young adults in highly disadvantaged neighborhoods are more likely to get married early (South and Crowder 2000), and neighborhoods structure partnership options (South and Lloyd 1995). If neighborhoods shape the context in which young people find relationship partners, they may play a role in the healthy functioning of those relationships as well.

The young adult years, starting around age 18 and continuing through the 20s, are a period of great upheaval and transition in the life course. Young adults, guided by the experiences of their childhood, begin to forge independent trajectories that establish patterns in their adult and family lives (Rosenfeld 2007). Young adults take on a number of new roles that interact with neighborhood quality to influence well-being and self-concept. Entering committed relationships, having children, and buying a home are among the many new responsibilities that can be both stressful and rewarding. Each of these roles has been associated with neighborhoods, self-concept, and well-being among young adults (Cassidy and Davies 2003; Christie-Mizell and

Erickson 2007; Christie-Mizell et al. 2003; Tyndall and Christie-Mizell 2016; Umberson, Pudrovska, and Reczek 2010). Disadvantaged neighborhood contexts may challenge young adults' abilities to manage these transitions which can ultimately lead to worse mental health and interpersonal behaviors later in life.

Young adult experiences of neighborhood crime, poverty, and social ties are associated with immediate and long term health outcomes and may account for some racial and socioeconomic health inequalities among adults (Johnson et al. 2012). Furthermore, childhood neighborhood residence has persistent effects on adult health independent of contemporaneous effects (Vartanian and Houser 2010). Long term studies make clear that early residential experience has lasting impacts on well-being, and the ways young adults experience their surroundings during this period has serious ramifications for later life. Considering the impact of childhood residence on young adult outcomes, Wheaton and Clarke (2003) find evidence that childhood neighborhood disadvantage increases internalizing and externalizing problems during the transition to adulthood above and beyond the effects of current neighborhood. Alternatively, Wickrama and Noh (2010) found childhood neighborhood to have indirect effects on depression through family adversity and adolescent adjustment. This research demonstrates that childhood residence is impactful in later life, but whether that is through pathways mediated by self-concept or through contemporaneous neighborhood contexts requires further investigation.

### **SUMMARY AND HYPOTHESES**

Existing research suggests that neighborhood contexts have consequences for a broad range of mental health, behavioral, and interpersonal outcomes. These effects can be long lasting, and reach from childhood into adulthood through a variety of potential mechanisms. One mechanism through which childhood neighborhoods might exert long lasting influences is

through self-concept. Children in disordered neighborhoods experience challenges to the way they perceive their worth and ability to control events in their lives that children in advantaged neighborhoods do not face. Levels of self-esteem and mastery, two important dimensions of self-concept, that have been diminished by neighborhood experiences in childhood can remain lower for these children into young adulthood (see Chapter 3). Young adulthood is a life stage at the nexus of childhood experience and later adult experience. Evidence shows that childhood neighborhood experiences have effects during the young adult period and that young adult residence has effects on well-being in mid to late life (Johnson et al. 2012; Vartanian and Houser 2010; Wheaton and Clarke 2003; Wickrama and Noh 2010).

This study examines several potential pathways through which childhood perceptions of neighborhood disorder affect young adult well-being in four domains: depressive symptoms, self-rated health, drinking, and relationship quality. Incorporating a variety of outcomes supports the contention that the structural effects of neighborhoods are non-specific and wide-ranging. The evidence for depression and self-rated health suggests that childhood neighborhoods may have indirect effects on young adult depression through self-concept. The evidence for drinking and relationship quality is less clear.

Based on stress process theory and prior neighborhood literature, this study explores the associations between early neighborhood experiences and young adult health and tests the following hypotheses:

- H1. Neighborhood disorder in childhood will be inversely associated with positive self-concept in young adulthood.

H2a-c. Positive self-concept will be negatively associated with (H2a) depressive symptoms, (H2b) positively associated with self-rated health, and (H2c) negatively associated with alcohol consumption.

H3a-b. In terms of relationship quality, positive self-concept will be related to (H3a) more positive interactions and (H3b) fewer arguments, among married and cohabiting couples.

In addition to these hypotheses, this study examines the relationship between childhood neighborhood perceptions and adult perceptions of neighborhood disorder. Including adult perceptions of disorder in the analytic model serves two functions. First, it acts as a control for more proximal neighborhood influences on the health and relationship outcomes and replicates prior research which shows neighborhoods are related to health concurrently. Second, it identifies another possible pathway linking childhood perceptions of disorder to adult well-being. The way an individual experiences their neighborhood during childhood is likely to inform their perceptions as adults. This possibility has not been investigated in prior literature, but may represent another important relationship connecting childhood experiences to adult well-being.

## **DATA AND METHODS**

### *Data*

Data for this study come from the National Longitudinal Survey of Youth 1979 (NLSY79) and its related Child (NLSY-C) and Young Adult (NLSY-YA) surveys. These surveys are sponsored by the Bureau of Labor Statistics and maintained by the Center for Human Resource Research at The Ohio State University. The NLSY79 is a nationally representative sample of individuals who were aged 14 to 22 in 1979 ( $N=12,686$ ). The NLSY-C is made up of

the children of the mothers of the NLSY79 and consists of questions regarding child-specific information such as child development, parent-child relationships, and child well-being ( $N=11,512$ ). The NLSY-C began in 1986 and has been administered biennially since. At age 14, these children become a part of the NLSY-YA sample which has been administered every two years since 1994 ( $N=7,612$ ). The NLSY-YA contains questions relevant to economic health, adult roles and transitions, and well-being of its respondents. Of consequence to this study, the NLSY surveys include questions about neighborhood perceptions, self-concept, and various health outcomes and relationship behaviors.

The sample for this paper is limited to young adults aged 18 to 30 in 2008. There is some inconsistency in the age range considered to be “young adulthood.” Many studies use age ranges that end in the mid-twenties. An age range truncated in the mid-twenties may be too restrictive for this study for at least two reasons. First, many young adults in their early twenties are in college and their residential experiences are limited to college or dorm experiences that could skew results for categories of people more likely to attend college. Second, at younger ages, young adults are less likely to be in committed relationships. By allowing for a more extensive age range, young adults in the sample are more likely to be in cohabiting relationships or married and able to answer questions about relationship quality. Limited to this age range, the total sample size was 2,224. Descriptive statistics for the sample are shown in Table 1.

**Table 1. Means, Proportions, and Standard Deviations for Study Variables ( $N = 2,224$ ).**

<b>Variable</b>	<b>Mean or Proportion</b>	<b>SD</b>	<b>Scale Range</b>
<i>Childhood Neighborhood</i>			
Mother's PND <sup>a†</sup>	.48	.48	0-2
Child's PNU <sup>b</sup>	1.68	.84	1-4
<i>Self-Concept (2004)</i>			
Self-esteem	3.26	.41	1-4
Mastery	3.19	.43	1-4
<i>Adult Neighborhood (2006)</i>			
Adult PND <sup>a†</sup>	.38	.42	0-2
<i>Health Outcomes (2008)</i>			
Depressive Symptoms	.63	.52	0-3
Self-Rated Health	3.72	.93	1-5
Number of Drinks	2.34	2.86	—
<i>Relationship Variables (2008)<sup>c</sup></i>			
Positive Interactions <sup>†</sup>	3.82	.41	1-4
Arguments <sup>†</sup>	.80	.50	0-3
<i>Race and Gender</i>			
Black	.33	—	—
Hispanic	.22	—	—
Male	.49	—	—
<i>Childhood Control</i>			
Family Income	\$48,197	\$58,578	—
<i>Adult Controls (2008)</i>			
Age	23.01	3.04	18-30
Income	\$35,323	\$40,343	—
Education (years)	12.74	1.96	—
Cohabiting	.15	—	—
Married	.15	—	—
Parent	.34	—	—
Home Owner	.13	—	—
Urban	.37	—	—
Rural	.20	—	—
South	.43	—	—
Frequency of Drinking	3.43	2.43	0-8

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> PNU = Perception of Neighborhood as Unsafe.

<sup>c</sup> Married and cohabiting respondents only ( $N = 636$ ).

<sup>†</sup> Means of summed scales presented for illustrative purposes only. Latent factors were used for these variables in structural equation analyses.

## *Measures*

*Depressive symptoms* were measured in 2008 using the 7-item Center for Epidemiologic Studies – Depression scale (CES-D; Radloff 1977). The CES-D asks respondents how often in the last week they experienced various symptoms of depression on a scale ranging from rarely (0) to most of the time (3). The scale items include: 1) “I did not feel like eating; my appetite was poor,” 2) “I had trouble keeping my mind on what I was doing,” 3) “I felt depressed,” 4) “I felt that everything I did was an effort,” 5) “My sleep was restless,” 6) “I felt sad,” and 7) “I could not get ‘going’.” This mean for this scale was .63 ( $\alpha = .72$ ). *Self-rated health* was measured in 2008 using a single item that asked respondents how they would describe their present health. Responses could range from poor (1) to excellent (5). The mean score in the sample was 3.72 indicating the average respondent perceived themselves in good to very good health.

Alcohol consumption was measured in 2008 using a single measure of the *number of drinks per occasion* on the days that respondents drank in the previous 30 days. The average number of drinks per occasion in the sample was 2.34. Additionally, *frequency of drinking* was included as a control in regression equations for number of drinks per occasion. This question came from a single item which asked respondents to rate how often they drank in the past year from never (0) to daily (8). Respondents averaged a score of 3.43 on this scale, indicating they drank between a few days a month to every other month, on average.

*Positive relationship interactions* were measured using a 3-item scale which asked respondents how often they and their spouse or partner: 1) “calmly discuss something,” 2) “laugh together,” and 3) “tell each other about [their] day.” Responses ranged from less than once a month (1) to almost every day (4). The mean for this scale was 3.82 ( $\alpha = .72$ ). *Arguments* with one’s spouse or partner were measured using an 8-item scale which asked respondents how often



they argued with their spouse or partner about various topics. The topics include: 1) chores and responsibilities, 2) children, 3) money, 4) showing affection, 5) religion, 6) free time, 7) drinking, and 8) infidelity. Responses ranged from never (0) to often (3). The mean for this scale was .80 ( $\alpha = .73$ ).

*Childhood neighborhood perceptions* were measured using two scales. Both were taken from the survey wave before the respondent entered the NLSY-YA survey which means respondents were between 10 and 13 years old at the time these were measured. The first scale is the respondent's *mother's perceptions of neighborhood disorder* and was measured in the NLSY79 survey. This scale consists of 8 items which asked mothers to rate how problematic various aspects of their neighborhood were perceived to be (0 = not a problem, 1 = somewhat of a problem, 2 = a big problem). Items on this scale include: 1) "People don't have enough respect for rules and laws," 2) "Crime and violence," 3) "Abandoned or run-down buildings," 4) "Not enough police protection," 5) "Not enough public transportation," 6) "Too many parents who don't supervise their children," 7) "People keep to themselves and don't care what goes on in the neighborhood," and 8) "Lots of people who can't find jobs." The mean for the mother's perceptions scale was .48 ( $\alpha = .84$ ). *Childhood perceptions of the neighborhood as unsafe* were measured with a single item from the child survey (NLSY-C). The item asked children to rate how safe they felt walking or playing in their neighborhood. Responses ranged from very safe (1) to very unsafe (4). The mean for child's perceptions was 1.68. *Young adult perceptions of neighborhood disorder* were measured in 2006 using the same 8-item scale that was asked of the mothers. The mean for young adult perceptions was .38 ( $\alpha = .83$ ).

*Self-concept* was measured in 2004 using measures of self-esteem and mastery. The *self-esteem* scale was the 10-item Rosenberg Self-Esteem Scale (Rosenberg 1965). Items on this

scale ask respondents how much they agree to a series of questions about their self-worth ranging from strongly disagree to strongly agree. Self-esteem items include: 1) “I feel that I’m a person of worth, at least on an equal basis with others,” 2) “I feel that I have a number of good qualities,” 3) “All in all, I am inclined to feel that I am a failure,” 4) “I am able to do things as well as most people,” 5) “I feel that I do not have much to be proud of,” 6) “I take a positive attitude toward myself,” 7) “On the whole, I am satisfied with myself,” 8) “I wish I could have more respect for myself,” 9) “I certainly feel useless at times,” and 10) “At times I think I am no good at all.” Responses were rated on a 4-point scale from strongly disagree (1) to strongly agree (4). Items were recoded such that higher values correspond to higher self-esteem, then summed and divided by the number of items. The self-esteem scale had a mean of 3.26 ( $\alpha = .74$ ).

The *mastery* scale was the 7-item Pearlin Mastery Scale (Pearlin and Schooler 1978). The questions on this measure used the same 4-point scale as the self-esteem measure. Items include: 1) “There is really no way I can solve the problems I have,” 2) “Sometimes I feel that I’m being pushed around in life,” 3) “I have little control over the things that happen to me,” 4) “I can do just about anything I really set my mind to,” 5) “I often feel helpless in dealing with the problems of life,” 6) “What happens to me in the future mostly depends on me,” and 7) “There is little I can do to change many of the important things in my life.” Responses were recoded such that higher values correspond to higher mastery, then summed and divided by the number of items. The mastery scale had a mean of 3.19 ( $\alpha = .87$ ).

Control variables include race, gender, age, income, education, relationship status, parenthood, home ownership, urbanicity, and region of residence. *Race* is a series of mutually exclusive dummy variables coded 1 if the respondent is black (33%), Hispanic (22%), or white (45%), and 0 otherwise. Whites are the reference category in all analyses. *Sex* is a dummy

variable indicating the respondent is male (49%) (1) or female (51%) (0). *Family income in childhood* is the logged total net family income measured at the same wave as the childhood neighborhood perception measures. It is included to control for the possibility that early neighborhood experiences are proxies for family resources. *Age* is the respondent's age in years. *Adult income* is the respondent's logged total net household income. *Education* is measured by total years of education completed. *Relationship status* is a series of dummy variables indicating if the respondent is *married* (15%) or *cohabiting* (15%). Unmarried, non-cohabiting respondents are the reference group. *Parenthood* is a dummy variable indicating if the respondent is a parent (34%). *Home ownership* is a dummy variable indicating that the respondent owns their home (13%), compared to renters. *Urbanicity* is a series of dummy variables that indicate if the respondent lives in an urban (37%) or rural area (20%), compared to suburban areas (47%). Finally, *region* is a dummy variable that compares southern residents (43%) to all others.

### *Analytic Strategy*

The primary analyses in this study used longitudinal structural equation modeling (SEM) to determine direct and indirect links between childhood neighborhood perceptions and young adult well-being outcomes. SEM allows for the use of latent constructs to measure many of the key dependent and independent variables which helps eliminate measurement error among the modeled constructs. Furthermore, SEM allows for the simultaneous estimation both direct and indirect paths linking all outcomes and mediating variables in a single model. This feature of SEM is particularly useful for determining the pathways through which childhood neighborhood variables are related to young adult well-being outcomes.

Several key variables were measured as latent constructs. Childhood neighborhood perceptions is a second-order latent factor that includes the first-order latent factor indicated by

mother's perceptions of neighborhood disorder as well as the child's perceptions of the neighborhood as unsafe. Self-concept is latent factor made up of the Rosenberg Self-Esteem Scale and the Pearlin Mastery Scale. Adult perceptions of neighborhood disorder, depressive symptoms, positive relationship interactions and arguments were all modeled as first-order factors indicated by their respective scales as described above. All other outcomes and controls are manifest variables. Controls for the 2004, 2006, and 2008 measures were measured contemporaneously; for example, household income in 2004 was used as a control for self-concept, while income in 2008 was used as a control on depressive symptoms, self-rated health, and number of drinks per occasion.

There were two primary analyses conducted for this study. The first modeled depressive symptoms, self-rated health, and number of drinks per occasion in a single model. The long-term nature of the NLSY data allows for the separation of each set of key variables by at least two years, thus ensuring that each key independent variable temporally precedes the dependent variables (Cole and Maxwell 2003). Each "upstream" variable (i.e., childhood perceptions of neighborhood disorder, self-concept, and adult perceptions of neighborhood disorder) were included in the regression equations for the variables that succeeded them. For example, childhood perceptions of neighborhood disorder (measured from ages 10-13) were included in the equations for self-concept (measured in 2004), adult perceptions (2006), and all health outcomes (2008). Likewise, self-concept was included in the equation for adult perceptions of disorder and all health outcomes.

The second analysis was largely the same as the first, but included positive relationship interactions and arguments as the ultimate outcomes. This separation of models was necessary because only 30% of the sample was in a committed relationship (i.e., married or cohabiting) in

2008. The resulting sample size for the relationship analysis is therefore much smaller ( $N = 636$ ). Roughly half of this smaller sample were married and half were cohabiting. These sample characteristics are not surprising in light of current trends toward later age at marriage and more cohabiting relationships among American young adults (Cherlin 2010). Results presented are from unweighted analyses which were substantively similar to results using weights to adjust for sampling design. Unweighted descriptive statistics are presented in Table 1.

## RESULTS

I began the multivariate analyses by conducting a confirmatory factor analysis with my latent constructs to ensure that these variables were being measured appropriately. All factor loadings were significant at  $p < .001$ . Though some items had relatively low loadings on their construct (see Appendix A for factor loadings), there was no indication that constructs were measured incorrectly. I achieved an adequate fit for the measurement model (RMSEA = .039, 90% CI [.037, .041], CFI = .93, TLI = .93). All key variables were correlated and in the expected directions with the exception of number of drinks per occasion and two factors—depressive symptoms and self-concept—which were not significantly correlated.

Initially, self-esteem and mastery were modeled first as separate latent factors using the scale items as indicators then as part of a self-concept second-order latent factor made up of first-order factors comprising the self-esteem and mastery scales. Though there was no indication of major problems with cross loadings between these constructs, problems arose fitting the models with these specifications. Ultimately, using the summated scales on a two item factor produced the best fitting model. It is important to note that in the models with separate self-esteem and mastery factors, all relationships behaved similarly to those found in the final models presented in the present study.

The standardized coefficients for all modeled relationships between key variables and controls are presented in Table 2. Figure 1 graphically illustrates the significant findings from the first model. This model, which includes all hypothesized relationships and control variables, demonstrated good fit to the data across a variety of fit statistics (RMSEA = .027, 90% CI [.026, .028], CFI = .98, TLI = .96). Panel 1 in Table 2 includes the coefficients for self-concept regressed on childhood neighborhood perceptions and all control variables. The results show that Hypothesis 1, which anticipated a significant negative relationship between childhood perceptions of neighborhood disorder and self-concept, was supported. Children who lived in neighborhoods that they and their mothers perceived as disordered and unsafe experienced lower levels of self-concept. Panel 2 of Table 2 shows coefficients for adult perceptions of neighborhood disorder regressed on childhood perceptions, self-concept and all control variables. The standardized coefficient for childhood perceptions of neighborhood disorder on adult perceptions is large, positive, and significant. This finding indicates that early perceptions are substantially related to the way adults perceive their current surroundings. In this panel, self-concept is shown to have no significant relationship to adult perceptions of neighborhood disorder. One's level of self-concept does not appear to have any relationship to how one perceives disorder only two years later. In combination, these findings lend support to the literature that conclude neighborhoods have important influences on self-concept rather than operating in the opposite direction (Christie-Mizell and Erickson 2007; Geis and Ross 1998; Haney 2007).

**Table 2. Standardized coefficients for structural equation models of depressive symptoms, self-rated health, and drinks per occasion regressed on childhood neighborhood perceptions, self-concept, and adult perceived neighborhood disorder (N=2,224).**

Variable	Self-Concept (2004)		Adult PND <sup>a</sup> (2006)		Depressive Symptoms (2008)		Self-Rated Health (2008)		Drinks per Occasion (2008)	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
<i>Key Variables</i>										
Childhood Neighborhood Perceptions <sup>b</sup>	-.310***	.046	.419***	.049	.018	.058	-.098	.052	.020	.044
Self-Concept <sup>c</sup> (2004)			-.041	.028	-.182***	.028	.174***	.025	.010	.022
Adult PND <sup>a</sup> (2006)					.129***	.032	-.056	.029	-.011	.025
<i>Controls</i>										
Black	.212***	.034	.099**	.036	-.060	.035	.016	.031	-.148***	.026
Hispanic	.060*	.027	.004	.026	-.071**	.027	-.022	.024	-.026	.020
Male	.047	.024	.005	.023	-.111***	.024	.067**	.021	.136***	.018
Age	-.028	.044	-.006	.033	.062*	.029	-.157***	.026	-.011	.023
Family Income in Childhood	.011	.029	-.019	.027	-.010	.027	.020	.024	.003	.021
Household Income	.016	.028	-.015	.023	-.050*	.025	.013	.022	.014	.019
Education	.222***	.039	-.015	.031	-.087**	.029	.087***	.026	-.061**	.022
Cohabiting	.025	.026	-.014	.024	-.002	.025	-.043*	.022	-.016	.019
Married	.059*	.027	-.025	.026	-.056	.029	-.009	.025	-.062**	.022
Parent	-.067*	.029	.052	.027	.032	.029	.008	.026	.023	.022
Home Owner	-.023	.025	-.042	.025	-.050	.026	.052*	.023	.014	.020
Urban	.028	.026	.126***	.026	-.014	.026	.023	.023	.014	.019
Rural	-.039	.026	.028	.025	-.012	.025	-.015	.023	.010	.019
South	-.077**	.025	-.097***	.024	-.024	.025	-.004	.022	.019	.019
Frequency of Drinking Occasions									.508***	.017
R <sup>2</sup>	.152		.300		.114		.106		.338	

$\chi^2$  (df = 1210) = 3187.68,  $p < .001$ ; RMSEA = .027; CFI = .98; TLI = .96.

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> Consists of mother's perceptions of neighborhood disorder scale and child's perceptions of neighborhood safety.

<sup>c</sup> Self-concept consists of self-esteem and mastery scales.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

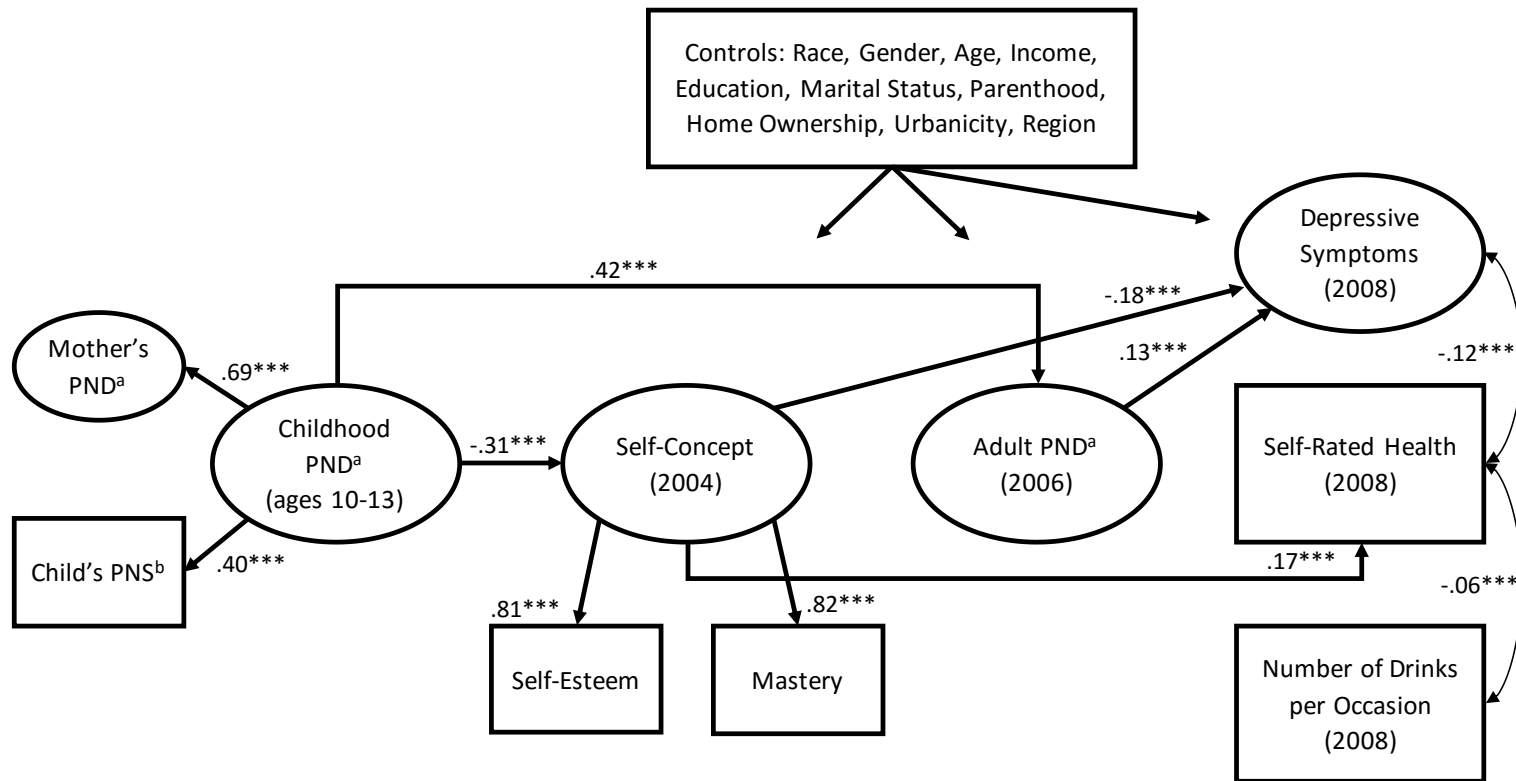


Figure 1. Path diagram of structural equation model regressing health outcomes on neighborhood perceptions and self-concept. For the sake of clarity, non-significant pathways and disturbance terms are not included for the sake of clarity. Curved arrows represent correlations between error terms of the outcomes measured in 2008.  $\chi^2 (df = 1241) = 2060.19, p < .001$ ; RMSEA = .032; CFI = .96; TLI = .94. See Table 2 for additional information.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .



Hypotheses 2a-c are tested in the final three panels of Table 2. The third panel shows the results for the regression of all variables on depressive symptoms. Childhood neighborhood perceptions are not directly associated with young adult depressive symptoms, net of self-concept and adult perceptions of neighborhood disorder. However, self-concept is negatively and significantly associated with depressive symptoms, supporting Hypothesis 2a. Young adults with lower self-concept have higher depressive symptoms. Childhood perceptions neighborhood disorder has a significant and positive indirect effect on depressive symptoms (standardized indirect effect = .11,  $p < .001$ ). Higher levels of adult perceptions of neighborhood disorder have a direct significant relationship with depressive symptoms as well. Overall, perceiving one's neighborhood as disordered in both childhood and adulthood appear to be related to worse depressive symptoms. Panel 4 of Table 2 shows the results for self-rated health. Again, childhood perceptions of neighborhood disorder are not significantly related to self-rated health, though the negative coefficient is in the expected direction. The indirect effects are negative and significant, however (standardized indirect effect =  $-.078$ ,  $p < .001$ ). Self-concept has a direct, positive association with levels of self-rated health, supporting hypothesis 2b. As with depressive symptoms, childhood perceptions of neighborhood disorder appear to be related to self-rated health. The final panel of Table 2 presents the results for number of drinks per occasion. This model shows that none of the key independent variables exhibit any significant relationship with drinking behaviors. Thus, Hypothesis 2c, that positive self-concept would lead to less alcohol consumption, is not supported. Neither childhood nor adult perceptions of neighborhood disorder showed any relationship with alcohol consumption as measured by drinks per occasion.

**Table 3. Standardized coefficients for structural equation models of positive relationship interactions and arguments regressed on childhood neighborhood, self-concept and adult neighborhood (N=643).**

Variable	Self-Concept (2004)		Adult PND <sup>a</sup> (2006)		Positive Interactions (2008)		Arguments (2008)	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
<i>Key Variables</i>								
Childhood Neighborhood Perceptions <sup>b</sup>	-.278***	.076	.348***	.077	-.018	.090	-.107	.091
Self-Concept <sup>c</sup> (2004)			-.070	.051	.049	.054	-.186***	.054
Adult PND <sup>a</sup> (2006)					-.070	.056	.164**	.056
<i>Controls</i>								
Black	.218***	.050	.094	.051	-.042	.055	.185***	.055
Hispanic	.075	.047	-.007	.047	.061	.049	.023	.050
Male	.060	.043	.042	.041	.042	.044	-.045	.044
Age	.029	.058	.072	.050	-.096*	.048	.103*	.048
Family Income in Childhood	.022	.047	.075	.046	.103*	.048	-.026	.049
Household Income	.101	.047	-.086	.044	.002	.046	.092*	.047
Education	.172**	.060	-.068	.056	.064	.056	-.050	.056
Cohabiting	.026	.044	.041	.042	.027	.047	-.034	.047
Parent	-.023	.049	.007	.047	.048	.048	.180***	.048
Home Owner	.007	.044	-.106*	.044	-.012	.048	-.107*	.048
Urban	.015	.047	.042	.048	.055	.047	-.034	.048
Rural	-.100*	.046	.023	.046	.001	.047	-.078	.047
South	-.110*	.043	-.103	.042	.061	.045	-.069	.046
R <sup>2</sup>	.206		.248		.049		.169	

$\chi^2$  (*df* = 1241) = 2060.19, *p* < .001; *RMSEA* = .032; *CFI* = .96; *TLI* = .94.

<sup>a</sup> PND = Perceived Neighborhood Disorder.

<sup>b</sup> Consists of mother's perceptions of neighborhood disorder scale and child's perceptions of neighborhood safety.

<sup>c</sup> Self-concept consists of self-esteem and mastery scales.

\* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

The model testing the hypotheses that perceptions of high neighborhood disorder and low self-concept are associated with fewer positive interactions and more arguments among married and cohabiting young adults is shown in Table 3. This model also demonstrated good fit to the data across a number of fit statistics (RMSEA = .032, 90% CI [.030, .035], CFI = .96, TLI = .94). Statistical power is limited in this model compared to the previous model because of the smaller sample size. Nonetheless, the basic relationships between childhood neighborhood perceptions, self-concept, and adult perceptions of neighborhood disorder remain similar across both models. Panel 3 of Table 3 shows the results for the regression of all key independent and control variables on positive relationship interactions. No key independent variables have any significant relationship with the positive interaction factor, though the coefficients are all in the expected directions. Thus, hypothesis H3a is unsupported. Finally, Panel 3 of Table 3 presents results for the argument factor regressed on all independent and control variables. Childhood neighborhood perceptions are not significantly related to arguments in young adulthood. Self-concept has a significant negative relationship with the argument factor. Hypothesis H3b, which expects young adults with lower self-concept have more arguments with their partner or spouse, is supported. Adult perceptions of neighborhood disorder are significantly and positively associated with the argument factor. The indirect effect of childhood neighborhood perceptions on self-concept is positive and significant (standardized indirect effect = .11,  $p < .001$ ).

Taken together, these findings suggest that childhood and contemporaneous neighborhood perceptions are implicated in creating higher levels of relationship turmoil, at least in terms of arguments between partners. However, neighborhoods do not seem to play a role in supporting or diminishing positive relationship interactions. One possible reason for this finding is that the positive interactions factor did not adequately measure relationship quality. Results of

the confirmatory analysis for the relationship variables showed a significant correlation between the argument factor and positive interaction factor was significant and in the expected direction ( $r = -.22, p < .001$ ) and all items loaded on the positive interaction factor alone. To some extent, these null findings are likely a result of low variation on the dependent variable. Nearly 90% of respondents rated their interactions at the highest level (i.e., a score of 4) on at least two out of three of the questions that make up this scale. It is also possible that neighborhood perceptions and self-concept do not play a role in these types of daily interactions between partners, but do create conditions that increase disagreements in relationships.

Although the evidence for self-concept as a mediator is strong for depression, self-rated health, and arguments, it is still important to conduct formal tests of mediation effects further specify the extent to which a mediating relationship exists (Preacher and Hayes 2004). In simple mediation analyses, I calculated Sobel test statistics for the mediation effects of self-concept on depressive symptoms, self-rated health, and arguments (Sobel 1982). I found direct effects of childhood neighborhood perceptions on depressive symptoms (standardized coefficient = .107,  $p < .05$ ) and self-rated health (-.134,  $p < .05$ ). The Sobel test statistics were significant for both outcomes (depressive symptoms: 4.23,  $p < .001$ ; self-rated health: -4.47,  $p < .001$ ) indicating significant mediation effects. In a simple mediation model with self-concept as the mediator and not including adult perceptions of neighborhood disorder, the coefficients of depression regressed on childhood perceptions (.070,  $p > .05$ ) and self-rated health (-.110,  $p < .05$ ) were only reduced by about 35% and 18%, respectively. The decrease in the coefficients does not give confidence that self-concept fully mediates this relationship. In similar tests with arguments as the outcome, there was no direct effect of childhood perceptions on arguments. The Sobel test using self-concept as a mediator, however, was significant (2.50,  $p < .05$ ), and the indirect effects

of childhood neighborhood were similar in size to the other indirect effects of childhood perceptions on depression and self-rated health. Thus, while self-concept may not fully capture the extent of the relationship between childhood perceptions and adult well-being, there is ample evidence to believe that self-concept plays a role as a mediator in this relationship.

## **DISCUSSION AND CONCLUSIONS**

This study explored the long term impacts of childhood neighborhood perceptions on depressive symptoms, self-rated health, alcohol consumption, and two behavioral indicators of relationship quality—positive interactions and arguments. While depressive symptoms and self-rated health have been shown to be associated with a number of neighborhood variables—including neighborhood perceptions—in previous research (Bjornstrom 2011; Browning and Cagney 2002; Christie-Mizell and Erickson 2007; Hill et al. 2005), alcohol consumption and relationship quality are not well represented in neighborhood literature. I investigated a wide range of outcomes to expand previous literature and because the effects of neighborhoods on well-being are likely to be varied and not specific to just emotional distress and generalized feelings of health (Aneshensel 2005).

In addition to broadening the scope of health and well-being outcomes, this study proposed that self-concept may act as a mediator through which early neighborhood experiences are transmitted to later health outcomes. In keeping with stress process theory (Pearlin et al. 1981; Turner 2010) disparities in health and well-being are thought to arise from social contexts which diminish protective personal psychosocial resources. Self-concept represents an important personal resource which helps people to cope with the major events and chronic conditions that are responsible for producing distressful outcomes. Children who live in neighborhoods that are perceived to be disordered and unsafe experience lower levels of self-concept (see Chapter 3),

and lower levels of self-concept can leave individuals vulnerable to worse mental health and harmful social behaviors.

The results of this study suggest that childhood perceptions of neighborhood disorder are related to lower levels self-esteem and mastery, two evaluative dimensions of self-concept that have been shown to help individuals cope with stressors (Gadalla 2009; Turner and Lloyd 1999). Consistent with this stress process research, people with lower levels of self-concept have more depressive symptoms, lower self-rated health, and more arguments with their spouses and cohabiting partners. Furthermore, it appears that self-concept acts in a mediating role between early neighborhood perceptions and each of these outcomes. In other words, children living in disordered and unsafe neighborhoods grow up to be more distressed as young adults, and a large portion of this relationship can be attributed to the ways that neighborhood contexts alter the way children feel about themselves.

Recall that childhood neighborhood perceptions of neighborhood were measured jointly by the mother's perceptions of disorder and the child's perceptions that the neighborhood is unsafe. These perceptions can alter behavior in ways that create few opportunities to build self-esteem and mastery through neighborhood social relationships. Children who fear their neighborhood may choose not to venture out independently. Mothers who worry about neighborhood problems may limit their children's interactions with neighborhood people and places (Byrnes et al. 2011; Chin and Phillips 2004; Kimbro and Schachter 2011). Additionally, children's peers in disordered neighborhoods may feel similarly unsafe and resource deprived in their neighborhoods and may not provide the kind of social relationships conducive to self-esteem and mastery growth (Turley 2003). Ultimately, perceptions of disorder and lack of safety are internalized in ways that make children feel less worthy and less capable of overcoming

challenges. Deficits in these important aspects of self-concept have enduring effects on the individual that are measurable as lower health and well-being in young adulthood.

The relationship between neighborhoods and self-concept did not adequately explain variation in all of the outcomes under study, though. Number of drinks per occasion was not related to childhood or adult neighborhood perceptions, nor was it associated with self-concept. Though research on the topic is scant, this result corroborates previous findings of small or nonexistent associations between neighborhood disorder and alcohol use (Bryden et al. 2013; Carpiano 2007; Fauth et al. 2004). It is possible that this measure of alcohol consumption does not do a good job of capturing unhealthy levels of alcohol consumption. One study that found a positive relationships between alcohol consumption and neighborhoods focused on heavy drinking (Hill and Angel 2005). In supplementary analyses, I converted the number of drinks per occasion into a commonly used dichotomous variable where four or more drinks for women and five or more for men are considered heavy or binge drinking (Christie-Mizell et al. 2015). The results of this analysis were similar to those presented above for number of drinks per occasion. Neither neighborhood perceptions nor self-concept were directly associated with higher odds of heavy drinking. At least one other study has found a relationship between higher neighborhood disadvantage and more negative consequences of drinking (Jones-Webb and Karriker-Jaffe 2013). It may be the case that alternate measures of problematic drinking would be more revealing in future studies of contextual effects on drinking behaviors.

Findings regarding neighborhood perceptions and relationship quality among married and cohabiting couples were mixed. Childhood neighborhood perceptions of disorder were indirectly related to higher levels of arguing through self-concept, and adult perceptions demonstrated direct effects on the level of arguments. Young adults with low levels of self-concept argued

more frequently than those with higher levels of self-concept. Those with low self-concept may have trouble feeling important in a relationship or capable of overcoming interpersonal problems which could lead to more disagreements and a higher level of turmoil between partners and spouses. Furthermore, the challenges of living in a high disorder neighborhood may create an additional source of stress which leads to more frequent arguments (Umberson et al. 2005). Conversely, neighborhoods and self-concept had no impact on positive relationship interactions. As discussed above, this may be a result of low variation in the positive interaction scale. In general, these young people reported a high level of positive interactions. However, the interactions that make up this scale (i.e., calm discussion, laughing together, and talking about one's day) are relatively mundane and may not capture a sufficient range of indicators of positive relationship quality.

Another important result from this study is that childhood neighborhood perceptions are strongly linked to adult neighborhood perceptions. There are two potential interpretations of this finding. On one hand, childhood perceptions may have enduring effects on the way people perceive their surroundings. Mother's perceptions and childhood experiences of safety may establish a baseline level for the neighborhood characteristics that an individual considers to be acceptable or problematic. On the other hand, this relationship may represent continuity in objective neighborhood quality. In other words, children raised in disordered neighborhoods are more likely to continue to live in disordered neighborhoods as young adults. It is important to note, though, that neither family income in childhood nor contemporaneous income had significant relationships to adult perceptions of disorder. The absence of these associations indicates that it is more likely that childhood perceptions establish adult perceptions. Moreover, this relationship appeared to mediate some of the effects of childhood perceptions on young adult



depressive symptoms and arguments. In addition to the intervening influence of self-concept on both of these outcomes, recent experiences of living in disordered neighborhoods created worse mental health and more strained relationships with spouses and partners. Again, this may represent stability or continuity in the subjective experience of neighborhoods. Young adults who remain in neighborhoods they see as unsafe and disordered may see little possibility of escaping their surroundings and may internalize this or lash out at their partners.

Despite the strong results of this study, it is not without limitations. This study relies entirely on neighborhood perceptions of disorder and safety rather than objective measures of disadvantage and disorder. Objective indicators, which are typically drawn from Census measures, offer clear distinctions in the amounts of resources available in neighborhoods. These measures of resources are bounded geographically to zip codes or Census tracts, while the boundaries of subjective measures can vary from person to person. While these objective measures allow researchers to determine absolute differences between neighborhoods, they fail to capture the way neighborhoods are experienced by individuals. Residents of a Census tract are not confined by the tract's boundaries and may form opinions about the size and scope of their neighborhoods that are at odds with Census measures. Furthermore, residents form perceptions about their neighborhoods based on visual and social cues about poverty, crime, social control, and other measures which are ostensibly captured by objective indicators, but which may not be as salient to all residents in the same neighborhood. A number of studies have shown that while objective indicators of neighborhood disadvantage inform perceptions about neighborhoods, it is ultimately the perceptions that are most proximally related to the outcomes studied in neighborhood literature (Christie-Mizell and Erickson 2007; Geis and Ross 1998; Haney 2007; Ross 2000). Nonetheless, future research should investigate the joint influence of objective and

subjective neighborhood quality on the relationship between self-concept and well-being outcomes.

Another limitation of this study is the age range represented by the sample. The young adults were 18-30 at the time the ultimate outcomes were measured and between 10-13 years old when the childhood perceptions were measured. Thus, for some individuals, this gap represents 20 years, while for others it represents only 5 years. Furthermore, self-esteem and mastery, taken 4 years prior to the outcomes, was measured when some respondents were still very close to their childhood perceptions (i.e., 14 years old) while others were much further away (i.e., 26 years old). Despite controlling for age in all analyses, this irregular gap between early perceptions and young adult outcomes could bias the findings. In additional analyses not shown here, various age cutoffs were tested and the models' substantive conclusions remained the same. These analyses give confidence that the present findings are robust, but future research could better specify the timing of neighborhood experiences and self-concept development to understand how long effects of early neighborhood context are likely to last.

This study lends support to research on the long term effects of neighborhood disorder on health and well-being throughout the life course (Johnson et al. 2012; Vartanian and Houser 2010; Wheaton and Clarke 2003; Wickrama and Noh 2010). The findings demonstrate how social structural effects, which influence the amount of resources, safety, and social order in neighborhoods, can result in health disparities in the larger population. This research also provides evidence for life course cumulative disadvantage theory which suggests that early experiences can create benefits and deficits that accrue throughout life to amplify differences between social groups (Dannefer 2003). Life course accumulation of advantage or disadvantaged can be socially structured by the day to day contexts in which people live. Children in disordered

neighborhoods experience the immediate effects of contextual disadvantage and have lower levels of personal psychosocial resources with which to deal with later disadvantage. Conversely, children who grow up in areas that they perceive as safe, resource rich, and with high social control also have the advantage of feeling better about themselves and more prepared to take on life's challenges. Ultimately, surpluses or deficits of protective individual and interpersonal resources create differences in the health and well-being of young adults which in turn influences health in later life. The findings from this study continue to show that neighborhood effects offer the promise of a better understanding of the social structural antecedents of life course disparities in health and well-being.

**Appendix A. Standardized factor loadings for latent constructs used in structural equation models.**

<u>Mother's PND<sup>a</sup></u>		<u>Depressive Symptoms</u>	
No respect rules and laws	.79	Poor appetite	.49
Crime and violence	.78	Trouble keeping mind on task	.51
Abandoned/run-down bldgs.	.61	Felt depressed	.77
Not enough police	.64	Everything an effort	.19
Not enough transit	.24	Restless Sleep	.46
Parents don't supervise kids	.74	Felt sad	.74
People keep to themselves	.63	Could not get going	.46
People can't find jobs	.64		
		<u>Positive Relationship Interactions</u>	
		Calmly discuss something	.49
		Laugh together	.87
		Talk about day	.78
		<u>Arguments</u>	
		Chores and responsibilities	.63
		Children	.47
		Money	.58
		Showing affection	.61
		Religion	.37
		Free time	.59
		Drinking	.41
		Infidelity	.40

<sup>a</sup> PND = Perceptions of Neighborhood Disorder

<sup>b</sup> PNU = Perceptions of the Neighborhood as Unsafe

## **CHAPTER V**

### **CONCLUSIONS**

In this dissertation, I explored several ways neighborhood contexts influence well-being in three separate studies extending from childhood to adolescence to young adulthood. The goal of these studies was to examine theoretically guided processes through which different levels of perceived neighborhood disorder result in well-being disparities. Each study specified hypothesized pathways linking perceptions of neighborhood disorder to well-being that have particular relevance to the life course stage being examined. Furthermore, I used nationally representative, multigenerational, and longitudinal data to test these hypotheses. The aim of the dissertation as a whole was to heed the call for more longitudinal research on processes that translate neighborhoods into well-being disparities across the life course (Leventhal and Brooks-Gunn 2000; Murry et al. 2011).

Neighborhoods structure interpersonal interactions, behavior patterns, and opportunities, and as such, they have important implications for the health and well-being of individuals. The places people live can be a source of stress and anxiety as well as a source of strong interpersonal ties and resilience (Ross and Mirowsky 2001; Turney and Harknett 2010). Which neighborhoods are more conducive well-being is determined in large part by social forces that allocate the availability of resources and the presence of stressors by socio-geographical location (Sampson et al. 2002). Some neighborhoods are characterized by more crime, disorder, environmental hazards, and lack of social resources than others which ultimately results in disparate behavioral responses and well-being outcomes among the residents of different neighborhoods (Sampson and Raudenbush 1999, 2004; Wilson and Taub 2006; Wilson 1987, 1996). The psychosocial and

interpersonal processes that create well-being disparities remain to be adequately explained by social scientists, however.

Several theories guided the direction of this dissertation. Social capital theory (Christie-Mizell et al. 2011; Coleman 1988) and social disorganization theories (Sampson and Raudenbush 1999; Wilson 1987, 1996) provide explanations for the aspects of neighborhoods that are believed to be important influences on individual well-being. Social capital theory locates the importance of neighborhoods in people and the support they can provide one another (Turney and Harknett 2010). The provision of support, either actual or perceived, has important ramifications for health (Turner and Brown 2010). Believing that those around us will provide help and protection provides individuals with a sense of security and amplifies well-being.

Conversely, the belief that people are not interested in one another or are powerless to prevent crime and other dangers is psychosocially damaging (Christie-Mizell and Erickson 2007; Christie-Mizell et al. 2003; Haney 2007; Ross et al. 2001; Ross and Mirowsky 2009). The social disorganization approach to neighborhoods identifies visual and social cues of disorder as the culprit behind neighborhood disparities in well-being. People who regularly witness signs that their neighborhoods are impoverished, unsafe, and lack social control are demoralized by their surroundings (Sampson and Raudenbush 1999, 2004). The absence of opportunities to obtain good jobs, quality education, and reliable health care in urban, poor, and minority neighborhoods damages not only the physical health of residents, but also diminishes their social psychological well-being. Perceiving one's neighborhood as lacking the resources that are necessary for healthy living can create feelings of isolation from areas which are relatively resource rich which manifests in the population as disparities in psychosocial functioning (Wilson and Taub 2006; Wilson 1987, 1996).

While social capital and social disorganization theories offer the broad strokes that link neighborhoods to well-being, stress process theory specifies the intervening psychosocial processes (Pearlin 1999; Turner 2010). Specifically, stress process implicates the neighborhood context as a source of stressors which create distress in individuals. Neighborhoods are a source of stress, but they also create the conditions in which protective social and personal resources are flourish or deteriorate (Turner et al. 1999; Turner and Roszell 1994). Social and personal resources, like positive mother-child relationships and self-concept, protect individuals from the harms of their social environments. A disordered neighborhood may be stressful, but having strong relationships with parents or a strong sense of self can buffer the impacts of neighborhood stressors. Unfortunately, neighborhoods high in disorder also tend to diminish the capacities of these resources, for instance by creating mother-child turmoil or limiting opportunities for self-growth.

Guided by these theories, the studies in Chapters 2 through 4 were driven by three research questions that asked if theoretically derived process pertinent to each life stage resulted in differences in well-being related to neighborhood context.

- 1) Does neighborhood context influence parent-child relationships, and does this influence affect children's well-being?
- 2) Does childhood neighborhood context influence the growth and development of self-concept during adolescence?
- 3) Do childhood neighborhood experiences influence well-being in young adulthood? Is this relationship mediated by neighborhood influences on psychosocial resources?

Chapter 2 addressed question 1 by testing the hypothesis that mothers' perceptions of neighborhood disorder simultaneously damage their own well-being and their relationships and

parenting behaviors used with their children. In turn, troubled mother-child relationships were expected to increase children's distress. Mother-child relationships and parenting were operationalized in two different ways: frequency of mother-child arguments and frequency of punishments. Punishments were limited to those disciplinary actions that limited children's behavior and freedom of movement, such as grounding and removal of privileges.

The study in chapter 2 found evidence for the association between higher levels of perceived neighborhood disorder and increased child distress. However, as hypothesized, this relationship was not direct. Instead, maternal perceptions of neighborhood disorder appeared to operate indirectly through the mother-child relationship and parenting variables in different ways. Living in neighborhoods perceived as highly disordered increased maternal distress which in turn led to an increased frequency of arguments between mother and child. Mother's distress was not related to the frequency of punishments, but perceiving more disorder was associated with the mother administering more punishments. Ultimately, arguing and being punished frequently were associated with higher levels of child distress.

Several conclusions can be drawn from this study about the influence of perceived neighborhood disorder on maternal distress, mother-child relationships, and child distress. Living in disordered neighborhoods creates conditions that challenge the relationship between mother and child. This relationship is a primary source of social support for children, and when it is unstable or troubled, child well-being can be harmed (Gayman et al. 2011; Gutman et al. 2005; Schofield et al. 2012). Furthermore, perceiving one's neighborhood as disordered alters the strategies that mothers use in parenting. Mothers who believe that their surroundings are not safe for their children may resort to coercive or controlling methods of parenting (Barajas-Gonzalez and Brooks-Gunn 2014; Jocoson and McLoyd 2015; Kimbro and Schachter 2011). Ultimately,



both of these neighborhood influenced behaviors create worse mental health outcomes for children.

Research question 2 was answered in chapter 3 which focused on neighborhood influences on the growth of self-concept during adolescence and into the transition to adulthood. Adolescence is a stage in the life course during which young people are granted new roles and responsibilities and a period of increasingly independent interaction with neighborhoods. It is also an important time for the development of self-concept (Demo 1992). Self-concept, which consists of all the thoughts, attitudes and opinions about the self, has important ramifications in the stress process model (Turner and Roszell 1994). Self-concept is a protective personal resource that buffers individuals from distress caused by day to day and major life stressors (Gadalla 2009; Turner and Lloyd 1999). Two well-known dimensions of self-concept are self-esteem and mastery. High self-esteem, one's global evaluation of self-worth, is believed to prevent people from believing stressors reflect poorly on themselves (Gecas and Burke 1995). High mastery, the level of control one feels able to exert over life events, is believed to prevent people from seeing challenges as particularly threatening (Pearlin et al. 1981). In previous research, lower levels of both measure have been associated with more disordered neighborhoods (Christie-Mizell and Erickson 2007; Haney 2007; Ross et al. 2001). However, little research has examined the long-term effects of neighborhood contexts on self-esteem or mastery growth.

The study in chapter 3 used growth curve analyses to track trajectories in individual levels of self-esteem and mastery from ages 14 to 25. The results of these analyses showed that perceptions of high neighborhood disorder and low safety in childhood lower overall levels of both aspects of self-concept. Furthermore, these levels remained lower across this entire period

of life resulting in gaps in self-concept that persisted to young adulthood. Early perceptions of disorder and safety had few impacts on the rate of self-esteem and mastery growth, however. There was evidence that children who felt unsafe in their neighborhoods did not ultimately experience mastery deficits in young adulthood. In other words, these early experiences may attenuate, at least in this domain. Nonetheless, these results are noteworthy because they show how potentially far reaching neighborhood effects can be. In addition to the long-term findings, this study also showed that perceptions of neighborhood disorder contemporaneous to perceptions of self-esteem and mastery decreased levels of both. Contemporaneous and childhood perceptions of neighborhoods exerted independent effects on self-concept that suggests that where one lives currently and where one has lived in the past are both important determinants of well-being.

Chapter 4 expands on the findings from chapter 3 by examining the role of neighborhood influences on self-concept in creating disparities in young adult well-being outcomes. This study extended previous research on the long-term influences of neighborhoods (e.g., Vartanian and Houser 2010; Wheaton and Clarke 2003; Wickrama and Noh 2010) by including multiple measures of well-being and by specifying self-concept as an important mediator linking neighborhoods to outcomes. The outcomes included in this study were depressive symptoms and self-rated health which have been extensively studied in neighborhood literature (e.g., Boardman 2004; Browning and Cagney 2002; Christie-Mizell et al. 2003; Hill, Ross, and Angel 2005; Ross and Mirowsky 2001) as well as alcohol consumption and relationship quality which have been less prevalent in neighborhood studies, though some such studies do exist (Cutrona et al. 2003; Hill and Angel 2005; Hostetler et al. 2012).

The study in chapter 4 corroborates the findings from chapter 3 that perceptions of neighborhood disorder are negatively associated with self-concept. Living in a disordered neighborhood as a child leads to lower levels of both self-esteem and mastery as a young adult. This study extends chapter 3's results by showing that low self-concept in turn leads to more depressive symptoms, lower self-rated health, and more arguments between spouses and partners. As hypothesized, childhood perceptions of neighborhood disorder and safety influence young adult well-being, but this influence is mediated by processes related to self-concept. Additionally, this study included a measure of young adult neighborhood perceptions which supported previous findings on the short term relationships between neighborhood disorder and depressive symptoms. Results further showed a strong influence of childhood perceptions on young adult perceptions which opens future possibilities for the study of long term neighborhood effects. Finally, the findings showed no evidence for these relationships with alcohol consumption or positive relationship interactions. Thus, whereas the well-being effects of social structural context are not believed to be specific to any particular health or well-being outcomes (Aneshensel 2005), disadvantaged neighborhoods may not influence all outcomes equally.

Taken together, all three studies show how early neighborhood experiences can have influences that accumulate throughout the life course. Mothers, fearing for their children's safety in disordered neighborhoods, become more distressed and their relationships with their children are strained. This diminished social support and stressful environment of the disordered neighborhood limits children's ability to develop healthy levels of self-esteem and mastery in adolescence. During young adulthood, lower self-concept makes people vulnerable to a host of negative mental health and interpersonal outcomes. Extrapolating beyond the dissertation, it is reasonable to believe that these early deficits in self-concept and well-being result in problems

later in adulthood. The studies in this dissertation support the argument that the effects of disadvantage accumulate throughout the life course (Dannefer 2003; Elder et al. 2003).

There remains a great deal of future research needed to better understand the effects of neighborhoods, neighborhood perceptions and well-being. Though neighborhood perceptions have a demonstrated influence on a number of psychosocial, health, and interpersonal outcomes, it remains unclear how these influences are shaped by race and ethnicity. In the U.S., neighborhoods have been drastically shaped by race and ethnicity and formal and informal policies of residential segregation (Massey and Denton 1993). Racist housing and lending policies at the individual, corporate, and governmental levels have prevented many minority families, including African Americans and Latinos, from having the opportunity to live in and create neighborhoods with standards of living as high as their white counterparts (Oliver and Shapiro 2006). The result of neighborhood segregation has overwhelmingly been to confine minority families to especially impoverished parts of the nation's inner cities (Wilson and Taub 2006; Wilson 1987, 1996). The result of this social isolation is that many minority families live in neighborhoods that are perceived to be highly disordered. However, racial and ethnic minority neighborhoods can have important resources that support and protect well-being and fight the damaging effects that larger social trends have wrought (Pattillo-McCoy 2013; Small 2006).

Relatedly, future work needs to better understand how perceptions of neighborhood change are related to well-being. The U.S. regularly experiences fluctuations in residential preferences. Beginning in the 1950s, white families and families with ample financial resources began to leave urban areas for the spacious suburbs (Hayden 2003; Jacobs 1961). However, current trends find modern day whites and economically advantaged families moving back to cities while racial-ethnic minorities and poor families must relocate to suburban areas for

affordable housing (Raphael and Stoll 2010). Gentrification and the economic forces that disrupt established neighborhoods are an important topic for future neighborhood studies (Hwang 2016; Hwang and Sampson 2014; Sharkey 2012). The findings in this dissertation may become even more pronounced if gentrification and neighborhood change widens neighborhood inequality gaps. However, if efforts to improve urban areas bring resources to people who were previously lacking, neighborhood influences on health may be less pronounced. As neighborhoods change, it will be necessary to better understand how those changes influence the health and well-being of those who move and those who remain.

In conclusion, this dissertation has demonstrated how location in social structural hierarchy can lead to health disparities through the intermediate influence of neighborhood context. Perceptions of one's residential context are intimately linked to the social structural positioning of one's class, race, and ethnicity relative to others. Individuals do not have immediate contact with the major social forces that shape their lives, but they do interact with people and places that are socially and geographically local. Social interactions, opportunities, and challenges are shaped and constrained by resources available in neighborhoods. As long as neighborhood resources are unequally distributed, they will continue to be a driving force in reproducing disparities in health and well-being.

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