



This is to certify that the  
dissertation entitled

CONCENTRATED NEIGHBORHOOD DISADVANTAGE AND  
COMPETENCE IN SCHOOL-AGED CHILDREN

presented by

JULIEANN STAWICKI

has been accepted towards fulfillment  
of the requirements for the

Ph.D. degree in Psychology

*Alyssa Swendsky*  
Major Professor's Signature  
12/13/07

Date



**PLACE IN RETURN BOX** to remove this checkout from your record.  
**TO AVOID FINES** return on or before date due.  
**MAY BE RECALLED** with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE

CONCENTRATED NEIGHBORHOOD DISADVANTAGE AND COMPETENCE IN  
SCHOOL-AGED CHILDREN

By

JulieAnn Stawicki

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

2007



and

rela

in 3

infl

nei

con

et.

ne

hy

m

d

c

c

v

n

b

## ABSTRACT

### CONCENTRATED NEIGHBORHOOD DISADVANTAGE AND COMPETENCE IN SCHOOL-AGED CHILDREN

By

JulieAnn Stawicki

This study examined the role of concentrated neighborhood disadvantage above and beyond individual levels of poverty as a predictor of child development. This relationship was measured through parent, child, and teacher report of child competence in 3 areas: academic, behavioral, and social. In addition, this study examined the influence of parental strictness, acceptance, and detachment on the relationship between neighborhood and child competence.

Child competence was predicted by concentrated neighborhood disadvantage, and concentrated neighborhood disadvantage was a stronger predictor than family SES of child competence. However, there was a positive relationship between concentrated neighborhood disadvantage and self-rated child competence which was not as hypothesized for academic and social competence. As predicted, parenting behavior moderated this relationship. Specifically, in high concentrated neighborhood disadvantage, greater parental acceptance predicted higher competence. In low concentrated neighborhood disadvantage, high parental detachment predicted lower competence, and low acceptance predicted behavioral problems.

When analyses were done separately for boys and girls, hypotheses for gender were mostly supported; boys' competence was better predicted by concentrated neighborhood disadvantage, while girls' competence was better predicted by parent behavior. Lastly, race/ethnic differences were not as hypothesized. Overall, African

American children demonstrated significantly higher social and academic competence compared with non-African American children which were not accounted for by differences in concentrated neighborhood disadvantage.

Overall the results of this study supported the importance of neighborhood effects on child competence. This is the first known study directly examining the effect of neighborhood level SES on children's competence during middle childhood using multiple reporters of child outcomes.

Copyright by  
JULIEANN STAWICKI  
2007

This is dedicated to my advisor, Alytia Levendoski.

Thank you for your guidance and friendship.

## TABLE OF CONTENTS

LIST OF TABLES.....	viii
 <b>CHAPTER 1</b>	
LITERATURE REVIEW.....	1
Introduction.....	1
Poverty and Neighborhoods.....	4
Middle Childhood.....	9
Child Competence.....	11
Child Outcomes and Concentrated Neighborhood Disadvantage.....	18
Gender.....	25
Models of Neighborhood Effects.....	27
Parenting.....	28
Parenting and Concentrated Neighborhood Disadvantage.....	30
Parenting, Concentrated Neighborhood Disadvantage and Childhood Outcomes .....	33
Child Gender and Parenting Practices.....	39
Ethnicity.....	40
Summary.....	41
 <b>CHAPTER 2</b>	
CURRENT STUDY AND HYPOTHESIS.....	43
Neighborhood and Child Competence.....	44
Parenting, Neighborhood, and Child Competence.....	44
Ethnicity.....	45
 <b>CHAPTER 3</b>	
METHODS.....	47
Procedures.....	47
Measures.....	49
 <b>CHAPTER 4</b>	
RESULTS.....	56
Missing Data.....	56
Data Reduction.....	56
Participant Demographics.....	60
Hypothesis 1: Neighborhood and Child Competence.....	61
Hypothesis 2: Parenting, Neighborhood, and Child Competence.....	66
Hypothesis 3: Ethnicity.....	73
Follow Up Analysis.....	75

CHAPTER 5	
DISCUSSION.....	78
Neighborhood and Child Competence.....	79
Parenting, Neighborhood, and Child Competence.....	85
Ethnicity.....	88
Limitations.....	89
Conclusions.....	90
Future Studies.....	93
APPENDICES	
APPENDIX A.....	96
Economic characteristics of the city of Milwaukee.....	96
Census level indicators of neighborhood disadvantage for the city of Milwaukee.....	96
APPENDIX B.....	97
REFERENCES.....	130

## LIST OF TABLES

Table 1: Demographics.....	100
Table 2: Neighborhood Characteristics.....	102
Table 3: Academic Competence Cross-Rater Correlations.....	103
Table 4: Behavior Competence Cross-Rater Correlations.....	104
Table 5: Social Competence Cross-Rater Correlations.....	105
Table 6: Parenting Behavior Inter rater Reliability.....	106
Table 7: Hypothesis 1 a: Regression Predictor = Concentrated Disadvantage.....	107
Table 8: Hypothesis 1 B – High and Low Concentrated Neighborhood Disadvantage.....	108
Table 9: Main Effects – Gender.....	111
Table 10: Hypothesis 1c – Gender.....	112
Table 11: Hypothesis 2a – Neighborhood and Parenting.....	115
Table 12: Hypothesis 2b – Parenting by Child Gender (all neighborhoods).....	119
Table 13: Hypothesis 2b – High Concentrated Neighborhood Disadvantage.....	122
Table 14: Hypothesis 2b – Low Concentrated Neighborhood Disadvantage.....	125
Table 15: Hypothesis 3 – 2-Way ANOVA by Race.....	128



## **LITERATURE REVIEW**

### **Introduction**

Over the past two decades, urban families that live below the poverty level have found themselves increasingly socially and geographically isolated within inner-city neighborhoods (McLoyd, 1998). The individuals within inner-city neighborhoods are segregated from working and middle-class neighbors, and the resulting underclass is left to live in areas of concentrated disadvantage. These neighborhoods are defined by a high percentage of families living below poverty, residential instability (low percentage of home ownership and high vacancy rates), and a high number of single-parent households. Unfortunately, many of the residents in these neighborhoods are African American (Massey & Denton, 1993). Neighborhoods of concentrated disadvantage suffer from high levels of structural and social disorganization: high crime rates, wide-spread drug use, high school drop out, chronic unemployment, and economic isolation (Gephart & Brooks-Gunn, 1997). Social disorganization theory suggests that, because of this disorganization, neighborhood of residence is a stronger predictor than individual family socioeconomic status (SES) of individual outcomes, just as criminal behavior, mental health, and educational attainment (Kupersmidt, Griesler, DeRosier, & Patterson, 1995).

Neighborhood factors are related to a variety of negative mental health outcomes in young children and adolescents. Well-documented consequences of concentrated neighborhood disadvantage include increased externalizing disorders and related anti-social behavior, and elevated rates of emotional distress and internalizing symptoms (Leventhal & Brooks-Gunn, 2000).

Although the correlation between neighborhood disadvantage and children's mental health is beginning to be explored, this early research shows striking weaknesses. Most studies of individuals within concentrated neighborhood disadvantage have focused on adolescent outcomes such as high-school dropout rates and predictors, early sexual activity, and juvenile delinquency. Outcomes in middle childhood are often overlooked in neighborhood studies, despite it being a time of significant social development outside the home. Those studies that have included younger children have primarily examined negative outcomes. Broadening the research to include competence rather than focusing on pathological outcomes provides a more complete picture of the results of concentrated neighborhood disadvantage. Childhood competence has been shown to be a significant predictor of general adult outcomes such as educational attainment, occupational success, and mental health status. Childhood competence has also been shown to be a stable predictor of adult development across individual SES (Masten et al., 1995).

In addition, few neighborhood studies have examined factors that interact with concentrated disadvantage and influence child outcome. A greater understanding of factors that interact with both competence and neighborhood disadvantage would suggest a means of both buffering children from the deleterious effects of living in these concentrated disadvantage neighborhoods and promoting competent development despite increased risk. Social disorganization theory hypothesizes that the neighborhoods of concentrated disadvantage are characterized by a deterioration of social structure within the neighborhoods, which in turn directly affects individuals living in this environment. This is true for both the children and as well as parents.

Therefore, social disorganization theory would predict that neighborhoods of concentrated disadvantage can disrupt the home environment and, consequently, parenting behaviors (Sheidow, Gorman-Smith, Tolan, & Henry, 2001). The parenting context is especially relevant for middle childhood, when children are both influenced by parenting behaviors yet increasingly exposed to the neighborhood in which they live.

Parental restrictiveness (Furstenberg & Harris, 1993), direct family protection strategies (Burton & Jarrett, 2000), discipline strategies (Pinderhughes, Nix, Foster, & Jones, 2001), and parental warmth/emotionality (Plybon & Kliewer, 2001) have all been suggested as particularly important in predicting child outcomes for this age group. Surprisingly, there are few systematic studies of parenting effects on child competence outcomes in relationship to neighborhood residence (see Roosa, Jones, Tein, & Cree, 2003 for a discussion).

The current study proposes to examine the role of concentrated neighborhood disadvantage above and beyond individual or family levels of poverty as a predictor of child development. This relationship will be measured through parent, child and teacher reports of child competence in 3 areas: academic, behavioral, and social. In addition, this study will examine the influence of parenting discipline practices and parental warmth and nurturance on the relationship between neighborhood and child competence. This is the first known study directly examining the effect of neighborhood-level disadvantage on children's competence during middle childhood.

### **Poverty and Neighborhoods**

Poverty has been a relevant area of study for decades; children from families of economic disadvantage are at risk for a variety of poor outcomes (McLoyd, 1998). In



addition, family socioeconomic status (SES) is a significant predictor of children's physical health, social and emotional competence, and behavior problems (Bradley & Corwyn, 2002). For example, children from low income homes report higher amounts of psychological and physiological stress (Evans & English, 2002). In another study of disadvantaged families (as measured by parent income and occupation), children had lower scores on standardized tests in psychomotor, social, language, and cognitive abilities relative to those children from more advantaged homes (Terrisse, Roberts, Palacio-Quintin, & MacDonald, 1998).

Since the 1970s, however, the nature of poverty has undergone substantial change. Despite the decline in overall poverty across the country, residents of severely disadvantaged neighborhoods are increasingly isolated from their neighbors in working and middle class areas of the city (O'Hare and Mather, 2002). With this change, a major shift has occurred in the focus of examining economic risk. The effects of living within these new climates of concentrated disadvantage confers additional risk not measured by traditional poverty research; in fact current neighborhood theorists posit that there is a unique risk of living in neighborhoods of concentrated disadvantage, regardless of family SES.

Neighborhood level poverty. Social and economic deprivation has grown within very poor urban neighborhoods, contributing to the disparity between these neighborhoods and surrounding areas, and resulting in the reduction of absolute and relative resources in inner cities (Sampson, Morenoff, & Gannon-Rowley, 2002). Most often it is racial minority groups that are segregated into isolated inner-city ghettos and this segregation promotes increased poverty (Massey & Denton, 1993). The resulting

‘underclass’ is not at a disadvantage merely as a result of income level, but rather, participate in a daily life characterized by intergenerational poverty, geographic isolation, social isolation from the mainstream, un/underemployment and poor educational opportunities (Brooks-Gunn, Duncan, & Abber, 1997). As a result, the use of income alone to predict risk fails to incorporate several associated consequences of living in these impoverished areas.

Concerns about safety, negative peer choice, lack of academic resources, and few employment opportunities plague and pervade the environment of the individuals living in the inner cities; unfortunately, many of those people are children (O’Hare and Mather, 2003). Individuals are not suffering only because of a lack of income. More accurately, it is the collective disadvantage faced as a result of the concentrated poverty (Jarrett, 1997). Therefore, it is essential to account for neighborhood-wide levels of disadvantage as well as individual SES when predicting individual outcomes.

Social Disorganization Theory. Social disorganization theory, as proposed by Wilson (1987), suggests that a concentration of poverty creates a breakdown of neighborhood social organization. Generally neighborhood social organization refers to the prevalence of social networks, the degree of collective supervision, and the participation of neighbors in voluntary organizational roles within the neighborhood (Wilson, 1996). Research has demonstrated that high unemployment rates and high poverty rates predict high rates of social disorder in neighborhoods (see Massey & Denton, 1993). Unfortunately, this relationship results in a downward spiral where neighborhood disorder creates an environment of distrust among neighbors leaving further participation in social networks unlikely. The more that neighbors disengage

from formal and informal networks, the more likely it is that the neighborhood will deteriorate, leading to increased social isolation and, thus social disorder. This low level of social organization and its effects on members of the community is proposed as an explanation of neighborhood influence on individuals. Subsequent research within neighborhoods of concentrated disadvantage has supported this hypothesis (see Sampson, Morenoff, & Gannon-Rowley, 2002).

Measurement of concentrated neighborhood disadvantage. Areas of concentrated neighborhood disadvantage are “geographic hot-spots” for crime and problem behavior and evidence of multiple forms of disadvantage (Sampson, Morenoff, & Gannon-Rowley, 2002). As stated earlier, a number of social problems tend to cluster at the neighborhood level. These include crime, adolescent delinquency, social and physical disorder (graffiti, public loitering, presence of prostitutes and drug sales), and child maltreatment (Wilson, 1996). Most neighborhood studies choose varying aspects of disadvantage to include in their study, often choosing only the average income level of the residents in the neighborhood. There are, however, features of the neighborhood that are most commonly related to child and adolescent outcomes. Concentration of poverty, racial minority isolation, single-parent families, rates of home ownership and length of tenure have consistently been shown to be the most relevant aspects of the neighborhood that contribute to childhood outcomes (Sampson, Morenoff, & Gannon-Rowley, 2002). Using multiple measures of neighborhood poverty is crucial in identifying neighborhood risk for concentrated disadvantage. Each of the above indicators of neighborhood disadvantage contributes additional variance to neighborhood risk and without

convergent evidence of concentrated disadvantage, the neighborhood identified may not be truly disadvantaged (Wilson, 1996).

Sampson, Raudenbush, and Earl (1997) conducted a large, city-wide investigation of the effects of neighborhood disadvantage on residents' perception of neighborhood violence and victimization. In this study, neighborhood was defined using "neighborhood clusters" which were 2-3 census tracts combined along geographical boundaries, and each neighborhood consisted of approximately 8,000 people. Neighborhoods were classified by three measures of "neighborhood risk": concentrated disadvantage, immigrant concentration, and residential stability. Concentrated disadvantage was defined by percent of residents below poverty line, percent of residents on public assistance, percent female-headed families, percent of unemployed adults, percent of residents less than age 18, and percent African American. Immigrant concentration was measured by the percent of Latino and percent foreign-born residents within the neighborhood. Residential stability was comprised of percent of residents living in the same house as 5 years ago and percent owner-occupied houses.

The purpose of the study was to quantify census-level indicators of neighborhood social disorganization and their effect on violence outcomes. Neighborhood-level predictors were better predictors of violence than person-level predictors. Even after controlling for all individual predictors (i.e. gender, marital status, homeownership, ethnicity, age, SES, and time spent in neighborhood) concentrated disadvantage and immigrant concentration were positively correlated with perceived violence, victimization rates and homicide rates. Residential stability was negatively correlated with violent outcomes. Overall, this study was significant in that it established



measurable neighborhood-level variables of concentrated disadvantage shown to be important predictors of individual experiences.

However, most early research on the problems of concentrated neighborhood disadvantage has been focused on the group-level effects of social problems resulting from residence in these neighborhoods. Many studies have examined neighborhood-level predictors of crime and delinquency rates (e.g., Sampson & Groves, 1989). The focus of sociological studies of neighborhood disadvantage has been to explain larger phenomena within urban environments, and for the most part have overlooked individuals living within these neighborhoods. However, outcomes examined by sociologists, such as crime, unemployment, and lack of opportunity, have been independently shown to negatively affect individuals (for example, Benson, Fox, DeMaris & Van Wyk, 2003; Boardman & Robert, 2000; South & Crowder, 1999). Extending the original sociological studies of concentrated disadvantage, psychologists sought to better understand the effects of neighborhoods on individuals within inner-city environments.

Neighborhoods and children. Beginning in the 1980s, researchers attempted to understand the consequences of collective poverty and neighborhood-level disadvantage on children and families. Jencks and Mayer (1990) conducted the first review of the relatively new neighborhood literature. Although the authors found few measured direct effects, their work inspired an “explosion” of neighborhood studies (Sampson, Morenoff, & Gannon-Rowley, 2002) and has inspired several noteworthy reviews and volumes of books on this important area of research (e.g. Brooks-Gunn, Duncan, & Aber, 1997; Leventhal & Brooks-Gunn, 2000).

Importantly, neighborhood influence has been found to directly affect a range of social, behavioral, and physical outcomes (see Leventhal & Brooks-Gunn, 2000). Characteristics of the neighborhood such as residential stability, percent of welfare recipients, housing quality, and crime rates have been linked with a variety of negative individual outcomes, with the majority of the outcomes measured in adolescence and early adulthood. For instance, residence in “high problem” neighborhoods (as defined by neighborhood cohesion, safety, and neighborhood median income) predicted greater psychological problems and impaired physical health in children (Curtis, Dooley, & Phipps, 2004) and adolescents (Steptoe & Feldman, 2001). In addition, adolescents who live in highly disadvantaged neighborhoods are more likely to participate in risky sexual behavior (Baumer & South, 2001), experience elevated rates of high school drop-out (Connell & Halpern-Felsher, 1997), and increased deviant behavior and delinquency (Simons, et al., 1996). In each instance neighborhood residence, above individual income level, predicted negative outcomes in older children.

### **Middle Childhood**

Middle childhood is worthy of its own focused research because it is a time when major developmental milestones are being reached. During this time children develop a more sophisticated information processing ability, which increases their knowledge in both academic and social settings. In turn, they are able to apply this new knowledge to novel situations (Eccles, 1999). Also during this time they are increasingly exposed to their environment beyond the social networks created by their families; thus their actions are beginning to be influenced by teachers, peers, and neighbors (Franco & Levitt, 1998).

It is a time when children begin to evaluate themselves and their environment. These judgments lead to future choices of peer groups, subjects of study, and extracurricular activities (Eccles, 1999). For example, in a 10-year longitudinal study of late elementary school students, their cognitive competence and academic achievement motivation at time 1 was a significant predictor of later academic performance, attitudes toward school and social competence in high school (Roeser, Eccles, & Freedman-Doan, 2000).

Middle childhood includes social developmental tasks that predict future competence as adults, such as following societal rules and getting along with peers (Masten et al., 1995). This age is a time when children are progressively more exposed to their neighborhood and more directly influenced by ecological factors. In addition, performance outcome differences between high and low social classes begin to increase in significance during the transition from early to middle childhood (Stevenson, Richman, & Graham, 1985).

In middle childhood, children are increasingly aware of their own performance in relation to others, particularly peers (Eccles, 1999). It is a crucial time period when children's beliefs about their own competence and potential for the future are developed. Children at age 6 are optimistic about their own competence and rate it higher than parents and teachers. By age 10 there is a much stronger relationship between self-rated and "actual" competence (Wigfield, et al., 1997). The change in their capacity to evaluate their own performance affects their self-concept, thoughts about their future, and understanding of others. For example, as the children got older, their beliefs about their own competence in school, music, and sports were significantly correlated with their perception of the value of the task (Wigfield, et al.). However, it is unknown how

perception and judgment of competence is affected by an environment in which life chances are reduced and far fewer competent adults and adolescents are available for comparison.

### **Child Competence**

Over the last decade, another conceptual shift has transformed the investigation of child outcomes. Specifically, researchers began to focus on positive development in the face of contextual risks (Lerner et al., 2005; Taylor et al., 2002). Examination of a contextual risk factor, such as concentrated neighborhood disadvantage, encompasses a broad spectrum of effects and consequences that are best understood through a lens wider than a typical psychopathological approach. Constricted models that center on symptoms and deficits tend to leave researchers with an incomplete picture of the consequences of that risk factor. For example, the assessment of pathology fails to incorporate the important developmental tasks for a particular life stage.

Development is a dynamic and ongoing process that coordinates multiple internal, social, mental and physical processes that result from various pathways (Masten et al., 1995). Competence, the assessment of the level of success of attaining expected developmental tasks for a given age and culture, is often seen as an alternative to the narrow scope of pathology research. When examined within the context of a risk factor, childhood competence is also described as resilience. Competence (or resilience as is the case when examined within neighborhood disadvantage) is organized into several different factors that distinguish between academic, social, and conduct behaviors. These three domains have been shown to be reliable measures of childhood outcomes and can

3

be used to predict future outcomes (Dishion, 1990; Dishion, Patterson, Stoolmiller, & Skinner, 1991; Masten et al., 1995; Patterson, 1986).

Further, when a resilience framework is applied to the examination of a contextual risk factor, it provides an understanding essential to the development of intervention and prevention strategies (Masten & Coatsworth, 1998). For example, the “overcoming the odds” study by Taylor and colleagues (2002) found that by focusing on positive youth development leads to identifying individual and community assets used to change the likelihood of high risk behavior for children in poor communities. Overall, competence/resilience provides a better frame of reference to evaluate the outcome of living in the context of a particular risk factor than examining only pathological outcomes.

Advantages of Competence Framework. With the multiple risk factors present in today’s society, such as child and partner abuse, community violence, teenage pregnancy, poverty and homelessness, interest in examining the status of children within these contexts has increased. As a result, attention has also extended to those children who have demonstrated resilience in the face of contextual risk factors (Masten & Coatsworth, 1998). Classic risk studies focus on the comparison between competence in low-risk children and psychopathology within at-risk children, while resilience focuses on the outcomes of children in the context of a particular risk factor (Tiet & Huizinga, 2002). The latter approach has several advantages.

In general, competence is a relatively stable measurement of child functioning, as the three major areas of childhood competence have demonstrated continuity into late adolescence (Masten et al., 1995). Academic achievement, including educational

attainment, and peer acceptance are global predictors of adult outcomes such as occupational success and mental health status (Kohlberg, Ricks, & Snarey, 1984). Children who are rated as likeable by their peers are also more likely to have greater educational attainment in high school, and report higher psychological adjustment (Chen et al., 2002). The presence of competence in childhood, rather than the absence of any pathology, is the best predictor of freedom from pathology in adulthood (Masten & Curtis, 2000). Although a majority of longitudinal studies of child outcomes have focused on negative consequences, the general areas of child competence have been shown to be significant predictors of adult outcomes across socioeconomic status (Masten et al., 1995).

In addition to being a predictor of later outcomes, research on childhood competence provides a focus on a greater spectrum of strengths and weaknesses of a particular population. Applying a resilience perspective implies an effort to investigate strengths of at-risk groups (Luthar & Cicchetti, 2000) and thereby providing a natural goal for prevention-intervention strategies to minimize neighborhood risk's impact on children. Application of a competence-focused study provides guidance for policy makers who seek to improve the odds of good development in children living in poverty (Masten & Coatsworth, 1998). Overall, using a competence/resilience framework provides significant advantages over traditional pathology research.

Definition of Competence. Throughout early competence and resilience research, what constituted childhood competence was subject to each researcher's individual definition. However, Masten and colleagues (1995) designed a study to empirically determine the structure of competence. All available measures of competence including

peer assessment, teacher ratings, grades, achievement testing, and parent and child interviews, were collected on 205 late elementary school-aged children (Masten et al.). The children and families were from a wide range of racial and economic backgrounds; however, the majority of the families were middle class and Caucasian. The measures were configured to test the Goodness of Fit of various models of competence. Although all competence domains were significantly correlated with one another, the best model included three distinct domains: 1) academic, 2) behavior, and 3) social. Further, competence in one domain was significantly correlated with competence in the other two domains.

Generally, these three domains have been accepted within the research literature; however each domain can be measured in various ways. Academic achievement is often measured objectively with the use of IQ, reading proficiency, grade level achievement, and performance on individual subject tests (Hinshaw, 1992). Unfortunately, behavioral competence is the domain most often defined as freedom from pathology. Rated categorically, classifications are made using cut-offs for clinical diagnoses, such as presence or absence of anti-social behavior, drug use, depression, etc. However, there is also a dimensional aspect of behavior that is often rated by parents and teachers. Rather than freedom from pathology, behavior competence can be conceptualized as the presence of appropriate conduct and prosocial behavior. Finally, social competence is defined as the relative sociability of the child or the degree to which the child is socially interactive (Rose-Krasnor, 1997). Sociability is important because it is seen as the precursor to the development of relationships in adolescence and adulthood. Sociability



of the child is often measured through peer ratings of likeability and by number of friendships within the child's classroom.

Theoretically, competence is a dynamic, multidimensional construct. Research on resilience has been noted as having a lack of formal definition of the relationships between the individual areas of competence; specifically it begs the question of whether resilience is demonstrated by positive development within one area or by positive development within several areas (see Luthar, Cicchetti, & Becker, 2000). Often within risk studies, each competence domain is assessed independently (Luthar, Cicchetti, & Becker), i.e. the academic achievement of children living in poverty. Yet, if a child were having considerable social difficulties, it would be dubious to consider the child as resilient even if he/she demonstrated academic success. Therefore, when examining resilience within risk, several domains of competence should be examined (Luthar, Cicchetti, & Becker).

Often, it has been found that competence in one area is correlated with higher competence in the other domains (Masten & Coatsworth, 1998). For instance, peer acceptance is related to higher IQ and lower rates of aggression (Newcomb, Bukowski, & Pattee, 1993). In addition, behavior and academic competence are often linked; children who exhibit several forms of externalizing behavior (such as hyperactivity, aggressiveness, overt and covert rule breaking behavior, and juvenile delinquency) have correlated academic difficulty, such as lower IQ, reading level at least 1 grade below expected level, and 1.2-2 standard deviations below the mean on standardized achievement tests (Hinshaw, 1992). The correlation between competence factors has been found in studies of at-risk children as well, such as children living in poverty

(McLoyd, 1998) or children of teen-aged mothers (Bates, Luster, & Vandenbelt, 2003).

However, this may not be true within the context of neighborhood risk.

Competence and culture within neighborhood disadvantage. The outcome of competence has been studied in relation to a large group of risk factors, yet competence is often defined by the majority culture. There are very few studies of the structure of competence within minority groups. For example, it is hypothesized that there is high cultural variability in what constitutes sociability (Rose-Krasnor, 1997). Therefore, the nature of competence may differ from the guidelines established using sample populations from the dominant cultures. For example, due to suffering from a severe restriction of opportunities, inner-city children and parents may use different criteria for successful developmental outcomes (Burton, Allison, & Obeidallah, 1995).

Kupersmidt and colleagues (1995) found lower levels of behavioral competence (higher aggression) in 2<sup>nd</sup>-6<sup>th</sup> grade children living in concentrated neighborhood disadvantage compared with those living in middle class neighborhoods. However, decreased behavioral competence in children living in concentrated neighborhood disadvantage was not related to lower social competence. In contrast, those children from low income families residing in middle class neighborhoods also had greater rates of aggression; however, as would be predicted by Masten et al. (1995), higher rates of aggression for these children was correlated with peer rejection. This suggests that within concentrated neighborhood disadvantage, correlates of competence may be different than would be predicted within the context of other risk factors.

Tiet and Huizinga (2002) examined youth ages 12, 14, and 16 and their parents who lived in high-risk neighborhoods. In a study replicating Masten et al. (1995), several

measures of competence were obtained from adolescents, teachers, and parents to determine the structure and correlation factors of psychosocial functioning, self-esteem, academic performance, and presence or absence of delinquent behaviors (e.g. drug use and gang involvement). The authors found that positive self-esteem is derived from (and related to) either antisocial acts or prosocial behaviors and academic performance. Self-esteem is positively correlated with both positive adjustment and antisocial behavior. The latter is a relationship not found in traditional competence research.

Taken together, the findings of Kupersmidt et al. (1995) and Tiet and Huizinga (2002) suggest that competence within concentrated neighborhood disadvantage may not be comparable to competence within normal development or even within other risk factors. However, only one study was done with school-aged children, and that study only examined behavior and social competence. Although Tiet and Huizinga examined several variables of competence, social competence was not included. Therefore, it is unclear how the three established areas of competence in childhood (as defined by Masten et al., 1995) are related within the context of concentrated neighborhood disadvantage, especially for school aged children. Overall, competence is more predictive for future outcomes and more informative for designing interventions than the examination of pathology alone. Understanding the conditions in which children develop competence despite risk may help interventions foster the same resilience within other children living with the particular risk factor.

### **Child Outcomes and Concentrated Neighborhood Disadvantage**

As discussed earlier, neighborhoods are relevant contexts for development as they have shown to be related to a wide range of individual outcomes. Social disorganization

theory predicts that residence in neighborhoods of concentrated disadvantage is qualitatively different than residence in mixed and affluent neighborhoods. This hypothesis has been supported by the examination of social outcomes such as crime rates. However, this hypothesis has not been widely examined when considering child outcomes, though many studies examining the consequences of growing up within concentrated neighborhood disadvantage have focused on adolescent outcomes. Research that examines the effect of the neighborhood context in school-aged children has the greatest value because younger children are not yet highly impacted by the neighborhood environment and research focused on school-aged children could lead to interventions that reduce the risk of negative adolescent behavior.

As reviewed earlier, middle childhood includes several developmental tasks that predict future competence as adults such as school adjustment, following societal rules, and getting along with peers (Masten & Coatsworth, 1998). Generally, these tasks are grouped into three domains most relevant to this age group: 1) academic achievement, 2) behavior, and 3) peer/social acceptance (Masten et al., 1995). Although there are very few that directly examine competence, those studies that have examined the effect of neighborhood disadvantage on each of these childhood outcomes is reviewed here.

Academic Achievement. Studies have found that neighborhood-level disadvantage is negatively correlated with reading achievement, IQ, and verbal ability throughout childhood, beginning with children as young as 3 years old (Brooks-Gunn et al., 1993) and as old as late adolescence (Connell & Halpern-Felsher, 1997). As is true with other studies of neighborhood effects, the majority of the research studying

academic achievement has examined adolescents' grade point average (GPA; e.g., Brooks-Gunn et al., 1993) or high-school completion (e.g., Duncan, 1994).

One study of children in 1-5<sup>th</sup> grade, grades 6-8, and high school compared the effects of neighborhood characteristics on academic achievement in Caucasian and African American children (Halpern-Felsher et al., 1997). While family characteristics were better predictors of academic achievement and school adjustment for young children, neighborhood risk, defined as concentration of low SES neighbors, lack of ethnic diversity, high population density, and concentration of jobless males, was a better predictor of educational outcomes for children as they approached early adolescence (grades 6-8). In addition, the authors found that neighborhood characteristics were better predictors of males' academic performance than females. Neighborhood effects on achievement were not present for girls until they reached high school; even then, family characteristics were more strongly associated with their performance than neighborhood characteristics. Halpern-Felsher and colleagues (1997), however, only examined children within high-risk neighborhoods and did not compare development across neighborhoods.

Behavior. Rather than child behavioral competence, child behavior disorders are possibly the most widely studied outcome in school-aged children. Not surprisingly, it is also the most frequently examined outcome in relation to concentrated neighborhood disadvantage. However, as discussed earlier, nearly every study focuses exclusively on externalizing behavior disorder. Higher rates of aggression, oppositional behavior, and delinquency have all been consistently related to neighborhood characteristics (see Leventhal & Brooks-Gunn, 2000). Neighborhood disadvantage is associated with higher rates of early externalizing behaviors and aggression in children as young as 6 years old

(Attar, Guerra, & Tolan, 1994), and the link between neighborhood and externalizing behaviors as rated by parents and teachers has been replicated across several studies (see Chase-Lansdale et al., 1997).

In a study of inner-city mothers and children (aged 7-15; mean age 12.9 years), neighborhood dangerousness was associated with child behavior problems as rated by the mother (Dorsey & Forehand, 2003). Specifically, neighborhood dangerousness predicted higher levels of child externalizing behaviors. This was replicated when the definition of neighborhood was expanded to include neighborhood income as a predictor of neighborhood risk.

Shumow, Vandell, and Posner (1998) explored the effect of neighborhood characteristics and externalizing behavior of children in the 5<sup>th</sup> grade. Neighborhood risk, (high violent crime rates and lower neighborhood income) was associated with parent and teacher reports of child misconduct, where more violent crime predicted ratings of more frequent child misconduct (e.g., lying, cruelty, destructiveness). In each of these studies (Dorsey & Forehand, 2003; Shumow, Vandell, and Posner), neighborhood disadvantage was defined narrowly using neighborhood income.

In a study of adolescent delinquency, Gorman, Smith, Tolan, and Henry (2000) used concentrated disadvantage, level of business investment, crime rates, neighbors' concerns about safety, and neighborhood social support to compare adolescent behavior in 2 neighborhood types: 1) inner-city neighborhood characterized by high crime, high poverty concentration, and low social organization and 2) other urban poor neighborhoods, with a high level of social organization. Youth from the inner city disorganized neighborhoods were more likely to be involved in juvenile crime than those

from other poor neighborhoods. However, this study did not measure the family's income, but rather just the neighborhood's concentration of poverty.

The most comprehensive study of school-aged children's behavior to date was done in the Netherlands. Schneiders et al. (2003) examined effects of neighborhood disadvantage on behavioral problems reported by children (aged 10-12) and their parents controlling for individual variables (parental socioeconomic status, child's gender, and age). Neighborhood levels of public assistance, high-school completion, immigration, unemployment, residential stability, and marital status predicted externalizing behaviors, even after controlling for family-level variables.

Overall, neighborhood has been shown to be related to a variety of behavior problems in children. Children in low income, high-risk neighborhoods are more likely to have increased behavioral problems such as aggressiveness, misconduct, and even criminal behavior. However, the majority of studies of child misconduct have used limited definitions of neighborhood risk and most have failed to control for family-level risk factors in examining the neighborhood predictors of child behavior problems. In addition, there were no studies of behavioral competence within neighborhood disadvantage.

Peer and Social Competence. In general, children living within concentrated neighborhood disadvantage may have increased rates of social problems as compared to those within middle and upper class neighborhoods. For example, after controlling for parent occupation, education, income, and employment as well as family structure (1 vs. 2 parent homes), religion, and family size, a study by Homel and Burns (1989) found that neighborhood quality was a significant predictor of the child's report of social

adjustment. Children (aged 9-11) who lived in neighborhoods with higher quality housing (using subjective ratings by the interviewer), less crime, and higher residential stability had more friends and reported more satisfaction with the quality of their friendships. On the other hand, lower neighborhood quality was significantly correlated with children's social problems (i.e. reported that they did not get along with classmates).

Kupersmidt et al. (1995) classified 2<sup>nd</sup>-5<sup>th</sup> grade children as living in high- or middle-concentrated neighborhood disadvantage based on their addresses. Variables for computing concentrated neighborhood disadvantage included neighborhood levels of marital status, employment status, educational attainment, residential stability and vacancy, and percent of households receiving public assistance. The same variables were also collected on the individual level in order to determine individual family economic risk. Overall, children from high disadvantage neighborhoods and families were rated as the most aggressive by their peers. However, children from middle range disadvantaged neighborhoods, but from high-risk families had reduced aggression but a greater likelihood of being rejected by one's peers. Therefore, neighborhood of residence predicted higher aggression among children, but was not predictive of peer rejection. In contrast, children from low-income families in middle class neighborhoods were more likely to be rejected by their peers.

When social competence is measured by the child's own rating of social satisfaction, those children living in high neighborhood disadvantage report lower satisfaction, compared with children living in other neighborhoods. On the other hand, children living within high neighborhood disadvantage are not necessarily rejected by their peers. Rather, family indicators of risks were more important predictors of social



acceptance, suggesting that children in high disadvantage neighborhoods are less satisfied with their social relationships, but actual acceptance may not be affected by neighborhood context.

Child Competence. Neighborhood disadvantage has been shown to be a better predictor of child outcomes than family level SES, but, the examination of competence is strikingly missing from the literature in this area. In fact, all but one study examined negative child outcomes within neighborhoods. Applying a resilience perspective is an important next step in examining the broad spectrum of effects of concentrated neighborhood disadvantage in that it may provide intervention applications to help mitigate the risks these children face.

Luthar and Cushing (1999) examined the contribution of neighborhood factors to the competence and the development of psychopathology for the children of substance abusing parents. The proportion of low-income households in the neighborhood was linked with increases in internalizing symptoms and decreases in behavioral competence. High neighborhood dangerousness was related to lower behavioral competence in boys but not girls. In contrast, presence of professional workers in the neighborhood was correlated with higher academic achievement in girls, but had no effect on boys. The researchers did not compare neighborhood differences; rather they used variables within the neighborhoods (% poverty, % neighbors working in white-collar jobs, and crime rates) as predictors of child competence within disadvantaged neighborhoods. Although the study used a sample of children of substance abusers and a limited definition of neighborhood risk, it is the first study to examine competence in the context of concentrated neighborhood disadvantage.

Overall, prior studies of concentrated neighborhood disadvantage have significant limitations in that the outcomes are largely defined through the lens of pathology such as poor academic performance, behavioral misconduct, and social rejection. Few studies (e.g., Kupersmidt et al., 1995; Luthar & Cushing, 1999) examined a larger spectrum of outcomes within a particular domain, such as social acceptance and satisfaction. In addition, many studies use a narrow definition of neighborhood risk, measuring only one level of risk within the neighborhood (such as neighbor income), which does not incorporate the compounded risk faced by individuals living within concentrated neighborhood disadvantage which has been shown to differ significantly than living in poverty alone (Sampson, Raudenbusch, & Earls, 1997).

Finally, almost all prior studies have limited their examination of youth outcomes to one domain. Prior competence research suggests that competence domains interact, such that academic competence is correlated with behavioral competence and social competence (Masten et al., 1995). Therefore, children who are more aggressive are more likely to be rejected by peers. However, when considering all domains of child outcomes within concentrated neighborhood disadvantage, a more complex interaction emerges. For example, neighborhood studies of child behavior problems suggest that children living within neighborhood disadvantage are more aggressive, yet they are not more likely to be socially rejected.

## **Gender**

In general, studies have found differences in school-aged boys' and girls' competence (e.g. Cole et al., 2001). For example, girls are more likely to do better in reading and have higher achievement test scores (as reviewed by Leventhal & Brooks-

Gunn, 2004). Differences between boys and girls may be confounded within contextual risk. For instance, recent studies suggest that girls may be less susceptible to neighborhood effects than boys (see Leventhal & Brooks-Gunn, 2000).

Halpern-Felsher et al. (1997) found that neighborhood characteristics were better predictors of males' than females' academic performance. Neighborhood effects on achievement were not present for girls until they reached high-school; even then, family characteristics were more strongly associated with their performance than neighborhood characteristics. Beyers, Bates, Pettit, and Dodge (2003) suggested that overall, female adolescents may be less susceptible to neighborhood characteristics. Community socioeconomic disadvantage is linked with conduct problems, low school attendance, and low academic achievement in males, but not their female counterparts.

In a "moving to opportunity" study by Leventhal and Brooks-Gunn (2004), it was shown that neighborhood type may influence the children differentially depending on child gender. Specifically, male adolescents in high-poverty neighborhoods scored 10 points lower on achievement tests than female peers in the same neighborhood type, whereas in high-income neighborhoods, there were no differences between the genders. In addition, 11-18-year-old boys who moved to low-poverty neighborhoods had higher achievement scores compared with the boys who remained in high-poverty neighborhoods. However there were no differences between academic achievement for girls in low-income and girls in high-income neighborhoods.

Overall, it has been shown that neighborhoods may exert more influence over boys compared with girls. Researchers have speculated that this difference may be due to the way boys are allowed by their parents to interact in neighborhood activities, and

therefore are more affected by negative environments and peer groups (Beyers, Bates, Pettit, and Dodge, 2003). This suggests that child gender differences may be moderated by additional influences, such as parenting behaviors.

### **Models of Neighborhood Effects**

A major drawback to traditional neighborhood research is the relatively little progress in developing theoretical and methodological models of neighborhood influence on individual development (Roosa, Jones, Tein, & Cree, 2003). It is generally accepted that, like most risk factors, neighborhood disadvantage alone does not directly affect individual outcomes. Instead, it is more likely that neighborhood disadvantage may either co-occur with other risk factors, or, may trigger other processes or events. In most cases these other factors and mediating events which are more proximal to the child are more likely to influence their development (Roosa, Jones, Tein, & Cree, 2003). This is particularly relevant when examining how neighborhoods shape development in middle childhood.

Traditionally, parenting has been seen as one of the most relevant variables when examining neighborhood residence and child outcomes (Leventhal & Brooks-Gunn, 2000). Children often have more direct contact with their parents and families than with peers and neighbors (Leventhal & Brooks-Gunn, 2000). However, the role of parenting in determining child outcomes is not clearly defined. Some researchers suggest that the impact of concentrated neighborhood disadvantage is almost entirely mediated through the parent-child relationship while others suggest that parenting serves as a moderating factor that can exacerbate or buffer children from neighborhood disadvantage. In addition, few studies have examined school-aged children. For young children, parenting

practices entirely mediate neighborhood effects on child competence outcomes (Nickerson & Nagle, 2004). However, as children approach adolescence, the direct effect of neighborhood increases (Kroneman, Loeber, & Hipwell, 2004). Yet the majority of studies done within the context of neighborhood disadvantage have only examined adolescents. The significance of the relationship between parenting and neighborhood and its effect on outcomes in school-aged children are yet to be fully understood. Understanding these mechanisms through which neighborhoods exert influence on children is a first step in developing a comprehensive model for future studies.

### **Parenting**

Parenting behaviors have been suggested as contributing to child outcomes within the context of neighborhood disadvantage (Leventhal & Brooks-Gunn, 2000; Leventhal & Brooks-Gunn, 2004). The impact of parenting on child outcomes has been demonstrated in animal studies, longitudinal research, and intervention research (for a review see O'Connor, 2002). The most widely studied aspects of the parent-child relationship are parental warmth (which includes parental involvement and nurturance) and parental strictness (which includes punishment practices, parental supervision, and control). Deficits in parental discipline strategies and warmth have been related to both positive and negative child outcome domains (for a review see Locke & Prinz, 2002).

Strictness. For the purposes of this discussion, the term strictness will be used to incorporate various methods that parents use to discourage inappropriate behavior and gain compliance from children. According to Schaefer (1965) strictness includes 3 different mechanisms, parent behavior (discipline practices), enforcement (referring to the consistency to which the rules are applied), and psychological control (use of guilt or

emotions to influence behavior). Methods that parents use to discourage inappropriate behavior can range from effective to ineffective practices. Examples of parenting that are more effective include the use of clear rules and requests, direct reinforcement of appropriate behavior, the use of time out, brief withdrawal of privileges, and application of age-appropriate reasoning. Examples of ineffective parenting include unclear rules and requests, excessive attention for inappropriate behaviors, use of harsh physical punishment without reinforcement for appropriate behaviors and frequent reliance on coercion (Locke & Prinz, 2002).

Warmth. Parental warmth is defined as providing a positive atmosphere for the parent-child relationship and the child's emotional development (Locke & Prinz, 2002). It generally can be divided into the separate components of emotional expressions (e.g. demonstrating acceptance of the child) and involvement (e.g., playing games together, doing a favor). Each of these components is seen as dimensional and is measured on a continuum ranging from acceptance vs. rejection, concern vs. overprotection (Locke & Prinz).

Dimensions vs. Styles. The emotional tone of the parent child relationship has been found to be related to other aspects of parental behavior. Consequently, research in child development literature has used a typological approach to understanding parenting effects (i.e. authoritative, authoritarian, indulgent, and neglectful). The use of parenting styles was designed to measure the whole 'environment', rather than single aspects of the parenting context (Mandara, 2003). The use of parenting styles may not include a complete picture of parental characteristics important in understanding risk (Gorman-Smith, Tolan, & Henry, 2000). Typically typology research uses only one measure of

discipline and warmth in order to create the parent styles, rather than measuring multiple aspects of control and nurturance. This has two major drawbacks. First, many parents do not fit into the predetermined “styles.” In a study of parenting styles and adolescent academic achievement, only 53% of the parents in the sample could be classified into one of the aforementioned groups (Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Secondly, this approach assumes that other dimensions of parenting are incorporated, which may not be the case, especially when these styles have not been applied to the population in question.

Most importantly, the majority of research done with parenting styles has focused on mostly white, middle class families. It is unclear whether parenting behaviors cluster into the same styles when using a high risk, minority sample (Amato & Fowler, 2002). While styles are important in understanding the whole environment of development, single dimensions are more useful for examining unexplored hypotheses (Steinberg et al., 1994) such as how the parenting environment is affected within the context of concentrated neighborhood disadvantage.

### **Parenting and Concentrated Neighborhood Disadvantage**

In addition to being relevant to child outcomes, it is likely that parenting is also susceptible to neighborhood effects. As stated before, social disorganization theory predicts that concentrated neighborhood disadvantage results in the breakdown of social networks and opportunities within these neighborhoods, which in turn, predict individual outcomes. Environment influences parents; accordingly, neighborhood characteristics may affect their parenting behaviors. In fact, this position is supported in several studies of parenting in concentrated neighborhood disadvantage.

As with child outcomes, parenting is influenced by neighborhoods above the influence of family level variables alone. Caughy, Brodsky, O'Campo, and Aronson (2001) found that beliefs about parenting were better explained by neighborhood level characteristics (i.e. neighborhood employment levels, housing stability) rather than the parent's employment status, whether the family rented or owned, or how often the family moved. However, neighborhood influence is not limited to beliefs about parenting; it also is associated with differences in parenting behaviors.

Pinderhughes et al. (2001) examined parental discipline and warmth of parents living within disadvantaged neighborhoods. Specifically, level of neighborhood dangerousness as rated by the parent was associated with decreased parental warmth. Lower dangerousness was related to more appropriate and consistent discipline. Higher dangerousness was associated with increased harshness. Neighborhood provided unique variance above all parental characteristics, such as parent education, occupation, family structure, and age.

In contrast, Hill and Herman-Stahl (2002) found that neighborhood dangerousness was only related to parental discipline strategies, but not parental warmth. They investigated the relationship between neighborhood safety and social involvement and parenting affection and discipline in mothers of kindergarten children living in disadvantaged neighborhoods. Neighborhood safety was negatively correlated with hostile control, inconsistent discipline, and withdrawal of affection. Neighborhood safety was not related to affective relationships. The researchers hypothesized that parenting strategies such as inconsistent discipline and hostile control may develop as an attempt to adapt to less predictable environments. In this study, as well as in Pinderhughes et al.



(2001), a within-neighborhood design was used, and neighborhood dangerousness was used to predict parental outcomes. It is unclear whether concentrated neighborhood disadvantage itself was related to parenting behaviors, or whether it was only mediated by a breakdown in neighborhood safety.

In a study of 895 mothers of 3-year-old children, neighborhood poverty (measured by the proportion of neighbors living in poverty) predicted a worse physical environment and less warmth between child and mother (Klebanov, Brooks-Gunn, & Duncan, 1994). Measures of family-level SES (family income, mother's years of schooling, welfare status, and single parent status) did not show the same effect. Rather, family poverty was associated with individual maternal mental health characteristics, such as depression.

Parenting behavior appears to vary by the neighborhood context. In fact, neighborhood has been shown to be a more important predictor of parenting behavior than individual family poverty and SES measures. However, it is unclear how these differences in parenting behavior function in relation to child outcomes by neighborhood. According to Social Disorganization Theory, neighborhoods of concentrated disadvantage disrupt the home environment and, the parent-child relationship leading to lower parental warmth, increased harsh discipline practices, and less parental involvement. In turn, these disrupted parental practices lead to lower child competence. Therefore, it was theorized that the disrupted relationship results in poor child outcomes (Sheidow, Gorman-Smith, Tolan, & Henry, 2001). However, none of the previous empirical studies examined the role of parenting behavior and child outcomes in the context of neighborhood.

## **Parenting, Neighborhood Disadvantage and Childhood Outcomes**

Parenting and academic competence. Although living within the context of neighborhood disadvantage has been associated with poor academic performance in children, many neighborhood studies do not examine parenting as influencing this relationship. However, outside of neighborhood disadvantage, parental involvement has been shown to predict children's future academic competence, even when controlling for family measures of SES. For example parental involvement is related to both children's interest in school and actual academic performance.

Low-income, ethnic minority children in kindergarten and their primary caregivers participated in a study of parental involvement. Parents who demonstrated increased involvement as measured by time spent with the child and direct, regular contact with school had children who demonstrated an increased interest in learning (McWayne et al., 2004). Although this study did not directly test child academic performance, the authors hypothesized that children's interest in school may translate into later academic success.

Morrison, Rimm, Kauffman, and Pianta (2003) directly examined the effect of parental involvement on child academic success. In a longitudinal design, mother-child interactions were assessed for 122 mother-child dyads on the children's first day of kindergarten. Interactions were coded for the level of interest in the child and the amount of demonstrated parental warmth. Children's social and academic performance in school (e.g., discipline problems, classroom behavior, and grades) was assessed via teacher observation and grade reports through the eighth grade. Parent-child interactions contributed unique variance to the child's academic and social competence in the 8<sup>th</sup>

grade, even after controlling for family demographic variables (parent education, ethnicity, child IQ, and gender). Although parent involvement was not measured when children were in 8<sup>th</sup> grade, the parent-child relationship in kindergarten predicted later school performance.

In a study of self-reports of neighborhood risk factors and academic achievement in African American junior high school students (Gonzales, Cauce, Friedman, & Mason, 1996), main effects were found for neighborhood, parent involvement, and child academic performance. Self-report of high neighborhood risk (low income, poor social networks, and high crime) was correlated with lower parental involvement and with poorer academic performance in children. However, parental involvement was correlated with child academic performance only within high-risk neighborhoods. The authors of this study examined neighborhood as a potential moderator in the relationship between parenting and child academic outcome, although main effects suggest a more complicated model.

Parents play an important role in shaping children's academic experience; parental involvement predicted children's interest in school as well as actual academic performance. Particularly, parental involvement may be most relevant within concentrated neighborhood disadvantage. The results of the previous studies support parenting as a potential mediator between neighborhood and child academic outcome. However, results from Gonzales et al. (1996) also suggest that the role of parenting as a predictor of child outcome may differ between neighborhoods of different risk.

Parenting and behavioral competence. As with research on neighborhoods and child behavior problems, most studies of the contribution of parenting behaviors and

child outcome focus on behavior in children. For example as reviewed earlier, concentrated neighborhood disadvantage was associated with parenting which was then associated with child problems (Dorsey & Forehand, 2003). A variety of parenting strictness, such as low supervision and ineffective behavioral control are all seen as related to child behavior problems.

In a study of neighborhood risk, higher neighborhood disadvantage was associated with less parental monitoring (as measured by time spent unsupervised) (Beyers, Bates, Pettit, & Dodge, 2003). In turn, time spent unsupervised in the community was correlated with greater externalizing problems. Also, there was a significant interaction between parent monitoring and neighborhood. Parent monitoring practices were better predictors of child behavior problems in high disadvantage neighborhoods, but not in affluent neighborhoods.

Family cohesion, which includes some elements of warmth, is also an important predictor of child outcomes within neighborhoods. Gorman Smith, Tolan, and Henry (2000) examined the relationship between family functioning and types of juvenile criminal patterns by neighborhood risk. Adolescent males (aged 11-14 yrs) from highly cohesive homes (share the same beliefs, spend time together) are less likely to participate in criminal behavior compared to those from low cohesive families. However, there was also an interaction with neighborhood type; adolescents from low cohesive families and living in neighborhoods of concentrated disadvantage were more likely to participate in criminal behavior compared to boys from low cohesive families living in non-urban poor neighborhoods. Results suggest that the relation of family functioning characteristics to

delinquency patterns is dependent, to some extent, on the characteristics of the neighborhood in which the family resides.

Accordingly, Brody et al. (2003) hypothesized that the role of negative parenting behaviors would be more predictive of child conduct disorder in disadvantaged neighborhoods than in affluent neighborhoods. African American children (age 10-13 years) and their primary caregivers reported on child externalizing behavior and parenting behaviors. Harsh-inconsistent parenting and low levels of acceptance and involvement was associated with children's conduct disorder symptoms. As hypothesized, these associations were strongest among families residing in the most disadvantaged neighborhoods (even after controlling for parent income and education).

In another study of child externalizing behavior problems, Plybon and Kliever (2001) examined neighborhood types with home environment as moderator. Children (aged 8-12) and their primary caregivers living in 3 different neighborhoods: 1) high disadvantage (% of neighbors below poverty, % of female-headed households) crowding, % vacant) and moderate crime (percent of personalized victim crime) 2) high crime, moderate disadvantage, and 3) low crime and low disadvantage participated in the study. Children living in high disadvantage/moderate crime neighborhoods had most externalizing behaviors when compared with both groups, including those who lived in high crime neighborhoods. Parenting behavior and family cohesion only predicted worse child behavior problems for those families living in high disadvantage neighborhood, regardless of crime rates.

Overall, both dimensions of parental warmth and strictness are related to child behavioral outcomes. To some extent, this relationship may be also related to the

neighborhood of family residence. Unfortunately in the studies that directly test the contribution of parent practices to child externalizing behavior between neighborhoods, child outcomes are limited to rates of child pathology, as defined by conduct disorder or juvenile crime rates. It is unclear which role parent practices may play when considering non-pathological behavior outcomes, such as behavioral competence. Further, it is unknown whether differences in parenting by neighborhood may play an important role in predicting child outcome.

Parenting and social competence. As seen with academic and behavioral outcomes, parenting behavior has also been related to children's social skills for a variety of age groups. For example, kindergarten children with parents who expressed high levels of positive emotion were well liked by peers and displayed more prosocial behavior in their classrooms than those from non-positive expressive parents. Adolescents with parents who demonstrated consistent discipline practices rated themselves as significantly more socially competent compared with their peers from neglectful or indulgent homes (Lamborn, Mounts, Steinberg, & Dornbusch, 1991). In a study of 6<sup>th</sup> and 7<sup>th</sup> graders, (Krevans & Gibbs, 1996) inductive discipline practices (defined as discipline without guilt and power-assertive) were related to increased child prosocial behavior as rated by the children's teachers. The use of inductive parental discipline and consistency in discipline was significantly related to higher parent SES. Power-assertive parenting was associated with less prosocial children.

Further, examination of the relationship between parent behavior and child social outcomes has shown possible interactions with neighborhood characteristics. Brody et al. (2001) examined the contributions of neighborhood disadvantage, collective

socialization, and parenting to African American children's affiliation with deviant peers. 867 families living in Georgia and Iowa, each with a 10- to 12-year-old child, participated. Community disadvantage and harsh/inconsistent parenting discipline practices were both positively correlated with deviant peer affiliations. However nurturing/involved parenting was most strongly associated with positive social behavior for those children residing in the most disadvantaged neighborhoods.

Parental strictness, emotional warmth, and involvement play a considerable role in predicting child academic, behavioral, and social outcomes. Unfortunately, when families are living in concentrated neighborhood disadvantage, these parenting behaviors may be compromised, leaving children at risk for a range of negative outcomes. Many studies of parenting within neighborhood disadvantage examine a constricted model of parenting domains and child outcomes (e.g. parental involvement and academic outcomes), which results in limited models of the mechanisms through which neighborhood disadvantage may affect children within this context. In addition, most neighborhood studies examine parent and child outcomes within neighborhood, rather than differences across neighborhoods of concentrated disadvantage and non-disadvantaged neighborhoods. Those that have, for example Gonzales and colleagues (1996), suggest possible differences in the relationship between parent behaviors and child outcomes across neighborhoods. Yet this has not been directly compared in a study examining parenting across levels of concentrated neighborhood disadvantage and childhood outcomes in each area of school-age competence.

## **Child Gender and Parenting behaviors**

As discussed earlier, girls seem to be less affected by neighborhood disorganization than boys. Questions about how concentrated neighborhood disadvantage influences boys versus girls differently have yet to be answered (Kroneman, Loeber, & Hipwell, 2004). In addition to gender differences in neighborhood effects, parenting also has been shown to vary by gender. Mothers and fathers interact differently with female children than they do with male children (Baumrind & Black, 1967; Conrade & Ho, 2001; Cote & Azar, 1997). For instance, boys are more likely to spend time alone unsupervised (Beyers, Bates, Pettit, and Dodge, 2003). In addition, boys are more likely to be punished with the removal of privileges, whereas girls are more likely to be punished with withdrawal of affection. Mothers were also more likely to tolerate verbal protest from boys than girls.

Furthermore, parent-child interaction is a better predictor of outcomes for girls than for boys. For example, maternal parenting characteristics are better predictors for girls' academic competence outcomes than for boys (Auerbach, Lerner, Barasch, & Palti, 1992). Moreover, within neighborhood disadvantage, parental supervision was a predictor of girls' externalizing behavior, but not boys'. Beyers, Bates, Pettit, and Dodge (2003) found no differences in externalizing behavior between boys who reported spending time without adult supervision and those with adult supervision. However, in a similar study of girls (Galambos & Maggs, 1991), those who spent more time unsupervised had more behavior problems and increased contact with delinquent peers than girls with less or no unsupervised time. Gender difference in reaction to neighborhood could be due to gender differences in parental monitoring. In general, girls



experience increased supervision and monitoring, and as a result, they would be buffered from negative effects of neighborhood disorganization. In contrast, boys are allowed increased time with peers and less supervision and are vulnerable to the neighborhood disadvantage.

### **Ethnicity**

As reviewed, several studies have found ethnic differences in parent and child outcomes. However, most studies fail to consider possible confounds within neighborhood research. Empirical research on neighborhood disadvantage has consistently demonstrated that there is considerable social inequality among neighborhoods in terms of socioeconomic and racial segregation, especially related to the connection between geographic isolation of African Americans and concentrated disadvantage (Sampson, Morenoff, & Gannon-Rowley, 2002). Klebanov, Brooks-Gunn and Duncan (1994) found that African American mothers were more likely to be poor, have less education, more likely to be single mothers, and more likely to live in poorer neighborhoods. As a result, when controlling for neighborhood residence, ethnic differences are no longer significant (Hill & Herman-Stahl, 2002).

African American parents were less warm and were less likely to be consistent in discipline compared to Caucasian parents (Pinderhughes, Nix, Foster, & Jones, 2001). Kotchick and Forehand (2002) found harsh discipline practices were correlated with family ethnicity, where ethnic minority status predicted more harsh discipline practices. Harsh discipline was also correlated with the dangerousness of the family's environment, which, within such conditions, may be adaptive.

Social disorganization theory is in part defined as being caused by ethnic and racial segregation. As a result, there is an over-representation of ethnic minority families within concentrated neighborhood disadvantage (Wilson, 1986). Most studies examining concentrated neighborhood disadvantage use a solely African American sample, yet for those who study poverty in general often use a majority Caucasian sample. Those who study overall competence outcomes, use a primarily Caucasian, and middle class population.

### **Summary**

While all neighborhoods are important and relevant contexts for development, living within neighborhoods characterized by chronic crime, joblessness, and social disorganization compounds the contextual relevance of the environment. Research has demonstrated that living within inner-city neighborhoods confers a greater risk than living within other conditions of impoverishment. When children are living within neighborhoods of concentrated disadvantage, collective measures of poverty consistently are shown to be predictive of child outcomes above and beyond individual family measures of SES. However, most of the research examining neighborhood effects has been done using older adolescents. Relatively little has been done with children in middle childhood; a significant oversight especially because it is at this age that children become more exposed to the neighborhood through interactions at school and with peers in the neighborhood. Further, of the research that has been done with individuals living within concentrated neighborhood disadvantage, especially research with school-aged children, most examine pathological outcomes rather than resilience, which leaves an incomplete picture of the effects of concentrated disadvantage as a risk factor.

In addition, there has been little progress developing a model of the mechanisms through which neighborhood disadvantage operates. Parenting is one of the most relevant proximal mechanisms through which this may operate, especially for children of school age. Parental warmth, involvement, and strictness are significant predictors of child success in all three competence domains. Unfortunately, the interactions between parenting behaviors and neighborhood environment have not been systematically examined across child competence domains. As children and families have been increasingly isolated within neighborhoods of concentrated disadvantage, understanding how neighborhood affects individuals has taken on a greater relevance for developing interventions that mitigate the effects of living within these high-risk neighborhoods.

## **Current Study and Hypotheses**

This study examined the effects of concentrated disadvantage as a predictor of academic, behavioral, and social outcomes in school-aged children living in Milwaukee, WI (See Appendix A) controlling for family level measures of socioeconomic status. In addition, this study measured aspects of parental warmth and strictness, as originally defined by Schaefer (1965) and their interactions with concentrated disadvantage and the effect on child competence. Subsequent studies have found Schaefer's definition of parenting factors reliable and valid across ethnic and minority groups. In addition, the two dimensions of parenting have held up across gender and age groups (Hill & Herman-Stahl, 2002; Kawash & Clewes, 1988; Schludermann & Schludermann, 1970).

### **Neighborhood and Child Competence**

According to social disorganization theory, living in an inner-city neighborhood is stronger predictor of child outcomes (both competence and disorder) than family income alone. Growing up within a neighborhood of concentrated disadvantage puts a child at risk even more than living in a poor family within a less disadvantaged neighborhood. In addition, because classic risk studies often employ a pathology-focused approach, limited information is known about a range of outcomes within the context of neighborhood risk. Studies of children's competence have been completed within a variety of risk factors, such as abuse, poverty, and chronic illness. However the structure of competence has yet to be examined within the context of neighborhood-wide disadvantage with school-aged children. Therefore, it is unclear how the three established areas of competence in childhood (as defined by Masten et al., 1995) are related within the context of concentrated neighborhood disadvantage, especially for school-aged children.

In addition, child competence within various contexts differs according to the child's gender. It has been suggested that boys are more likely to interact with their external environment, including neighborhood. On the other hand, girls are expected to be closer to their families, therefore interact with their neighborhood less and are buffered from neighborhood risk. As a result, neighborhood may be a better predictor of competence for boys within disadvantaged neighborhoods compared with girls.

Hypothesis 1a: It was hypothesized that children's competence in all areas would be negatively related to the level of concentrated neighborhood disadvantage. Increase in concentrated neighborhood disadvantage would predict lower levels of child academic, behavioral, and social competence across all raters.

Hypothesis 1b: It was hypothesized that neighborhood would be a better predictor of child competence than individual family SES for children living in the high concentrated disadvantage group. However, it was hypothesized that neighborhood would not contribute additional variance in the prediction of child competence above family level variables for those children living in less disadvantaged neighborhoods.

Hypothesis 1c: It was hypothesized that concentrated neighborhood disadvantage would be a better predictor of child competence for school-aged boys than for school-aged girls.

### **Parenting, Neighborhood, and Child Competence.**

It is generally accepted that neighborhoods affect individuals through proximal influences. It is unclear whether parenting behaviors are related to child outcomes in the same way across neighborhoods. Strict and high monitoring parenting practices may undermine child self-competence and social development in more affluent or middle

class neighborhoods. In contrast, high parental control within disadvantaged and dangerous neighborhoods may serve as a protective factor and therefore fostering more positive development for children within concentrated neighborhood disadvantage. The advantages of parental monitoring within these neighborhoods may even be more important than the effect of parental warmth. Therefore, parenting behaviors may predict different child competencies depending on the level of neighborhood disadvantage in which the family lives. In addition, just as neighborhoods affect boys differently than girls, parenting behaviors also vary by child gender.

Hypothesis 2a: It was hypothesized that neighborhood effects and parenting behaviors would interact to affect child competence. Specifically, high parental strictness and low warmth would be associated with lower child behavior competence within less disadvantaged neighborhoods. In addition, it was predicted that high strictness, regardless of parental warmth, would be correlated with higher behavioral competence within higher levels of concentrated disadvantage. Finally, parental strictness may be a stronger predictor of child competence within higher levels of concentrated neighborhood disadvantage than within low neighborhood disadvantage.

Hypothesis 2b: It was hypothesized that child gender would moderate neighborhood effects on child competence but would also moderate the effects of parenting behaviors on child competence

## **Ethnicity**

Inherent in social disorganization theory is that there is an over-representation of ethnic minority families within concentrated neighborhood disadvantage (Wilson, 1986). Where prior studies have found that discipline practices were correlated with family

race/ethnicity, it may be that these differences are due to the dangerousness of the family's environment. Within disadvantaged neighborhoods, these differences may be adaptive.

Hypothesis 3: It was hypothesized that neighborhood disadvantage would be a stronger predictor of racial/ethnic differences in child competence than parenting behaviors.

## **Methods**

Overview. Children were recruited from eight Milwaukee public elementary schools. Family neighborhood residence and individual SES was determined by demographic information completed by parents at the time of consent. After parental consent was obtained, measures were administered to children in classroom groups. Parents and teachers were asked to complete additional ratings. Children received small prizes for participation the study. Parents were monetarily (\$10) compensated for their time. In addition, each teacher received \$20 as a cash gift for completing the child ratings and an additional \$50 for classroom supplies.

### **Procedures**

School Selection. A letter describing the study was sent to 15 principals of elementary schools in the Milwaukee Public School District. Each school was a non-charter, non-magnet community-based school. Eight schools were chosen based on principal and teacher consent and non-overlapping district boundaries in order to represent varying levels of disadvantage throughout the city.

Participants. All 4<sup>th</sup> graders and their teachers from 13 classrooms in eight Milwaukee elementary schools were invited to participate in the study. The range of consent to participate obtained from the current study varied from 4.7-53.6% in the targeted classrooms. Parental consent was obtained for a total of 125 children; 114 children completed the study, 10 children were absent the days of data collection, and 1 child chose to not participate due to a reported illness. 93 parents agreed to participate themselves in the study and returned completed rating forms. Permission for teacher participation was obtained from 70 parents, eight teachers agreed to participate, yielding



43 child ratings. Table 1 lists demographic information for those who completed the study.

Neighborhood classification. Often, determination of neighborhoods are not made a priori, rather it is determined relative to the selected sample of recruited participants and analyzed at the level of census block which may not have social meaning (e.g. Gorman-Smith, Tolan, & Henry, 2001). As an improvement upon these prior studies, the current study used pre-existing neighborhood boundaries as defined by using boundaries set by the Milwaukee Neighborhood Data Center (<http://www.nonprofitcentermilwaukee.org/datacenter>) part of the National Neighborhood Indicators Partnership (NNIP). Neighborhood determination was similar to the procedure used by the Project on Human Development in Chicago Neighborhoods (Sampson, Raudenbush, & Earls, 1997). 218 Census tracts were combined resulting in 51 neighborhoods. Neighborhoods were composed of contiguous census tracts and ecologically meaningful as possible such as using geographic boundaries (for example, rivers, parks, and freeways), residential housing projects, and knowledge of Milwaukee's historic neighborhoods. Census statistics for each of the neighborhoods of Milwaukee were obtained from the Milwaukee Neighborhood Data Center website.

Final determination of neighborhood was based on the child's current residence as reported by the child and his or her primary guardian. The final sample of children was from 39 of the possible 51 different neighborhoods. Table 2 lists the demographic data comparing the 51 neighborhoods of Milwaukee with the final 39 neighborhoods represented in the sample.

Data Collection. Approximately 2 weeks before the arranged date of data collection, a consent form for parent and child participation in the study and permission to obtain the teacher ratings were sent home with the children in the chosen classrooms. Along with the consent, an envelope with parent questionnaires was sent home. If the parent agreed to participate, they completed a background form that included basic demographic information about the family such as family income, child's living situation (e.g., two-parent home, single family home, foster home, etc.), current address, and race/ethnicity. They also completed additional ratings of the child's social and externalizing problems (Child Behavior Checklist (CBCL); Achenbach & Rescorla, 2001) and of their own parenting behaviors (Parent Report of Parent Behavior Inventory (PRBPI); Hill & Herman-Stahl, 2002).

Once parental consent was obtained, children completed a series of questionnaires during a regular classroom period when the investigator was present. Measures included a perception of parenting (modified version of Children's Report of Parental Behavior Index (CRPBI; Schaefer, 1965; Hill and Herman-Stahl, 2002) and self-competence (Harter, 1982). Participating children also completed a measure of peer assessment (The Class Play-Revised; Masten, Morison, & Pellegrini, 1985). Questionnaires were read aloud in a group setting in order to control for reading level and to maintain attention.

After parental consent for teacher ratings was obtained, teachers were asked to complete supplemental rating forms that measure the child's competence (Perceived Competence Scale-Teacher Report; Harter, 1982) as well as child externalizing symptoms (Teacher Report Form (TRF); Achenbach & Rescorla, 2001).

## Measures

*Children's Report of Parental Behavior-Revised* (Schaefer, 1965; Hill and Herman-Stahl, 2002). The original CRPBI has had several revisions of the original form (Margolies & Weintraub, 1977; Schludermann & Schludermann, 1970). Each form has demonstrated adequate reliability and validity with a variety of ethnic minority populations and age groups (Prinz & Locke, 2002).

A shortened form of the CRPBI (Schaefer, 1965) was used to measure specific parenting behaviors. The CRPBI-R consists of 47 questions such as "My mother understands my problems and worries" and "My mother sees to it that I obey when she tells me something" and asks the children to rate how much each statement is "like" their parents. Questions are scored on a 5-point likert scale ranging from 0 "not like her/him" to 4 "like her/him". In another study of the CRPBI-child report, the internal reliability of child ratings of maternal behavior ranged from .79-.86 (Schwartz, Barton-Henry & Pruzinsky, 1985). Test-retest reliability at a 1 week follow with 4-9<sup>th</sup> graders (Margolies & Weintraub, 1977), all subscales demonstrated adequate alpha (.74-.92).

The six subscales are measured by an average score for each scale. The scales include: acceptance (10 items, alpha current study = .88), rejection (8 items, alpha current study = .66), hostile control (6 items, alpha current study = .49), inconsistent discipline (8 items, alpha current study = .74), withdrawal of affection (8 items, alpha current study = .76), and enforcement (8 items, alpha current study = .48). Because the alpha in this sample for some of the subscales were quite low (hostile control; enforcement), this measure was also factor analyzed to have more reliable measure of child-reported

parenting. The results of the factor analysis are detailed in the data reduction method section below.

*Parent Report of Parenting Behavior Index* (Schaefer, 1965; Hill and Herman-Stahl, 2002). The original CRPBI was also modified to obtain parent ratings of their own parenting behavior. The PRBPI also has 47 questions that ask parents to rate how much they are “like” each descriptive statement. Again, the questions are scored on a 5 point scale ranging from 0 “not like me”, to 4 “like me”. Total scores are calculated for six subscales that correspond to the child-ratings. These included Acceptance, Rejection, Hostile Control, Inconsistent discipline, Withdrawal of affection, and Enforcement. In a study comparing mother, father, and child reports of parental behavior, internal consistency of self report parenting scales were somewhat lower than those of other informants (Schwartz, Barton-Henry & Pruzinsky, 1985). Alpha for mother ratings of herself on the subscales ranged from .51-.71. However, convergent validity was relatively high; ratings of parental behavior were significantly ( $p<.01$ ) correlated between self and child report.

The internal reliability for the current study was somewhat higher than those found in the Schwartz, Barton-Henry, and Pruzinsky (1985) study. Coefficient alphas for maternal report are as follows: Acceptance = .86, Rejection = .73, Hostile Control = .76, Inconsistent discipline = .84, Withdrawal of affection = .77, and Enforcement = .66. Consistent with the CRPB, parent-report of parenting behavior was also factor analyzed and results appear below.

*Child Behavior Checklist* (Achenbach & Rescorla, 2001). The CBCL is a widely used instrument that scores behavior on a variety of dimensions such as cognitive ability,

social problems, and internalizing and externalizing behavior. A subset of the CBCL that included 73 total questions was used to include relevant measures of behavior. The final version scored several subscales of social problems and externalizing behavior. The social problems scale had a total of 11 items and an  $\alpha = .74$  for the current study. Total Externalizing symptoms scale was comprised of the 33 questions and a resulted in an  $\alpha = .91$ . The original published internal reliability for these two measures were similar to those found in the current study: social competence = .69 and externalizing behavior = .94 and test-retest reliability was more than adequate (social competence = .93; externalizing behavior = .92) (Achenbach & Rescorla, 2001).

*Teacher Report Form* (Achenbach & Rescorla, 2001). The TRF is similar to the parent's rating for in structure and content. In previous studies the TRF demonstrated high test-retest reliability (social competence = .83 and externalizing behavior = .89). In terms of validity, Achenbach and Rescorla found that TRF externalizing scores were significantly correlated with Behavioral Assessment Schedule for Children-Teacher (BASC-T) ratings of externalizing symptoms (externalizing = .74). The same was true for CBCL and BASC as rated by the mother (externalizing = .88).

Teachers also completed a subset of the TRF that included measures of behavior that were rated by the parents. The administered version included 69 total questions and the coefficient alpha values in this sample for the TRF were .93 for the externalizing scale and .63 for social problems.

*The Perceived Competence Scale (Child Form)* (Harter, 1982). The Perceived Competence Scale was used to measure children's report of their own competence. The scale used a "structure alternate" format, where children are asked to choose between 2

alternative descriptions (e.g. some kids often forget what they learn...but other kids can remember things easily) and rate how true the chosen statement is for them. The 24 questions are scored on a four-point scale where 1= low perceived competence and 4 = high perceived competence.

Total scores are summed from 6 items on each of the following domains: academic, social, and behavioral competence. The Perceived Competence Scale for children has demonstrated adequate internal reliability for each of the factors for elementary-aged children, alpha ranged from .75-.84 (Harter, 1982). The coefficient alpha for each of the scales for this sample are also acceptable (academic = .74, social = .77, behavioral = .76). Test-retest reliability in the original 9-month follow-up was again sufficient (alpha = .78-.80; Harter). Construct and discriminant validity has been shown to be adequate (Harter, 1982).

*The Perceived Competence scale (Teacher Form)* (Harter, 1982). The form consisted of 9 questions and parallels the child's questionnaire in its format. Teachers were asked to make the best judgment of the child's actual competence in 3 of the same areas as assessed in the child form. The teacher report form yielded higher internal reliability in this sample than the child self report: academic = .88; social = .93; behavioral = .93. In previous studies, the construct validity and discriminant validity of each of the subscales has been shown to be acceptable (Harter, 1982).

*Revised Class Play* (Masten, Morison, & Pellegrini, 1985). The Revised class Play was used as a measure of social competence by means of a peer nomination format. Children were instructed to select classmates to fill 30 different roles (15 positive, 15 negative) for a pretend class play. The student was only allowed to select one classmate

per role and was told to choose the student who seems to fit the part in real life. The measure yielded three dimensions of social competence: sociability-leadership (15 items), aggressive-disruptive (7 items), and sensitive-isolated (7 items). Example roles included the role of the person who *“helps others when they need it”* (Sociability-Leadership), *“rather play alone than with others”* (Sensitive-Isolated), and *“loses temper easily”* (Aggressive-Disruptive). Although the entire form was given to the participants, this study did not include measures of internalizing behavior. Therefore, only the sociability-leadership and aggressive-disruptive scores were used.

Each child was given a score for both dimensions of competence measured based on the number of times that child was nominated for those roles (Morrison & Masten, 1991). Internal reliability of the scales in this study was as follows: sociability-leadership = .89 and aggressive-disruptive = .68. Internal reliability of the same scales in a population of 3<sup>rd</sup>-6<sup>th</sup> grade students were both well above .85 (Morrison & Masten). Six-month test re-test reliability from previous studies for the social and disruptive scores demonstrated satisfactory correlations (.87, .77 respectively) (Masten, Morrison, & Pellegrini, 1985).

Earlier studies using the Class Play has used the whole classroom to rate students (Hymel, Rubin, Rowden, & LeMare, 1990; Luthar, 1995). However, due to current study procedures, only children whose parent consented for them to participate were able to complete peer nominations. To minimize artificially inflating nominations, children were instructed to rate all children in the classroom. The names of those children who were not participating were blacked out and scored as missing.

Further, because classroom participation varied from school to school, there was large difference in the number of possible raters for each child. For example, using the original scoring method, a child from a classroom with only seven raters rated as “aggressive” by all of the students in the class would yield a score of ‘7’, while a child from a classroom with 14 raters rated by only half of the students as ‘aggressive’ would have the same ‘aggressiveness’ score of 7. In order to compensate in this difference between classrooms, final subscale totals were converted to a percentage using the total possible number of raters as the denominator.



## RESULTS

### Missing Data

Missing scale items for each of the questionnaires ranged from 0.4 - 2.3% across raters. In order to compute total scores, missing items were imputed using individual mean substitution. As mentioned previously, 11 children did not participate in data collection; however, parents of these children completed all measures of family demographics. Because missingness included whole case-wise data, mean substitution and single imputation were considered inappropriate (Widaman, 2006). Therefore, Multiple Imputation method (MI) in PRELIS was used to impute missing case data using completed peer measures and individual, family, and neighborhood demographics. Demographics included child sex, child and parent ethnicity, marital status, parent years of education, family income, and neighborhood variables of percent of families living below poverty, percent of female-headed households, age and ethnic composition, and unemployment rates.

Of the 93 parents that completed the study, there were three missing total scores for each of the CBCL and PRPBI scales. In addition, of the 34 completed teacher ratings, 3 Perceived Competence scales were missing. Multiple Imputation method (MI) in PRELIS was used to impute missing case data using family and neighborhood demographics.

### Data Reduction

Neighborhood disadvantage. The measure of neighborhood disadvantage was created using several steps. First, census data, including percent of families living below poverty, percent of female-headed households, age and ethnic composition, and

unemployment rates, were obtained for all 51 neighborhoods of the city of Milwaukee. Each of the 5 census variables were standardized across all neighborhoods. A factor analysis was completed and the factor solution resulted in a single measure using all 5 variables.

After the scores were standardized, a mean concentrated neighborhood disadvantage score was calculated by summing the 5 standardized census statistics. One score was calculated for each neighborhood. A summary of all 51 neighborhoods appear in the second column of Table 2. Lastly, parents and children in the study provided their current address, which was located within one of the neighborhoods. The final concentrated neighborhood disadvantage score for each participant was the score calculated for their reported neighborhood of residence. The sample from this study resided in 39 of the 51 possible neighborhoods. The means and standard deviations of the demographics for these 39 neighborhoods appear in the third column of Table 3.

In order to analyze hypothesis 1b and hypothesis 2, neighborhoods were dichotomized into high and low concentrated neighborhood disadvantage based on a median split. This cut point was used for several reasons. Although 1 standard deviation above the mean has been used in sociological measures of urban poverty (see Jargowsky & Yang, 2006), the mean is defined based on a nation-wide average, whereas this study uses a city-wide comparison. As demonstrated in Table 2, the nation-wide averages are similar to the low concentrated disadvantage in this sample. Additionally, the national average for neighborhood indicators is based on census block level indicators, whereas this study uses more sophisticated, ecologically meaningful boundaries, composed of contiguous census tracts, geographic boundaries (for example, rivers, parks, and

freeways), residential housing projects, and knowledge of Milwaukee's historic neighborhoods to reflect actual neighborhoods. Therefore a comparison to a national statistic was more difficult to determine. Using 1 full standard deviation above the mean of the current sample yielded too few children from "high" concentrated disadvantage neighborhoods (N= 22), and resulted in low power, whereas the median cut-point in this sample produced significant differences ( $p<.001$ ) on all indicators (see Table 2).

Parent socioeconomic status (SES). Recent studies of children and family composition have determined that traditional measures of SES, where the "householder's" occupational code was used as the measure of the whole family's SES, is outdated (see Coleman, 1988). An alternative model that includes separate indicators of financial, human, and social capital has been suggested for use with socially and economically diverse populations. Therefore, each of these indicators was computed for this study as defined by Entwistle and Astone (1994). Financial capital was measured by income level of the household. Human capital was measured by the primary caretaker's years of education. Lastly, social capital was measured by household structure, defined by the number of biological parents in the home and whether there is a step-parent in the home. Because 14% of the sample was unmarried, cohabitating couples, an additional value for whether a non-married partner lived in the home was also included in the variable for social capital. The resulting 5-level social capital measure was scored accordingly: 4 = two biological/adopted parents in the home; 3 = one biological parent – remarried; 2 = one biological parent – non-married partner in home; 1 = one biological parent – no partner in home; 0 = no biological/adopted parents in home.

Child academic competence. Academic competence was measured using child

and teacher report of school competence on the Harter Perceived Competence Scale.

Table 3 lists the cross-rate correlation for this measure.

Child behavioral outcomes. Both behavioral competence and behavioral problems were measured in this study. Therefore, ‘outcome’ refers to both competence and pathology.

Behavioral competence was measured by the Harter Perceived Competence behavioral subscale as completed by the child and teacher. In addition, parents and teacher were also asked to rate child behavioral problems. The CBCL and TRF externalizing behavior scales were used as parent and teacher report of behavior problems (respectively). Peer ratings from the aggressive and disruptive behavior subscale of the Class Play was also used as a measure of behavior problems in children. Table 4 reports cross-rater correlations for each of the measures.

Child social outcomes. As with behavior, both social competence and social problems were measured in this study. Therefore, ‘outcome’ refers to both competence and pathology.

Child social competence was measured by child and teacher report of the social subscale from the Harter Perceived Competence Scales. The likeability subscale of the Class Play was used as the final peer measure of social competence in children. The social problems index on the CBCL and TRF were used as parent and teacher report of social problems in children. Table 5 lists cross-rater correlations for these measures.

Parenting behavior. Parents and children filled out the parenting behavior index (PRPBI and CRPBI respectively). However, internal consistency reliability was quite low for several subscales of the measure. Thus, a maximum likelihood factor analysis

was performed for both the parent and child measures and was followed by an orthogonal (varimax) rotation. The number of factors retained was determined by a Scree test, resulting in three factors that were similar across both child and parent raters. Final factors were comprised of items with factor loadings greater than .30, no items with cross loadings, and no fewer than three items (Costello & Osborne, 2005). Table 6 lists cross-rater correlations for the final subscales and their respective descriptive statistics. Appendix B lists the questions that comprise the final factors.

Factor 1 (Detachment) was made up of all the items from the inconsistent discipline subscale, along with several items from the rejection and withdrawal of affection subscales. This factor included questions such as “I make a rule one day, and forget it the next,” “My mother frequently changes the rules I am supposed to follow,” “I avoid looking at my child when they have disappointed me,” and “My mother acts as though I am in the way.” The CRPBI version consisted of 19 items and an  $\alpha = .86$ . The PRPBI was comprised of 22 items and a reliability = .89.

Factor 2 (Acceptance) included items solely from the acceptance scale. The child version was identical to the pre-factored subscale, with all 10 items and a reliability = .88. The parent version contained 8 of the acceptance items and had an  $\alpha = .87$ .

Factor 3 (Strictness) consisted of items from both the enforcement and hostility scales. Items on this scale included questions such as “I am strict with my child,” “My mother reminds me of things I have done wrong,” and “I demand my child do exactly as I tell him/her.” The child version had a total of 8 items and a reliability = .65. The parent version had a total of 9 items and had a greater reliability ( $\alpha = .80$ ).

## Participant Demographics

As stated in the method section, the demographic information for all participants is included Table 1. However, participant demographics were also examined by comparing groups divided by concentrated disadvantage. Children living in higher levels concentrated disadvantage were older ( $\bar{x} = 9.6$  years) compared with those living in lower concentrated disadvantage ( $\bar{x} = 9.2$  years;  $F_{(1,96)} = 9.87, p < .01$ ). In addition, families living in higher concentrated neighborhood disadvantage had larger households ( $\bar{x} = 5.17$  people) compared with those in lower concentrated neighborhood disadvantage ( $\bar{x} = 4.34$  people;  $F_{(1, 83)} = 5.22, p < .05$ ). Families living in higher concentrated disadvantage were also more likely to have lower social capital compared with families living in lower concentrated disadvantage ( $\chi^2 = 9.29, p < .05$ ). Families in lower concentrated neighborhood disadvantage were more likely to have 2 biological parents in the home compared with families in higher concentrated neighborhood disadvantage (34.9%; 14.6% respectively). Finally, as expected, children were more likely to be African American in neighborhoods of high concentrated disadvantage (81.7 %) than in neighborhoods of low concentrated disadvantage (32.7%;  $\chi^2 = 39.66, p < .001$ ).

There were significant differences in child age based on child ethnicity; African American children were older (9.6 years) compared with Caucasian children (9.1 years;  $F_{(1,76)} = 6.51, p = .01$ ). Family income ( $\chi^2 = 23.27, p < .01$ ), marital status ( $\chi^2 = 12.5, p = .01$ ), and social capital ( $\chi^2 = 22.24, p < .001$ ) also differed based on child ethnicity. Families of African American children were more likely to make less than \$5,000 per year compared with families of Caucasian children (27.0%; 0.0% respectively). Families of Caucasian children were more likely to be married (61.5%) and have two biological

parents in the home (71.4%) compared with families of African American children (15.4% married; 11.5% two biological parents in home). There were no demographic differences between boys and girls.

Overall, the sample represents a population of 4<sup>th</sup> grade students living in a medium-sized mid-western city. The sample also represents a population of children and parents responsible and involved in academics enough to return permission slips and questionnaire forms in a timely manner. Further, the neighborhoods from which these children live represent a range of concentrated disadvantage. The greater population represented in the high concentrated disadvantage sample are most likely African American children who come from single parent households.

### **Hypothesis 1: Neighborhood and Child Competence**

#### *Hypothesis 1a*

It was hypothesized that children living in less disadvantaged neighborhoods would demonstrate higher levels of competence in all areas than those who live in higher levels of concentrated neighborhood disadvantage. In order to test this hypothesis, a separate linear regression was completed for academic, behavior, and social competence and for behavior and social problems; each with a continuous measure of concentrated neighborhood disadvantage as the only predictor. F-tests,  $R^2$ , and betas for each of the regressions are included in Table 7.

Academic Competence. The model predicting child self-report academic competence was significant ( $F_{(1,123)} = 3.995$ ,  $p < .05$ ,  $R^2 = .03$ ). Teacher reported academic competence was not significantly predicted by neighborhood concentrated disadvantage.

Behavioral Competence. Child, teacher and peer measures of behavioral competence were not significantly predicted by neighborhood concentrated disadvantage.

Behavior Problems. Concentrated neighborhood disadvantage significantly predicted parent-reported child behavioral problems ( $F_{(1,92)} = 4.66, p < .05, R^2 = .05$ ). However, the model predicting teacher-reported behavior problems was not significant.

Social Competence. Concentrated neighborhood disadvantage significantly predicted child self-reported social competence ( $F_{(1,123)} = 3.84, p < .05, R^2 = .03$ ). However, teacher and peer measures of social competence were not significantly predicted by neighborhood concentrated disadvantage.

Social Problems. The model that predicted parent-reported child social problems ( $F_{(1,92)} = 6.74, p = .01, R^2 = .07$ ) was significant. The model was not significant for predicting teacher-reported child social problems.

### *Hypothesis 1b*

It was hypothesized that neighborhood characteristics would be a better predictor of child competence and behavior and social problems, than individual family SES for children living within high levels of concentrated disadvantage. However, it was hypothesized that neighborhood would not contribute additional variance in the prediction of child competence above family-level socioeconomic predictors for those children living within low disadvantaged neighborhoods. First, neighborhoods were dichotomized into high concentrated disadvantage and low concentrated disadvantage using a median split as described in the methods section. A separate hierarchical regression for each neighborhood was completed. Using the enter method, family SES predictors of human capital, financial capital, and human capital were entered in block1



(Model 1). Next, a continuous measure of concentrated neighborhood disadvantage was added to the model in block 2 (Model 2). F-tests and  $R^2$  for each model and betas for each of the predictors are included in Table 8.

Academic Competence. Models predicting child academic competence were not significant for children living in either high or low concentrated neighborhood disadvantage.

Behavioral Competence. The hypothesis was supported in that child-rated behavioral competence was predicted by continuous measures of concentrated disadvantage for children who live in high concentrated neighborhood disadvantage ( $R^2$  change = .09) but not for those in neighborhoods of low concentrated disadvantage ( $R^2$  change = .00). In high concentrated neighborhood disadvantage, only model 2, which included a continuous measure of concentrated neighborhood disadvantage as a predictor, negatively predicted child behavioral competence ( $F_{(4.58)} = 2.92$ ,  $p < .05$ ,  $R^2 = .17$ ), where higher levels of concentrated disadvantage was related to lower behavioral self-competence.

Behavior Problems. Models predicting child behavior problems were not significant for children living in either high or low concentrated neighborhood disadvantage.

Social Competence. Concentrated neighborhood disadvantage was a significant predictor of peer-rated social competence in both the high and low concentrated neighborhood disadvantage. In both groups, model 2 was a better predictor than model one (high concentrated neighborhood disadvantage:  $R^2$  change = .09; low concentrated neighborhood disadvantage  $R^2$  change = .09). However, the relationship between peer-

rated likeability and neighborhood disadvantage was the reverse of what was hypothesized. For both low and high concentrated neighborhood disadvantage, higher levels of concentrated disadvantage were positively related to social competence (high concentrated neighborhood disadvantage  $\beta = .29, p < .05$ ; low concentrated neighborhood disadvantage  $\beta = .32, p < .05$ ), where higher levels of concentrated disadvantage was associated with higher peer likeability ratings.

Social Problems. The hypothesis was also supported in predicting parent-rated social problems; a continuous measure of concentrated neighborhood disadvantage was a significant predictor of social problems for children who live in high concentrated neighborhood disadvantage ( $R^2$  change = .09). In this case, although the overall model was not significant, the individual beta of concentrated neighborhood disadvantage was significant in predicting overall social problems ( $p < .05$ ). In contrast, for the children who lived in low concentrated neighborhood disadvantage, neighborhood disadvantage did not significantly predict social problems above all 3 predictors of family SES alone ( $R^2$  change = .04).

#### *Hypothesis 1c*

It was hypothesized that levels of concentrated neighborhood disadvantage would negatively predict of child competence for school-aged boys, where higher neighborhood concentrated disadvantage would predict lower competence even after controlling for family SES. However, it was predicted that concentrated neighborhood disadvantage would not be a significant predictor of competence for school-aged girls after accounting for family SES. In order to test this hypothesis, hierarchical regressions were run separately by gender, one regression for boys and one for girls. As with hypothesis 1b,

family SES (human capital, financial capital, and human capital) was entered in block1 (Model 1). A continuous measure of concentrated neighborhood disadvantage was added to the model in block 2 (Model 2). F-tests and  $R^2$  for each model are included in Table 10.

Academic Competence. Neighborhood concentrated disadvantage was related to boys' self-reported academic competence; but the direction of the relationship was contrary to prediction. For boys, concentrated neighborhood disadvantage was a significant predictor of academic competence even after accounting for family SES ( $R^2$ change = .19). However, there was a positive relationship between neighborhood disadvantage and academic competence, where increased neighborhood disadvantage predicted higher academic competence ( $\beta = .50, p < .05$ ). For girls, there was no relationship between concentrated neighborhood disadvantage and academic competence ( $\beta = .08, p > .05$ ;  $R^2$ change = .00).

Behavioral Competence. Models predicting child behavioral competence were not significant for either boys or girls.

Behavior Problems. Models predicting child behavioral problems were not significant for boys or girls.

Social Competence. Model 2, which included both concentrated neighborhood disadvantage and family SES, was a significant predictor of peer-rated social competence in girls ( $F_{(4,64)} = 3.15, p < .05$ ;  $R^2$ change = .03). Although no one predictor reached significance, in general higher family SES and higher concentrated disadvantage predicted higher peer rated likeability. For boys, while the model was not significant, social capital as a predictor was peer-rated social competence, where increased family

social capital was related to peer likeability.

Social Problems. Overall, the hypothesis was only supported when predicting teacher rated social problems. The model that included both concentrated neighborhood disadvantage and family SES was a significant predictor of teacher-rated social problems for boys ( $F_{(4,11)} = 3.97, p < .05; R^2\text{change} = .17$ ). Social problems in boys were positively related to increases in concentrated disadvantage in the neighborhoods in which they lived ( $\beta = -.55, p < .05$ ). Concentrated neighborhood disadvantage was not a significant predictor of social problems for girls ( $R^2\text{change} = .12$ ).

## **Hypothesis 2: Parenting, Neighborhoods, and Child Competence**

### *Hypothesis 2a*

It was hypothesized that parenting predictors of child competence would differ based on concentrated neighborhood disadvantage. The original hypothesis included separate predictions for strictness and warmth. However, as discussed above, factor analysis resulted in 3 factors for child and parent report, and the six subscales did not combine into separate dimensions of strictness and warmth. Therefore, hypotheses were revised to reflect this change. It was then hypothesized that parental strictness would predict child behavior competence within neighborhoods of low concentrated disadvantage. And, it was predicted that detachment would be correlated with higher behavioral competence within neighborhoods of high concentrated disadvantage. Finally, it was predicted that parental acceptance would be a predictor of child competence in both neighborhoods.

In order to analyze this hypothesis, children living in neighborhoods of high and low concentrated neighborhood disadvantage were dichotomized and separate regressions

were run for the each of the two groups, one regression for high concentrated neighborhood disadvantage and one for low concentrated neighborhood disadvantage. Using the enter method, child report of parenting behaviors (detachment, acceptance, and strictness) was the predictor for child competence and behavior and social problems. The same regressions (one for high concentrated neighborhood disadvantage and one for low concentrated neighborhood disadvantage) were completed for the parent's report of parenting behaviors as predictors were also completed. Results for all regression models and betas for each predictor are included in Table 11.

Academic Competence. The overall model of child report of parenting predicting child-rated academic competence was significant for children living in both low concentrated neighborhood disadvantage ( $F_{(3,58)} = 3.78, p < .05, R^2 = .17$ ) and high concentrated neighborhood disadvantage ( $F_{(3,59)} = 3.90, p < .05, R^2 = .12$ ). In low concentrated neighborhood disadvantage, child-rated parental detachment was a significant negative predictor of self-rated academic competence ( $\beta = -.30, p < .05$ ), whereas for children living in high concentrated disadvantage, increased acceptance significantly predicted higher competence ( $\beta = .40, p < .01$ ).

Teacher-rated academic competence was also related to child-rated parenting behavior in both high and low concentrated neighborhoods ( $F_{(3,11)} = 9.84, p < .01, R^2 = .73$ ;  $F_{(3,17)} = 3.79, p < .05, R^2 = .40$  respectively). Again, different individual parenting behavior predictors emerged in the different neighborhoods. In low concentrated neighborhood disadvantage, higher child-rated detachment predicted higher levels of teacher-rated academic competence ( $\beta = .50, p < .05$ ). In high concentrated neighborhood disadvantage, higher child-rated acceptance ( $\beta = .63, p < .01$ ) and lower

strictness ( $\beta = -.45$ ,  $p < .05$ ) predicted higher teacher-rated academic competence.

Behavioral Competence. Child-rated parenting behaviors predicted child behavioral competence and behavior problems only for children living in neighborhoods of high concentrated disadvantage. Specifically, child-rated parental acceptance was positively related to self-rated behavioral competence ( $F_{(3,59)} = 2.80$ ,  $p < .05$ ,  $R^2 = .13$ ,  $\beta = .29$ ,  $p < .05$ ).

Behavior Problems. Self-rated parenting behavior was related to child behavior problems in both high ( $F_{(3,45)} = 7.53$ ,  $p < .01$ ,  $R^2 = .33$ ) and low concentrated neighborhood disadvantage ( $F_{(3,40)} = 4.95$ ,  $p < .01$ ,  $R^2 = .27$ ). In both neighborhoods, higher parent-rated strictness predicted more parent-rated externalizing behaviors ( $\beta = .58$ ,  $p < .01$ ;  $\beta = .41$ ,  $p < .01$ , respectively). Parent-rated strictness was also an independent negative predictor of teacher-rated behavioral competence ( $\beta = .72$ ,  $p < .05$ ) and positive predictor of teacher-rated behavior problems ( $\beta = .73$ ,  $p < .05$ ) for children living in high concentrated neighborhood disadvantage.

Models of parenting behavior were also significant for predicting peer-rated child behavior problems in low concentrated disadvantage (CRPBI,  $F_{(3,58)} = 7.89$ ,  $p < .01$ ,  $R^2 = .2$ ; PRBI,  $F_{(3,40)} = 2.89$ ,  $p < .05$ ,  $R^2 = .18$ ). Specifically, low child-reported parental acceptance ( $\beta = -.55$ ,  $p < .01$ ), and higher child and parent-rated strictness ( $\beta = .25$ ,  $p < .05$ ;  $\beta = .33$ ,  $p < .05$ , respectively) predicted higher levels of peer-reported aggressiveness and disruptiveness.

Social Competence. Child-reported parenting behavior predicted self-reported child social competence in both high ( $F_{(3,59)} = 2.86$ ,  $p < .05$ ,  $R^2 = .13$ ) and low concentrated neighborhood disadvantage ( $F_{(3,58)} = 3.54$ ,  $p < .05$ ,  $R^2 = .16$ ). While there

were no significant individual parenting predictors in low concentrated neighborhood disadvantage, higher child-rated parental acceptance predicted higher self-rated social competence in high concentrated neighborhood disadvantage ( $\beta = .27, p < .05$ ).

For teacher-rated social competence, child-rated parent behavior was a significant predictor in high concentrated neighborhood disadvantage ( $F_{(3,11)} = 4.57, p < .05, R^2 = .56$ ), while parent-rated parenting behaviors was a significant predictor in low concentrated neighborhood disadvantage ( $F_{(3,13)} = 4.46, p < .05, R^2 = .51$ ). In high concentrated neighborhood disadvantage, lower strictness predicted higher teacher-rated social competence ( $\beta = -.64, p < .01$ ). In low concentrated neighborhood disadvantage, higher parent detachment ( $\beta = .44, p < .05$ ) and higher acceptance predicted higher teacher-rated social competence ( $\beta = .64, p < .01$ ).

Social Problems. Parent-rated parenting behavior was a significant predictor of parent-rated child social problems in both neighborhoods (High CND,  $F_{(3,45)} = 10.30, p < .01, R^2 = .41$ ; Low CND  $F_{(3,40)} = 6.22, p < .05, R^2 = .32$ ). In both high and low concentrated neighborhood disadvantage, higher detachment (High CND  $\beta = .39, p < .01$ ; Low CND  $\beta = .35, p < .05$ ) and higher strictness (High CND  $\beta = .43, p < .01$ ; Low CND  $\beta = .34, p < .05$ ) significantly predicted more parent-reported social problems. However, child-reported parenting behaviors were only related to parent-reported social problems in high concentrated neighborhood disadvantage ( $F_{(3,45)} = 2.91, p < .05, R^2 = .16$ ).

### *Hypothesis 2b*

It was hypothesized that child gender would moderate both neighborhood effects on child outcomes (competence and pathology) and the effects of parenting behaviors on child outcomes. In order to test this hypothesis, separate linear regressions were

completed for boys and girls, and outcomes were predicted by entering all three parenting behaviors in the model. Differences in parenting behaviors were analyzed using the individual beta weights within the model. Table 12 includes F-tests and  $R^2$  for the models across the whole sample. The table also lists the beta weights for child and parent report of parenting behavior separately.

To examine neighborhood differences by gender, two sets of linear regressions by gender were again run using the above model. Separate sets of models were completed for high concentrated neighborhood disadvantage, one for boys and one for girls, and low concentrated neighborhood disadvantage, again one for boys and one for girls. F-tests and  $R^2$  for high concentrated disadvantage are included in Table 13 and F-tests and  $R^2$  for low concentrated disadvantage are included in Table 14. Because of low power, teacher-rated competence and behavioral and social problems were not included in follow-up analyses by neighborhood.

Academic Competence. For academic competence, parenting behaviors predicted competence only in girls (self-rated,  $F_{(3,65)} = 5.68$ ,  $p < .01$ ,  $R^2 = .21$ ; teacher-rated,  $F_{(3,16)} = 13.87$ ,  $p < .01$ ,  $R^2 = .72$ ), but not for boys. Parent behavior remained a significant predictor only for girls in both high ( $F_{(3,30)} = 4.01$ ,  $p < .05$ ,  $R^2 = .29$ ) and low concentrated neighborhood disadvantage ( $F_{(3,32)} = 4.01$ ,  $p < .05$ ,  $R^2 = .28$ ). However, in high concentrated neighborhood disadvantage, high parental acceptance significantly predicted higher academic competence in girls ( $\beta = .61$ ,  $p < .01$ ), while in low concentrated neighborhood disadvantage lower parental detachment significantly predicted higher academic competence in girls ( $\beta = -.41$ ,  $p < .05$ ).

Behavioral Competence. Similar to academic competence, parenting behaviors



were also significant predictors for girls' behavioral competence (self-rated,  $F_{(3,65)} = 2.92$ ,  $p < .05$ ,  $R^2 = .12$ ; teacher-rated,  $F_{(3,16)} = 3.29$ ,  $p < .05$ ,  $R^2 = .38$ ), but not for boys' behavioral competence. In the follow-up analyses, parenting behaviors only predicted behavioral competence for girls in high concentrated neighborhood disadvantage ( $F_{(3,30)} = 2.87$ ,  $p < .05$ ,  $R^2 = .22$ ), but not for girls living in low concentrated neighborhood disadvantage. Specifically, higher parental acceptance significantly predicted higher behavioral competence for girls living in high concentrated neighborhood disadvantage ( $\beta = .53$ ,  $p < .01$ ). Parenting behavior remained unrelated to boys' behavioral competence in both neighborhoods.

Behavior Problems. Behavioral problems were predicted by self-reported parental behaviors for both boys and girls (boys:  $F_{(3,35)} = 11.95$ ,  $p < .01$ ,  $R^2 = .51$ ; girls:  $F_{(3,50)} = 5.03$ ,  $p < .01$ ,  $R^2 = .23$ ). For girls, higher self-reported parent detachment and higher strictness predicted increased parent-reported behavior problems ( $\beta = .26$ ,  $p < .05$ ;  $\beta = .39$ ,  $p < .01$ , respectively). For boys, increased parent self-reported strictness predicted increased parent-reported behavior problems ( $\beta = .71$ ,  $p < .01$ ), and increased child-reported parent detachment predicted higher parent-reported behavior problems in boys ( $\beta = .44$ ,  $p < .01$ ). For both boys and girls, lower child-rated parent acceptance predicted peer-rated aggressiveness (boys:  $\beta = .41$ ,  $p < .01$ ; girls:  $\beta = .28$ ,  $p < .05$ ).

When examining parenting behaviors within high concentrated neighborhood disadvantage, the relationship between parent behavior and child behavior problems was only significant for boys. Both child and parent rated parenting behaviors predicted boys' behavior problems ( $F_{(3,16)} = 6.17$ ,  $p < .01$ ,  $R^2 = .54$ ;  $F_{(3,16)} = 4.73$ ,  $p < .05$ ,  $R^2 = .47$ ). Higher child-rated detachment ( $\beta = .73$ ,  $p < .01$ ) and higher parent-rated strictness ( $\beta =$

.66,  $p < .01$ ) predicted higher behavioral problems in boys living in high concentrated neighborhood disadvantage.

Within low concentrated neighborhood disadvantage, lower parent-rated acceptance ( $\beta = -.39$ ,  $p < .05$ ), and higher parent-rated strictness ( $\beta = .71$ ,  $p < .01$ ) significantly predicted higher parent-rated behavioral problems for boys, while lower child-rated acceptance ( $\beta = -.51$ ,  $p < .05$ ) predicted higher parent-reported behavioral problems in girls. Also within low concentrated neighborhood disadvantage, lower child-rated parental acceptance was significantly correlated with higher peer-reported aggressiveness in both boys ( $\beta = -.72$ ,  $p < .01$ ) and girls ( $\beta = -.46$ ,  $p < .05$ ).

Social Competence. When the outcome was social competence, low child-reported parent detachment ( $\beta = -.25$ ,  $p < .05$ ) and higher parent-reported acceptance ( $\beta = .35$ ,  $p < .05$ ) predicted higher self-rated social competence for boys, whereas lower parent detachment predicted higher teacher-rated social competence ( $\beta = -.58$ ,  $p < .05$ ) for girls. When examined separately by neighborhoods, only parental acceptance predicted social competence for girls living in high concentrated neighborhood disadvantage and for boys living in low concentrated neighborhood disadvantage.

Social Problems. Lastly, parent behavior, as reported by the parents themselves, significantly predicted parent-reported social problems for boys ( $F_{(3,35)} = 10.21$ ,  $p < .01$ ,  $R^2 = .47$ ) and girls ( $F_{(3,50)} = 8.01$ ,  $p < .01$ ,  $R^2 = .33$ ). In both cases, increased parental detachment (boys:  $\beta = .31$ ,  $p < .05$ ; girls:  $\beta = .44$ ,  $p < .01$ ) and parental strictness (boys:  $\beta = .54$ ,  $p < .01$ ; girls:  $\beta = .32$ ,  $p < .01$ ) predicted increased social problems. When separated by neighborhood, only parental detachment predicted girls' social problems (high:  $\beta = .47$ ,  $p < .01$ ; low:  $\beta = .80$ ,  $p < .01$ ) while only parental strictness predicted

boy's social problems (high:  $\beta = .42$ ,  $p < .05$ ; low:  $\beta = .48$ ,  $p < .05$ ) in both high and low concentrated neighborhood disadvantage.

### **Hypothesis 3: Ethnicity**

It was hypothesized that racial/ethnic differences in child outcomes would be better accounted for by differences in concentrated neighborhood disadvantage rather than parenting behaviors. First, main effects for racial differences were tested using a series of one-way ANOVAs comparing child outcomes for African American children vs. non-African American children, Caucasian children vs. non-Caucasian children, and Caucasian children vs. African American children. Means for child outcomes and parenting behavior are listed by race/ethnicity and appear in Table 15.

#### *Main effects*

Child Outcomes. The only child outcomes that differed by race were child self-rated academic and social competence. African American children rated themselves as more academically competent than non-African American children ( $F = 7.20$ ,  $p < .01$ ) and Caucasian children ( $F = 4.84$ ,  $p < .05$ ). African American children also rated themselves as more socially competent than non-African American children ( $F = 6.66$ ,  $p = .01$ ).

Parenting Behavior. African American children rated their parents as demonstrating more detachment behaviors as compared with non-African American children ( $F = 3.87$ ,  $p = .05$ ). Parents of Caucasian children rated themselves as demonstrating more strictness compared with parents of African American children ( $F = 6.97$ ,  $p = .01$ ) and non-Caucasian children ( $F = 5.44$ ,  $p < .05$ ).

#### *GLM*

Significant differences in competence by racial groups were tested using univariate general linear model (GLM), with race entered as a factor, and related parenting behaviors and a continuous measure of concentrated neighborhood disadvantage were entered covariates.

Academic Competence. Differences between African American and non-African American children for academic competence were compared using GLM, with child-rated parent detachment and concentrated neighborhood disadvantage as covariates. Overall, only parenting detachment remained significant in accounting for increased academic competence in African American children ( $F = 6.53, p = .01$ ), with race no longer significant ( $F = 2.42, p = .12$ ). However, concentrated neighborhood disadvantage was also not significant ( $F = .41, p = .62$ ).

Social Competence. Differences between African American and non-African American children for social competence were compared using GLM, with child-rated parent detachment and concentrated neighborhood disadvantage as covariates. When examining social competence, again, parenting detachment was significant ( $F = 8.73, p < .01$ ), and differences between African American children and non-African American children were no longer significant ( $F = 2.31, p = .12$ ). As with academic competence, concentrated neighborhood disadvantage was also not significant ( $F = .11, p = .74$ ).

### **Follow up analysis**

Initially hypothesis 3 as written included the assumption that there would be significant differences in child competence based on child ethnicity. However, there were only differences in children's self-report of academic and social competence. Further, differences in parenting behaviors based on child ethnicity were in the opposite

direction as would be hypothesized by the child differences. Specifically, parents of African American children were rated as more detached than parents of non-African American children, while African American children rated themselves as more competent than non-African American children. The direction of these two main effects are inconsistent with the findings from Hypothesis 2, which would predict that either having more detached parents would predict less competent children or more competent children would be predicted by having less detached parents. Therefore, additional analyses were performed in order to further explore the relationship between child competence, parenting behaviors, and ethnicity.

Neighborhood Disadvantage and Ethnicity. Two separate linear regressions were completed, one for African American children and one for non-African American children, with concentrated neighborhood disadvantage as the only predictor. Neither child-reported academic nor social competence was significantly predicted by neighborhood concentrated disadvantage for African American or non-African American children.

Neighborhood Disadvantage, Family SES, and Ethnicity. Hierarchical regressions were run separately by ethnicity: one regression for African American children and one for non-African American children. As with hypothesis 1b, family SES (human capital, financial capital, and human capital) was entered in block1 (Model 1). Concentrated neighborhood disadvantage was added to the model in block 2 (Model 2). Again, models predicting child-rated academic and social competence were not significant for African American or non-African American children.

Neighborhood Disadvantage, Parenting, and Ethnicity. African American and

non-African American children were dichotomized and separate regressions were run for the each of the two groups, one regression for African American children and one for non-African American children. Using the enter method, child report of parenting behaviors (detachment, acceptance, and strictness) was the predictor for child competence. The same regressions (one for African American and one for non-African American children) were completed for the parent's report of parenting behaviors as predictors were also completed.

Academic Competence. The overall model of child report of parenting predicting child-rated academic competence was significant for African American children ( $F_{(3,63)} = 3.57, p < .05, R^2 = .15$ ) but not non-African American children ( $F_{(3,47)} = 2.36, p > .05, R^2 = .10$ ). For African American children, child-rated parental acceptance was a significant predictor of self-rated academic competence ( $\beta = .35, p < .01$ ).

Social Competence. Child-reported parenting behavior predicted self-reported child social competence in both African American ( $F_{(3,63)} = 2.92, p < .05, R^2 = .12$ ) and non African-American children ( $F_{(3,47)} = 3.73, p < .05, R^2 = .12$ ). For African American children, higher parental acceptance predicted higher social competence ( $\beta = .31, p < .01$ ); whereas lower parental withdrawal predicted higher social competence in non-African American children ( $\beta = -.35, p < .01$ ).

## DISCUSSION

The results of this study supported the significance of neighborhood effects on child competence. Across all hypotheses, a large number of analyses were run; yet there were a higher percentage of significant results than would be allowed by alpha levels alone. In particular, 11.6% of the analyses were below a .05 alpha level, and 5.2% were less than a .01 alpha level.

As for specific results, child outcomes were predicted by concentrated neighborhood disadvantage, and concentrated neighborhood disadvantage was a stronger predictor than family SES of child outcome. However, the specific hypotheses proposed received mixed support. For example, the direction of the relationship between concentrated neighborhood disadvantage and self-rated child competence was not as hypothesized for academic and social competence, such that increased neighborhood disadvantage predicted increased child self-rated competence.

As predicted, parenting behavior predicted child competence differently depending on neighborhood disadvantage. Specifically, in high concentrated neighborhood disadvantage, greater parental acceptance predicted higher competence. In low concentrated neighborhood disadvantage, lower parental detachment predicted higher competence, and low acceptance predicted increased behavioral problems.

When analyses were performed separately for boys and girls, hypotheses for gender were mostly supported; overall, boys' competence was predicted by concentrated neighborhood disadvantage even above family-level SES. On the other hand, neighborhood disadvantage did not significantly predict girls' competence when accounting for family-level SES. However, girls' competence was predicted by

parenting behaviors, and parenting behaviors predicted girls' competence differently based on neighborhood disadvantage. Lastly, race/ethnic differences were not as hypothesized. Overall, African American children demonstrated significantly higher social and academic competence compared with non-African American children, which was not accounted for by differences in concentrated neighborhood disadvantage.

Overall, the current study found that neighborhood context did predict individual outcomes in elementary-school aged children, both competence and pathology. Importantly, neighborhood disadvantage significantly predicted childhood behavior disorders and also predicted childhood competence; the first study to do this. Directly supporting Social Disorganization Theory, concentrated neighborhood disadvantage was a significant predictor of child outcome even after controlling for family SES. The results of the current study complimented prior findings and added to the overall understanding of the functioning of children living in concentrated neighborhood disadvantage. These findings could be directly applied to designing interventions to diminish the effect of neighborhood disadvantage. For example, encouraging positive parent-child affective relationships could be one way of fostering child competence within neighborhoods of concentrated disadvantage. Overall, this study provided support for the theory that neighborhoods are important contexts for development and influence child development above and beyond the family social and economic context alone.

### **Neighborhood and Child Competence**

In the context of social disorganization theory, concentrated neighborhood disadvantage results in the breakdown of social networks and a decrease in opportunities within these neighborhoods (aka social disorganization). It is this social disorganization



which in turn predicts individual outcomes. Social Disorganization Theory also proposes that neighborhood context is an even better predictor of individual outcomes than individual- and family- level poverty and SES. Social disorganization theory has primarily been used to predict negative individual outcomes. In the current study, concentrated neighborhood disadvantage, which was used as a proxy for social disorganization, did predict increased child behavior disorders above and beyond family-level SES.

There was also a relationship between a continuous measure of concentrated neighborhood disadvantage and child competence. However, the direction of the effect was the opposite of the hypothesis, such that higher concentrated disadvantage predicted higher self-rated social and academic competence. One explanation for the seemingly surprising findings is that there is an unmeasured factor between child competence and neighborhood disadvantage that would serve as a protective factor for some children and increase competence. For example, the unmeasured factor could be a positive effect of having a social network of peers that are similar in ethnic and social background.

While the current findings were opposite of what was originally predicted, they are consistent with at least some prior studies in this area. Kupersmidt and colleagues (1999) found that while higher concentrated neighborhood disadvantage predicted lower social satisfaction, social competence was not affected. Further, the current study found that higher family SES within high concentrated neighborhood disadvantage predicts higher social competence.

Therefore, another possible explanation for the present findings could be a result of more competent children being included in the study rather than a random sample of

the children in the neighborhoods. Specifically, participation in the study was dependent on the children remembering to bring forms home and to return them to the school by the study deadline. For most of the classrooms, participation was below 50%. It was likely that only the most academically and socially responsible children were able to complete the registration requirement. Subsequently, when the children were asked to rate their own level of competence, children in higher levels of neighborhood disadvantage may view themselves as more competent in comparison to their peers and thus rated themselves accordingly. In contrast, those in lower neighborhood disadvantage may not view themselves as differing from their non-participating peers and as a result rated themselves as having average competence. In other words, it could be that in neighborhoods of higher concentrated disadvantage the difference between competent and non-competent is more salient. In neighborhoods of lower concentrated disadvantage, where competence was the expected norm, the difference between competent and less competent was less significant.

This phenomenon is best described by the Simpson's Paradox (Blyth, 1972; Wagner, 1982). This theory describes a situation where a negative relationship in the population is found to be a positive relationship within a particular sample because of a related, unmeasured variable. In this study, this variable would be the child's responsibility level in relationship to peers within the classroom. Comparing this sample of participating children with peers in their classroom was not possible for this study. Obtaining classroom statistics for the participating schools was not permitted by the Milwaukee Public School's office of research.

When the sample was dichotomized into high and low concentrated neighborhood disadvantage, the main effect (i.e. the relationship between increased concentrated neighborhood disadvantage and increased child competence) was no longer significant. When neighborhoods were analyzed separately, concentrated neighborhood disadvantage predicted higher behavioral and social problems for those children living in high concentrated neighborhood disadvantage. Concentrated neighborhood disadvantage was not related to behavioral problems or social problems for those children living in low concentrated neighborhood disadvantage. Academic and social competence both were not predicted by concentrated neighborhood disadvantage for either type of neighborhood, despite that it was a significant predictor when all neighborhoods were analyzed together.

One explanation for why both academic and social competence were significantly predicted by concentrated neighborhood disadvantage, when evaluating all neighborhoods and not when neighborhoods were dichotomized, is simply that effects may be too small when the sample is divided. However, another explanation could be that the relationship between neighborhood disadvantage and competence is continuous in nature and only significant when evaluating the full spectrum of disadvantage. Alternatively, disadvantage continued to significantly predict problems in children who lived in high concentrated neighborhood disadvantage, but not for those who lived in low concentrated neighborhood disadvantage. This may suggest that there was a critical level of neighborhood disadvantage that predicted childhood problems. While prior studies have suggested that there is a critical level of concentrated disadvantage that is a “tipping-point” for predicting problems, no study has directly tested this. Therefore, the

current finding that there is a difference between continuous and categorical measures of concentrated disadvantage provides additional support that there are qualitative differences in inner-city neighborhoods depending on degree of disadvantage.

Another notable result for both continuous and categorical analysis is that behavioral competence is not predicted by neighborhood disadvantage at all. Overall, testing childhood behavioral competence provided unique challenges. While child behavior *disorders* are possibly the most widely studied outcome in school-aged children and the most frequently examined outcome in relation to concentrated neighborhood disadvantage, behavioral competence has not been clearly defined. This study had the benefit of having child ratings of self-competence. However, the additional peer, teacher, and parent ratings of behavioral competence were defined only by the absence of negative behavior. Therefore, the reason for the lack of a relationship between behavioral competence and concentrated neighborhood disadvantage could be that the concept of behavioral competence remains poorly defined.

On the other hand, an alternate possibility is that only behavioral problems, and not competence, are related to concentrated neighborhood disadvantage. Previous studies found that children in low income, high-risk neighborhoods are more likely to have increased behavioral problems such as aggressiveness, misconduct, and even criminal behavior (e.g. Dorsey & Forehand, 2003; Shumow, Vandell, and Posner, 1998). This study found similar results; when measured continuously, higher concentrated neighborhood disadvantage predicted higher parent-rated social and behavioral problems. Even though parents rated children as having more behavioral and social problems, children's competence may be unrelated to these increased problems. In higher

concentrated disadvantage neighborhoods, competence and problem behavior may not be contingent on one another. For example, when considering the child's behavior, a parent may acknowledge that he/she interrupts others, but does not view the behavior as antithetical to his/her competence.

When results were analyzed separately by gender, concentrated neighborhood disadvantage positively predicted academic competence in boys, such that higher concentrated neighborhood disadvantage predicted higher academic competence. Concentrated neighborhood disadvantage did not predict self-rated competence in girls; however, the positive relationship between concentrated neighborhood disadvantage and social competence continued to be significant for boys. Gender differences may be due to the way boys and girls are allowed to interact with the community. Boys may spend more time out in their neighborhoods, while girls may spend more time close to home. In other words, the results may not be a true gender difference; rather neighborhood and child outcome is moderated by time in the community rather by gender, *per se*.

In addition, it may be that in neighborhoods of concentrated disadvantage, with a high rate of single-parent homes, boys are more affected by the lack of male role-models and support systems. Therefore there are fewer adults in the neighborhood to provide supervision and guidance. Specifically, in single-parent homes, it has been suggested that the mother-daughter relationship is strengthened (Simons et al, 1996). These girls may spend more time with their mothers and helping with siblings; as a result girls are more affected by family factors than they are by the surrounding neighborhood.

In one of the only studies to separately examine gender and competence within neighborhood disadvantage, Luthar & Cushing (1999) found that increased neighborhood

disadvantage predicted increased behavior problems in boys. The results of the current study found the opposite, that higher neighborhood disadvantage predicted higher academic competence in boys. This opposite effect could be consistent with the findings in studies such as Kling, Liebman, and Katz (2007).

In “Moving to Opportunity” studies (such as Kling, Liebman, and Katz, 2007) parents and children who are given government vouchers to move from disadvantaged neighborhoods to less disadvantaged neighborhoods were examined before and after their move. In a study of child mental health and academic competence, outcomes improved only for girls who moved to a better neighborhood, while boys did worse than prior to the move (Kling, Liebman, & Katz). The authors theorized that boys who are performing similar to peers in the disadvantaged neighborhoods have higher self-esteem, yet when they move to neighborhoods with higher expectations, they perceive themselves as less competent. This was only true for boys. Girls, on the other hand, benefited from increased peer competence and increased expectations. In the current study, it is possible that boys in high concentrated disadvantage could be similar to the boys in the Kling, Liebman, & Katz group prior to the move. Further, it could also be that boys benefit more from being with peers similar to themselves, while this is not as critical for girls’ self-ratings of competence.

### **Parenting, Neighborhood, and Child Competence**

Overall, in high concentrated neighborhood disadvantage, parental acceptance led to increased academic, behavioral, and social competence. In low concentrated neighborhood disadvantage, parenting behavior did not necessarily predict child competence; rather there was a connection between parenting and behavior problems,

where lower parental acceptance led to more problems. This was somewhat different than was originally hypothesized, where increased parental acceptance was hypothesized to be related to increased competence. In contrast, in this study it was only true for children in high concentrated neighborhood disadvantage. One reason for this difference could be that in high concentrated neighborhood disadvantage, there likely were enough environmental stresses that predicted child problems, making the environment hard to overcome in order to develop competence. However, in this environment, adding parental acceptance was an important protective factor and led to increased competence. Whereas, in low concentrated neighborhood disadvantage, it was expected that the natural outcome for children was to develop competence. In this case, normal development was only interrupted by negative parental behaviors.

Overall, this supports the assertion of Social Disorganization Theory that it is the disrupted social relationships in high concentrated disadvantage neighborhoods that predict negative outcomes, rather than the disadvantage itself. In this case, it was the positive child-parent affective relationship that predicted increased competence in high concentrated disadvantage. Theory would predict that high disadvantage would cause a disruption in social and family networks; therefore, the children whose parents who did not demonstrate a decrease in acceptance behaviors developed increased competence than would normally be predicted by the neighborhood context alone.

Although this study did not directly examine parenting behaviors as a mediator of neighborhood disadvantage, results provide additional evidence for a differential relationship between parenting and neighborhood similar to Gorman-Smith, Tolan, & Henry (2000). In their study, they found that family cohesion predicted adolescent

delinquency rates differently based on neighborhood: living with a low cohesive family was a better predictor of whether an adolescent was more likely to participate in criminal behavior when the family lived in concentrated neighborhood disadvantage than when the family lived in non-concentrated disadvantaged neighborhoods.

Again, when analyses were conducted separately for girls and boys, gender hypotheses were supported. Concentrated neighborhood disadvantage significantly predicted competence in boys, while parenting behaviors significantly predicted competence in girls. On closer examination, different parenting behaviors predicted competence for girls living in differential levels of concentrated neighborhood disadvantage. Higher parental affection predicted girls' increased competence in high concentrated neighborhood disadvantage, while higher parental detachment predicted girl's decreased competence in low concentrated neighborhood disadvantage. This suggests that concentrated neighborhood disadvantage's effect on girls' competence was moderated by parenting.

Overall, children in late elementary school are increasingly exposed to the disorganization in neighborhoods of concentrated disadvantage; subsequently their development is increasingly impacted by neighborhoods. Because children at this age continue to be largely influenced by their family context, even if neighborhood did not directly predict child competence, child competence would differ based on neighborhood disadvantage as moderated by parenting. Prior studies of gender differences and parenting suggested that parenting behavior, neighborhoods and gender would result in a three-way interaction, where parenting would predict different outcomes based on gender and based on neighborhood (Beyers, Bates, Pettit & Dodge, 2003). For example, parents





may be less strict with boys than they are with girls. Within low concentrated disadvantage, lower parental strictness would predict higher competence, yet within high concentrated disadvantage, it was hypothesized that lower levels of strictness would predict lower competence. However, this was not fully supported as only a two-way interaction was found between parenting and gender, such that parenting only predicted competence within girls, but not for boys. Therefore, differences in competence for boys between different levels of neighborhood disadvantage were not accounted for by parenting behaviors. For girls, parenting behaviors in general predicted competence above and beyond neighborhood disadvantage; however, specific parenting behaviors did differ between levels of disadvantage.

### **Ethnicity**

While there were some differences in child competence based on child ethnicity, the hypotheses for ethnic differences were not supported. First, the direction of the main effects of ethnicity on child competence was the opposite of the original hypothesis. African American children rated themselves as more competent than their non-African American peers. On the other hand, parents of African American children rated themselves as being more detached than parents of non-African Americans. It was hypothesized that ethnic differences would be better attributed to neighborhood of residence; however, this was not supported. Rather, parenting behaviors predicted ethnic differences in competence outcomes.

In follow up analyses, parenting behavior did predict child academic and social competence. In this case, child-rating of increased parental acceptance predicted increased competence in African American children but not for non-African American

children. For social competence, child-rating of parental increased acceptance again predicted increased competence in African American children while decreased withdrawal predicted increased competence in non-African American children. These results are similar to the differences found for high concentrated neighborhood disadvantage and low concentrated neighborhood disadvantage. Therefore, there is a possibility that due to the large concentration of African Americans in concentrated neighborhood disadvantage, that interaction between parenting, neighborhood, and ethnicity as examined in the current study could be within-ethnic differences.

It could be that there are cultural differences that lead to the findings of competence outcomes. For example, parental acceptance could be a significant predictor for child competence because of increased cultural emphasis on the importance of family influence in African American families. Li, Nussbaum, & Richards (2007) found that family support and self-confidence were the most important predictors of resilience for African American children. This relationship between family and resilience was even more significant for African American children living in neighborhood disadvantage.

Further, a study by Connell, Spencer, & Aber (1994) found that African American children's perception of parental involvement affected their own perceived competence and further engagement in academic tasks. This relationship was circular in that child engagement in academics increased parental involvement. While these results are similar to studies that use white, middle class samples, the authors note that the difference between competent and non-competent adolescents in their sample highlight the increased relevance for initial expectations of the African American children. They hypothesize that within disadvantaged and high-risk contexts, children who are perceived

as more involved in academics and positive social groups gain even more attention and involvement from parents, further supporting their own competence. Therefore, for African American children and children living in high concentrated disadvantage, extra parental involvement may be particularly salient as a defining difference between competent and non-competent children.

### **Limitations**

The primary drawback of the study was low recruitment rate within each of the schools. While there were no significant differences in participation for high concentrated neighborhood disadvantage schools and low concentrated neighborhood disadvantage schools, low participation may have affected the data for high and low concentrated neighborhood disadvantage differently. Overall, low participation could make it more likely that the children that did participate are more competent than their peers, resulting in a selection bias. The procedure for obtaining consent relied on the child bringing home consent forms and remembering to bring forms back. Despite incentives to remember to return forms, signed or not, many children in all neighborhoods did not. As mentioned earlier, the difference between competent and not competent may be more significant in high concentrated neighborhood disadvantage than in low concentrated disadvantaged neighborhoods.

Another limitation of the current study was low cross-rater reliability. Parent reported parent behaviors were highly correlated with parent-reported child behavioral and social problems. However, child self-reported competence was more reliable with teacher ratings, not with parent ratings. Teacher ratings could have been a key test of this

difference between parent and child. Unfortunately, low teacher response rate did not provide adequate power to examine this further.

Lastly, recruiting through the Milwaukee schools was difficult due to the history of school choice and extensive bussing within the city. Although the current study used neighborhood schools, it is likely that children whose homes were in high disadvantaged neighborhoods could be attending school in low disadvantaged areas. This study only considered their neighborhood of residence, and did not look at where children attended school.

## **Conclusions**

This is the first known study examining childhood competence within the context of concentrated neighborhood disadvantage. In doing so, this study also had methodological strengths, such as using multiple reporters of child competence and parenting behaviors, and measuring multiple dimensions of child competence. Prior studies of neighborhood disadvantage and development almost solely examined adolescent outcomes. These studies showed that neighborhood disadvantage significantly impacted individual outcomes. However, expanding the current literature by examining middle childhood competence was important for several reasons. During late elementary school, children experience a large number of cognitive and social changes. Successfully reaching these milestones predicts later social and academic function in their high school years and beyond (Roeser, Eccles, & Freedman-Doan, 2000). Therefore, this study is a first step in understanding how neighborhood disadvantage affects children during this important developmental stage.

In addition, this study expanded the model of the effect of concentrated neighborhood disadvantage on child development by also examining the effects of parenting behaviors. A major drawback to traditional neighborhood research was the relatively little progress in developing models of neighborhood influence on individual development (Roosa, Jones, Tein, & Cree, 2003). Social Disorganization Theory (Wilson, 1987) remains the primary theoretical model for how concentrated neighborhood disadvantage leads to a breakdown of social organization. It is this low level of organization and its effects on members of the community that are proposed to explain the effects of neighborhood influence on individuals. This study proposed that parenting behaviors would predict child behavior based on neighborhood of residence. Adding parenting to the model of neighborhood effects on competence in middle childhood expanded Social Disorganization Theory to apply to children younger than studied in prior neighborhood literature. Overall it provides a framework for further study of how neighborhood effects social networks, families, and elementary school children.

The focus on childhood resilience as an outcome was unique within the current literature. This study provided the first framework for looking at positive behavior with concentrated neighborhood disadvantage. There are very few studies of the structure of competence within minority groups. The correlation between competence factors has been found in studies of at-risk children as well, such as children living in poverty (McLoyd, 1998) or children of teen-aged mothers (Bates, Luster, & Vandenbelt, 2003). However, it has been hypothesized that there was high cultural variability in what constitutes competence (e.g. Rose-Krasnor, 1997), and further, that living within

concentrated neighborhood disadvantage was significantly different than living in poverty alone. Prior to this study, there were no studies of how children's self-perception was affected by neighborhood. By examining competence, this study can provide a focus on a greater spectrum of strengths and weaknesses of children living within concentrated neighborhood disadvantage. Applying a resilience perspective implied an effort to investigate strengths of at-risk groups (Luthar & Cicchetti, 2000) and thereby providing a natural goal for prevention-intervention strategies to alleviate neighborhood risk's impact on children.

Thus, this study was an important first step in examining concentrated neighborhood disadvantage and parenting behaviors differential affect on child competence outcomes. Not only is there direct academic benefit to both neighborhood disadvantage and child development fields by examining individual outcomes within the context of social wide phenomenon, the results of this study provide significant implications for public policy, such as school choice, neighborhood level resource investment, and city planning.

For example, this study could provide support for community school initiatives. In Milwaukee, as in many other places, school choice programs have been gaining a large amount of attention. However, something that school choice programs do not consider is the importance of the neighborhood of residence, rather than just the location of the children's school of attendance. This study demonstrated the importance of the neighborhood of residence in children's functioning; therefore any program that does not also provide for improvements to the child's home neighborhood would be ignoring an important contributor to child development.

Knowing the importance of neighborhoods lends support for various social policies, urban planning, and broader sociological interventions for communities at risk. For example, programs elevating the social isolation of concentrated disadvantage, supporting small business investment in disadvantaged neighborhoods, and promoting home ownership may not only reduce crime and individual poverty, it may promote competence in children early in their school years.

### **Future Studies**

Given the demonstrated importance of concentrated neighborhood disadvantage, it is critical to continue to examine the influence of community on individual outcomes in children and their families. Future studies using school-based samples should focus on recruitment from entire classrooms rather than relying on self-initiative which may lead to a biased sample, or alternatively, randomly select participants from the community. In addition, a range of measures of competences should be included to better assess the separate areas of academic competence, positive behaviors, and social skills. As this study has shown, parenting is a key moderator of neighborhood for girls. However, the fact that parenting did not moderate neighborhood effects for boys could be a result of the parenting variables examined. For example, parenting supervision practices, which was not examined, differing by gender could be reason that the boys were allowed to interact more with their environment. Follow-up studies of parental perceptions of gender differences in concentrated neighborhood disadvantage could provide insight into the relationship between gender and parenting behaviors. Finally, mediating factors such as individual perceptions of community and involvement in their community should be



examined in future studies as potential moderators of the effect of concentrated neighborhood disadvantage and individual outcomes.

## **APPENDICES**

## **Appendix A**

### **Economic characteristics of the city of Milwaukee**

Wisconsin's largest city, Milwaukee, is ranked as the 35<sup>th</sup> urban area in the United States (O'Hare & Mather, 2003). Regrettably, it is ranked 7<sup>th</sup> in the United States for largest percent of children living in poverty. Of the children living in Milwaukee, one-third lived below the poverty level in 1999 and 16.2% are living in neighborhoods with classified as severe disadvantage (O'Hare & Mather).

### **Census level indicators of neighborhood disadvantage for the city of Milwaukee**

Concentrated disadvantage. In the city of Milwaukee, 28.6 % of the population was age 18 or younger. 36.9 % of the residents were African American. 21.3% of individuals 18 years or older and 25.7% of families with children under 18 live below the poverty line. 4.6% of residents received their primary source of income through public assistance. Female headed households represent 53.4% of families with children under 18 years. Six percent of individuals in the city are unemployed.

Immigrant concentration. 12.0% of Milwaukee's residents are Hispanic, and 7.7% are foreign-born.

Residential stability. 49.0% of residents were living in same house in 2000 as they were residing in 5 years previously (1995). 45.3% of Milwaukee's households were residing in owner-occupied homes.

## APPENDIX B

### Items for Parenting Behavior Factor Scores

#### **Factor 1 'Detachment' – CRPBI**

My mother soon forgets a rule she has made  
My mother punishes me for doing something one day, but ignores it the next.  
My mother will not talk to me when I displease her.<sup>a</sup>  
My mother is less friendly with me if I do not see things her way.  
My mother avoids looking at me when I have disappointed her.  
My mother sometimes allows me to do things that she says are wrong.  
My mother is always getting after me.<sup>a</sup>  
It depends upon my mother's mood whether or not a rule is enforced.  
My mother stops talking to me if I have hurt her feelings until I please her again.  
My mother will not have anything to do with me when I have upset her until I find a way to make up.<sup>a</sup>  
My mother almost always complains about what I do.<sup>a</sup>  
My mother only keeps rules when it suits her.<sup>a</sup>  
My mother gets cold and distant for a while and will not say anything when she disapproves of what I have done.  
My mother often blows her top when I bother her.  
My mother wants to control whatever I do.<sup>a</sup>  
My mother acts as though I am in the way.  
My mother insists that I follow a rule one day and then she forgets about it the next.  
My mother changes her mind about rules to make things easier for herself.<sup>a</sup>  
My mother bothers me until I do what she wants me to do.

#### **Factor 1 'Detachment' – PRPBI**

I do not insist that my child does his/her homework.<sup>b</sup>  
I soon forget a rule I have made  
I punish my child for doing something one day, but ignore it the next.  
I am less friendly with my child if he/she does not see things my way.  
I think my child's ideas are silly.<sup>b</sup>  
I avoid looking at my child when he/she has disappointed me.  
I often forget to help my child when he/she needs it.<sup>b</sup>  
I sometimes allow my child to do things that I say is wrong.  
I seldom insist that my child do anything.<sup>b</sup>  
It depends upon my mood whether or not a rule is enforced.  
I stop talking to my child if he/she has hurt my feelings until he/she pleases me again.  
I do not bother to enforce rules with my child.<sup>b</sup>  
I get cold and distant for a while and will not say anything when I disapprove of what my child has done.  
I often blow my top when my child bothers me.  
I frequently change the rules my child is supposed to follow.<sup>b</sup>  
I don't seem to know what my child needs or wants.<sup>b</sup>  
I act as though my child is in the way.

I let my child get away without doing work he/she has been told to do.<sup>b</sup>  
I insist that my child follows a rule one day and then I forget about it the next.  
I speak to my child in a cold matter of fact voice when he/she upsets me.<sup>b</sup>  
I bother my child until he/she does what I want him/her to do.

**Factor 2 'Acceptance' – CRPBI**

My mother tries to make me feel better after talking over my worries with me.  
My mother seems to see my good points more than my faults.<sup>a</sup>  
My mother tries to speak to me in a warm and friendly voice.  
My mother understands my problems and worries.  
My mother is able to make me feel better when I am upset.  
My mother cheers me up when I am sad.  
My mother tries to find ways to show me that she loves me.  
My mother and I have a good time at home together.  
My mother praises me when I have done well.<sup>a</sup>  
My mother likes me as I am.

**Factor 2 'Acceptance' – PRPBI**

I try to make my child feel better after talking over his/her worries with him/her.  
I try to speak to my child in a warm and friendly voice.  
I understand my child's problems and worries.  
I am able to make my child feel better when he/she is upset.  
I cheer my child up when he/she is sad.  
I try to find ways to show my child that I love him/her.  
My child and I have a good time at home together.  
I like my child as he/she is.

**Factor 3 'Strictness' – CRPBI**

My mother is strict with me.  
My mother does not insist that I do my homework.<sup>a</sup> (reverse scored)  
My mother is telling me how I should behave.  
My mother keeps reminding me about things I am not allowed to do.  
My mother reminds me about the things I do wrong.  
My mother punishes me when I do not obey.  
My mother demands that I do exactly what she tells me.  
My mother almost always punishes me in some way when I am bad.

**Factor 3 'Strictness' – PRPBI**

I am strict with my child.  
I tell my child how he/she should behave.  
I keep reminding my child about things he/she is not allowed to do.  
I remind my child about the things he/she does wrong.  
I punish my child when he/she does not obey.  
I am always getting after my child.<sup>b</sup>  
I demand that my child does exactly what I tell him/her.  
I almost always punish my child in some way when he/she is bad.

I want to control whatever my child does.<sup>b</sup>

<sup>a</sup> Not on PRPBI Factor

<sup>b</sup> Not on CRPBI Factor

Table 1: Demographics

<b>Continuous Variables</b>	<b>N</b>	<b>Range</b>	<b>Mean (SD)</b>
Child Age (years)	98	8 – 11	9.43 (.63)
Parent Age (years)	40	26 – 60	36.20 (7.68)
Parent Education (years)	90	4 – 16	12.11 (2.14)
Number of People in Household	85	1 – 10	4.80 (1.70)
Time at Current Residence (years)	83	.08 – 33.0	4.52 (5.51)
<b>Categorical Variables</b>	<b>N</b>	<b>Percent</b>	
Child Ethnicity	112		
-Caucasian-Non Hispanic		14.3	
-African American		58.9	
-Hispanic		12.5	
-Asian American		4.5	
-Native American		1.8	
-Mixed Race/Other		8.1	
Child Sex – Male	125	42.1	
Parent Rater – Biological Mother	88	87.5	
Parent Ethnicity	76		
-Caucasian-Non Hispanic		21.1	
-African American		65.8	
-Hispanic		6.6	
-Asian American		3.0	
-Native American		0.0	
-Mixed Race/Other		1.3	
Marital Status	90		
-Single (never married)		55.6	
-Married		26.7	
-Separated		5.6	
-Divorced		10.0	
-Widow/widower		2.2	
Income Level (per year)	84		
-<\$5,000		22.6	
-\$5,000-\$9,999		15.5	
-\$10,000-\$14,999		8.3	
-\$15,000-\$19,999		8.3	
-\$20,000-\$29,999		14.3	
-\$30,000-\$39,999		10.7	
-\$40,000-\$49,999		6.0	
-\$50,000-\$74,999		11.9	
-\$75,000-\$99,999		2.4	
->\$100,000		0	

Table 1 (cont'd).

Parent Employment Status	90	
-Not Employed		37.8
-Part-Time		14.4
-Full-Time		47.8
Social Capital	91	
-No Biological Parents in home		4.4
-1 Biological Parent, no partner		51.6
-1 Biological Parent, partner (not married)		11.0
-1 Biological Parent, Step-parent		8.8
-2 Biological Parents in home		24.2



Table 2: Neighborhood Characteristics

	National Average 2000 Census	City of Milwaukee	In Sample	Low Concentrated Disadvantage	High Concentrated Disadvantage
Percent White	75.1	45.39	39.7 (30.6)	66.16 (19.85)	13.67 (10.01)
Percent Black	12.3	36.92	49.4 (33.8)	19.35 (18.38)	78.91 (12.79)
Percent Under 18	25.7	28.64	29.9 (9.5)	22.09 (5.80)	37.53 (5.27)
Percent Single Parent	24.09	53.04	57.1 (16.9)	44.14 (13.91)	69.92 (7.00)
Percent Unemployment	5.72	9.39	10.5 (6.1)	6.20 (2.46)	14.71 (5.64)
Average Income	\$41,994	\$40,875	\$38,613 (6725.42)	\$41,820 (6323.78)	\$35,456 (5541.31)
Percent Below Poverty	9.2	21.35	21.7 (12.3)	13.67 (7.61)	29.52 (10.94)
Concentrated Disadvantage Index (SS)	N/A	.00 (.92)	.24 (.83)	-.46 (.39)	.94 (.48)

Table 3: Academic Competence Cross-Rater Correlations

	1.	2.
1.Child Self – School Competence	1	
2. Teacher – School Competence	.64**	1
Mean (SD)	17.10 (4.26)	9.12 (2.09)
Range in Sample	6 -24	4-12

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

Table 4: Behavior Competence Cross-Rater Correlations

	1.	2.	3.	4.	5.
1. Parent – Externalizing Behavior	1				
2. Teacher – Externalizing Behavior	.42*	1			
3. Teacher – Behavioral Competence	-.27	-.85**	1		
4. Child Self – Behavioral Competence	-.32**	-.25	.35*	1	
5. Peer – Aggressive/Disruptive	.05	.45**	-.47**	-.12	1
Mean (SD)	10.42 (8.79)	4.92 (7.37)	9.98 (2.44)	17.33 (4.43)	1.50 (2.42)
Range in Sample	0-43	0-31	3-12	8-24	0-14.3

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

Table 5: Social Competence Cross-Rater Correlations

	1.	2.	3.	4.	5.
1. Child Self – Social Competence	1				
2. Peer – Sociability	.06	1			
3. Parent – Social Problems	-.24*	-.16	1		
4. Teacher – Social Problems	.11	-.33	.03	1	
5. Teacher – Sociability	.22	.38*	-.29	-.62**	1
Mean (SD)	17.10 (4.26)	2.33 (2.87)	3.76 (3.29)	1.09 (1.54)	9.71 (2.18)
Range in Sample	8-24	0-14.0	0-16	0-5	6-12

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

### Table 6: Parenting Behaviors Inter-rater Reliability

[illegible]

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

Table 7: Hypothesis 1 a – Regression Predictor = Concentrated Disadvantage

	<b>F</b>	<b>R<sup>2</sup></b>	<b>β</b>
<b>Academic Competence</b>			
Child	$F_{(1,123)} = 4.00^*$	.03	.18*
Teacher	$F_{(1,34)} = .02$	.00	-.03
<b>Behavioral Competence</b>			
Child	$F_{(1,123)} = 1.94$	.00	-.03
Teacher	$F_{(1,34)} = 1.80$	.05	-.22
<b>Behavior Problems</b>			
Parent	$F_{(1,91)} = 4.66^*$	.05	.22*
Teacher	$F_{(1,34)} = 2.98$	.08	.28
Peer	$F_{(1,123)} = .28$	.00	.05
<b>Social Competence</b>			
Child	$F_{(1,123)} = 3.83^*$	.03	.17*
Peer	$F_{(1,123)} = .14$	.00	.03
Teacher	$F_{(1,34)} = .01$	.00	.03
<b>Social Problems</b>			
Parent	$F_{(1,91)} = 6.74^{**}$	.07	.26**
Teacher	$F_{(1,34)} = 2.58$	.07	.27

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

Table 8: Hypothesis 1 B – High and Low Concentrated Neighborhood Disadvantage

Academic Competence		F	F	R <sup>2</sup>	R <sup>2</sup>	Predictor	β	β
Child Rating	Model 1	LOW	HIGH	LOW	HIGH		LOW	HIGH
		F <sub>(3,58)</sub> = 2.12	F <sub>(3,59)</sub> = .72	.10	.04	Social Capital	.06	-.01
Teacher Rating	Model 2	F <sub>(4,57)</sub> = 1.66	F <sub>(4,58)</sub> = .91	.10	.06	Financial Capital	.24	.15
	Model 1	F <sub>(3,17)</sub> = .15	F <sub>(3,11)</sub> = .39	.03	.10	Human Capital	.08	.05
Behavioral Competence	Model 2	F <sub>(4,16)</sub> = .21	F <sub>(4,10)</sub> = .30	.05	.11	Concentrated Disadvantage	1.50	1.04
							-.02	-.07
Child Rating	Model 1	LOW	HIGH	LOW	HIGH		LOW	HIGH
		F <sub>(3,58)</sub> = 2.59	F <sub>(3,59)</sub> = 1.65	.12	.08	Social Capital	.22	.23
Teacher Rating	Model 2	F <sub>(4,57)</sub> = 1.96	F <sub>(4,58)</sub> = 2.92*	.12	.17	Financial Capital	.15	-.07
	Model 1	F <sub>(3,17)</sub> = .97	F <sub>(3,11)</sub> = .18	.15	.05	Human Capital	.06	-.18
Behavior Problems	Model 2	F <sub>(4,16)</sub> = .69	F <sub>(4,10)</sub> = .18	.15	.07	Concentrated Disadvantage	.05	-.30
							.52	.02
Parent Rating	Model 1	LOW	HIGH	LOW	HIGH		LOW	HIGH
		F <sub>(3,40)</sub> = 1.35	F <sub>(3,45)</sub> = 1.10	.09	.07	Social Capital	-.05	-.27
Model 2		F <sub>(4,39)</sub> = 1.00	F <sub>(4,44)</sub> = .83	.09	.07	Financial Capital	-.28	.04
						Human Capital	.01	-.01
						Concentrated Disadvantage	.03	-.04

Teacher Rating	Model 1	F <sub>(3,17)</sub> = 1.50		F <sub>(3,11)</sub> = .27		.21	.07	Social Capital		-.55	-.14				
								Financial Capital	Human Capital						
Peer Rating	Model 2	F <sub>(4,16)</sub> = 1.07		F <sub>(4,10)</sub> = .21		.21	.08	Concentrated Disadvantage		.05	-.10				
	Model 1	F <sub>(3,58)</sub> = .89		F <sub>(3,59)</sub> = .74				.04	.04			Social Capital	Financial Capital		
	Model 2	F <sub>(4,57)</sub> = .66		F <sub>(4,58)</sub> = .65				.04	.04			Human Capital	Concentrated Disadvantage	-.24	-.20
Social Competence															
Child Rating	Model 1	F <sub>(3,58)</sub> = 1.80		F <sub>(3,59)</sub> = .68		.09	.03	Predictor		β	LOW	HIGH			
	Model 2	F <sub>(4,57)</sub> = 1.56		F <sub>(4,58)</sub> = .58				.10	.04				Concentrated Disadvantage	.12	-.07
	Model 1	F <sub>(3,58)</sub> = 2.28		F <sub>(3,59)</sub> = 1.76									.11		
Peer Rating	Model 2	F <sub>(4,57)</sub> = 3.64**		F <sub>(4,58)</sub> = 2.91*		.20	.17	Human Capital		-.03	.15				
	Model 1	F <sub>(3,17)</sub> = .149		F <sub>(3,11)</sub> = .55				.21	.13			Social Capital	Financial Capital	.42	.07
	Model 2	F <sub>(4,16)</sub> = 1.65		F <sub>(4,10)</sub> = .48				.29	.16			Human Capital	Concentrated Disadvantage	-.35	.30
Teacher Rating	Model 1	F <sub>(3,17)</sub> = .149		F <sub>(3,11)</sub> = .55		.21	.13	Concentrated Disadvantage		.32**	.29*				
	Model 2	F <sub>(4,57)</sub> = 3.64**		F <sub>(4,58)</sub> = 2.91*				.20	.17			Social Capital	Financial Capital	.42	.07
	Model 1	F <sub>(3,17)</sub> = .149		F <sub>(3,11)</sub> = .55				.21	.13			Human Capital	Concentrated Disadvantage	-.35	.30
Teacher Rating	Model 2	F <sub>(4,57)</sub> = 3.64**		F <sub>(4,58)</sub> = 2.91*		.20	.17	Concentrated Disadvantage		.32**	.29*				
	Model 1	F <sub>(3,17)</sub> = .149		F <sub>(3,11)</sub> = .55				.21	.13			Social Capital	Financial Capital	.42	.07
	Model 2	F <sub>(4,57)</sub> = 3.64**		F <sub>(4,58)</sub> = 2.91*				.20	.17			Human Capital	Concentrated Disadvantage	-.35	.30



Table 8 (cont'd).

Social Problems		F		R <sup>2</sup>		Predictor	$\beta$	
		LOW	HIGH	HIGH	HIGH		LOW	HIGH
<b>Parent Rating</b>	Model 1	$F_{(3,40)} = 1.51$	$F_{(3,45)} = .76$	.10	.05	Social Capital	.04	-.21
						Financial Capital	-.35	.16
						Human Capital	.04	-.06
	Model 2	$F_{(4,39)} = 1.66$	$F_{(4,44)} = 1.71$	.15	.14	Concentrated Disadvantage	.23	.30*
<b>Teacher Rating</b>	Model 1	$F_{(3,17)} = 6.31^{**}$	$F_{(3,11)} = .47$	.53	.11	Social Capital	-.83**	-.21
						Financial Capital	.19	-.20
						Human Capital	.36	-.19
	Model 2	$F_{(4,16)} = 5.35^{**}$	$F_{(4,10)} = .37$	.57	.13	Concentrated Disadvantage	-.24	.13

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

Table 9: Main Effects – Gender

	Boys Mean (SD)	Girls Mean (SD)	p
<b>N</b>	<b>56</b>	<b>69</b>	
<b>Academic Competence</b>			
Child Rating	16.70 (4.28)	17.08 (4.44)	ns
Teacher Rating	8.18 (2.35)	10.00 (3.76)	ns
<b>Behavioral Competence</b>			
Child Rating	16.38 (4.18)	17.95 (4.26)	.04
Teacher Rating	8.94 (3.04)	10.25 (2.51)	ns
<b>Behavioral Problems</b>			
Parent Rating	11.07 (10.01)	9.84 (7.82)	ns
Teacher Rating	7.40 (8.28)	4.65 (7.43)	ns
Peer Rating	1.77 (2.77)	1.23 (2.09)	ns
<b>Social Competence</b>			
Child Rating	16.28 (4.58)	17.22 (4.88)	ns
Teacher Rating	8.68 (2.47)	9.95 (2.01)	ns
Peer Rating	1.93 (2.07)	2.61 (3.36)	ns
<b>Social Problems</b>			
Parent Rating	3.31 (3.15)	4.02 (3.31)	ns
Teacher Rating	1.81 (1.76)	.95 (1.39)	ns
<b>Parent Behaviors</b>			
CRPBI Detachment	30.24 (19.16)	23.32 (19.32)	.04
CRPBI Acceptance	33.16 (8.50)	32.92 (9.14)	ns
CRPBI Strictness	22.52 (6.70)	21.17 (6.80)	ns
PRPBI Detachment	15.63 (14.91)	15.10 (12.89)	ns
PRPBI Acceptance	26.08 (5.19)	25.69 (7.05)	ns
PRPBI Strictness	18.94 (8.10)	19.79 (7.59)	ns

Table 10: Hypothesis 1c – Gender

Academic Competence		F	F	R <sup>2</sup>	R <sup>2</sup>	Predictor	$\beta$	$\beta$
Child Rating	Model 1	F <sub>(3,52)</sub> = .76	F <sub>(3,65)</sub> = .85	.04	.04	Social Capital	.02	-.09
						Financial Capital	.07	.15
						Human Capital	.15	.10
	Model 2	F <sub>(4,51)</sub> = 3.81**	F <sub>(4,64)</sub> = .73	.23	.04	Concentrated Disadvantage	.50**	.08
Teacher Rating	Model 1	F <sub>(3,12)</sub> = .42	F <sub>(3,16)</sub> = .33	.09	.06	Social Capital	-.28	.07
						Financial Capital	.00	.03
						Human Capital	.16	-.27
	Model 2	F <sub>(4,11)</sub> = 1.31	F <sub>(4,15)</sub> = .71	.32	.16	Concentrated Disadvantage	.63	-.38
Behavioral Competence		F	F	R <sup>2</sup>	R <sup>2</sup>	Predictor	$\beta$	$\beta$
Child Rating	Model 1	F <sub>(3,52)</sub> = .66	F <sub>(3,65)</sub> = 1.19	.03	.05	Social Capital	.17	.20
						Financial Capital	-.03	.05
						Human Capital	.08	-.08
	Model 2	F <sub>(4,51)</sub> = .45	F <sub>(4,64)</sub> = .93	.03	.06	Concentrated Disadvantage	-.00	.05
Teacher Rating	Model 1	F <sub>(3,12)</sub> = .78	F <sub>(3,16)</sub> = 1.33	.16	.20	Social Capital	.46	-.06
						Financial Capital	-.27	.24
						Human Capital	-.05	.32
	Model 2	F <sub>(4,11)</sub> = .59	F <sub>(4,15)</sub> = 1.08	.18	.22	Concentrated Disadvantage	-.16	-.18
Behavior Problems		F	F	R <sup>2</sup>	R <sup>2</sup>	Predictor	$\beta$	$\beta$
Parent Rating	Model 1	F <sub>(3,35)</sub> = 1.87	F <sub>(3,50)</sub> = .90	.14	.05	Social Capital	-.29	-.14
						Financial Capital	-.13	-.14
						Human Capital	-.02	.07
	Model 2	F <sub>(4,34)</sub> = 1.87	F <sub>(4,49)</sub> = .67	.18	.05	Concentrated Disadvantage	.24	.03

Table 10 (cont'd).

<b>Teacher Rating</b>	<b>Model 1</b>	<b>F<sub>(3,12)</sub> = .73</b>	<b>F<sub>(3,16)</sub> = .30</b>	<b>.16</b>	<b>.05</b>	<b>Social Capital</b>	<b>-.25</b>	<b>-.04</b>
						Financial Capital	.04	-.14
						Human Capital	.23	-.09
	<b>Model 2</b>	<b>F<sub>(4,11)</sub> = .50</b>	<b>F<sub>(4,15)</sub> = .78</b>	<b>.16</b>	<b>.17</b>	<b>Concentrated Disadvantage</b>	<b>.02</b>	<b>.41</b>
<b>Peer Rating</b>	<b>Model 1</b>	<b>F<sub>(3,52)</sub> = 2.24</b>	<b>F<sub>(3,65)</sub> = .12</b>	<b>.12</b>	<b>.01</b>	<b>Social Capital</b>	<b>-.09</b>	<b>-.03</b>
						Financial Capital	.12	.09
						Human Capital	-.37*	-.06
	<b>Model 2</b>	<b>F<sub>(4,51)</sub> = 1.87</b>	<b>F<sub>(4,64)</sub> = .10</b>	<b>.13</b>	<b>.01</b>	<b>Concentrated Disadvantage</b>	<b>.13</b>	<b>-.03</b>
<b>Social Competence</b>		<b>F</b>		<b>R<sup>2</sup></b>		<b>Predictor</b>	<b>β</b>	
		<b>Boys</b>	<b>Girls</b>	<b>Boys</b>	<b>Girls</b>		<b>Boys</b>	<b>Girls</b>
<b>Child Rating</b>	<b>Model 1</b>	<b>F<sub>(3,52)</sub> = .81</b>	<b>F<sub>(3,65)</sub> = .97</b>	<b>.05</b>	<b>.04</b>	<b>Social Capital</b>	<b>-.19</b>	<b>.10</b>
						Financial Capital	.12	.09
						Human Capital	.12	.09
	<b>Model 2</b>	<b>F<sub>(4,51)</sub> = 1.07</b>	<b>F<sub>(4,64)</sub> = 1.61</b>	<b>.08</b>	<b>.09</b>	<b>Concentrated Disadvantage</b>	<b>.21</b>	<b>.24</b>
<b>Peer Rating</b>	<b>Model 1</b>	<b>F<sub>(352)</sub> = 2.05</b>	<b>F<sub>(3,65)</sub> = 3.34*</b>	<b>.11</b>	<b>.13</b>	<b>Social Capital</b>	<b>.36*</b>	<b>.13</b>
						Financial Capital	-.12	.28
						Human Capital	.06	.02
	<b>Model 2</b>	<b>F<sub>(4,51)</sub> = 1.61</b>	<b>F<sub>(4,64)</sub> = 3.15*</b>	<b>.11</b>	<b>.16</b>	<b>Concentrated Disadvantage</b>	<b>.09</b>	<b>.19</b>
<b>Teacher Rating</b>	<b>Model 1</b>	<b>F<sub>(3,12)</sub> = .64</b>	<b>F<sub>(3,16)</sub> = 1.44</b>	<b>.14</b>	<b>.21</b>	<b>Social Capital</b>	<b>.05</b>	<b>.27</b>
						Financial Capital	.19	.15
						Human Capital	-.42	.12
	<b>Model 2</b>	<b>F<sub>(4,11)</sub> = 1.18</b>	<b>F<sub>(4,15)</sub> = 1.06</b>	<b>.30</b>	<b>.22</b>	<b>Concentrated Disadvantage</b>	<b>.53</b>	<b>-.10</b>

Table 10 (cont'd).

Social Problems		F		R <sup>2</sup>		Predictor	$\beta$	
		Boys	Girls	Boys	Girls		Boys	Girls
<b>Parent Rating</b>	Model 1	F <sub>(3,35)</sub> = 1.11	F <sub>(3,50)</sub> = .42	.09	.03	Social Capital	-.19	-.11
						Financial Capital	-.11	-.08
						Human Capital	-.07	.03
	Model 2	F <sub>(4,34)</sub> = 1.42	F <sub>(4,49)</sub> = .58	.14	.05	Concentrated Disadvantage	.28	.15
<b>Teacher Rating</b>	Model 1	F <sub>(3,12)</sub> = 2.87	F <sub>(3,32)</sub> = 1.85	.42	.26	Social Capital	-.60*	-.31
						Financial Capital	.04	-.28
						Human Capital	.35	.08
	Model 2	F <sub>(4,11)</sub> = 3.97*	F <sub>(4,31)</sub> = 2.32	.59	.38	Concentrated Disadvantage	-.55*	.42

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

Table 11: Hypothesis 2a – Neighborhood and Parenting

Academic Competence		F		R <sup>2</sup>		Predictor	β	
Child Rating	CRPB	LOW F <sub>(3,58)</sub> = 3.78*	HIGH F <sub>(3,59)</sub> = 3.90**	LOW .17	HIGH .12		LOW -.30*	HIGH -.05
						CRPBI Detachment	.16	.40**
						CRPBI Acceptance	.07	-.01
	PRPB	F <sub>(3,40)</sub> = .53	F <sub>(3,45)</sub> = .74	.04	.05	CRPBI Strictness	.05	-.02
						PRPBI Detachment	.18	.25
						PRPBI Acceptance	.07	-.13
						PRPBI Strictness		
Teacher Rating								
	CRPB	F <sub>(3,17)</sub> = 3.79*	F <sub>(3,11)</sub> = 9.84**	.40	.73	CRPBI Detachment	.50*	-.03
						CRPBI Acceptance	.10	.63**
						CRPBI Strictness	-.113	-.45*
	PRPB	F <sub>(3,13)</sub> = .32	F <sub>(3,9)</sub> = .63	.07	.17	PRPBI Detachment	-.09	.32
						PRPBI Acceptance	.23	.02
						PRPBI Strictness	-.12	-.42
Behavioral Competence								
Child Rating	CRPB	LOW F <sub>(3,58)</sub> = 2.41	HIGH F <sub>(3,59)</sub> = 2.80*	LOW .11	HIGH .13	Predictor	LOW -.19	HIGH -.17
						CRPBI Detachment	.23	.29*
						CRPBI Acceptance	-.05	-.06
	PRPB	F <sub>(3,40)</sub> = .15	F <sub>(3,45)</sub> = 1.97	.01	.12	CRPBI Strictness	-.06	-.20
						PRPBI Detachment	.01	.20
						PRPBI Acceptance	-.07	-.27
						PRPBI Strictness		
Teacher Rating								
	CRPB	F <sub>(3,17)</sub> = 1.01	F <sub>(3,11)</sub> = 1.37	.15	.27	CRPBI Detachment	-.34	-.07
						CRPBI Acceptance	.01	.12
						CRPBI Strictness	.09	-.48

Table 11 (cont'd).

	PRPB	F <sub>(3,13)</sub> = .36	F <sub>(3,9)</sub> = 3.01	.08	.50	PRPBI Detachment	.18	.54
						PRPBI Acceptance	.16	.03
						PRPBI Strictness	.13	-.72*
Behavior Problems		F	F	R <sup>2</sup>	R <sup>2</sup>	Predictor	β	β
		LOW	HIGH	LOW	HIGH		LOW	HIGH
Parent Rating	CRPB	F <sub>(3,40)</sub> = 1.53	F <sub>(3,45)</sub> = 5.07**	.10	.25	CRPBI Detachment	-.05	.50**
						CRPBI Acceptance	-.34*	-.05
						CRPBI Strictness	.00	.19
	PRPB	F <sub>(3,40)</sub> = 4.95**	F <sub>(3,45)</sub> = 7.53**	.27	.33	PRPBI Detachment	.13	.19
						PRPBI Acceptance	-.27	-.19
						PRPBI Strictness	.41**	.58**
Teacher Rating	CRPB	F <sub>(3,17)</sub> = .33	F <sub>(3,11)</sub> = 1.83	.06	.33	CRPBI Detachment	.09	.36
						CRPBI Acceptance	.10	.08
						CRPBI Strictness	-.18	.53
	PRPB	F <sub>(3,13)</sub> = .78	F <sub>(3,9)</sub> = 2.63	.15	.47	PRPBI Detachment	-.29	-.43
						PRPBI Acceptance	-.13	-.04
						PRPBI Strictness	-.22	.73*
Peer Rating	CRPB	F <sub>(3,58)</sub> = 7.89**	F <sub>(3,59)</sub> = .87	.29	.04	CRPBI Detachment	-.14	-.01
						CRPBI Acceptance	-.55**	-.09
						CRPBI Strictness	.25*	.20
	PRPB	F <sub>(3,40)</sub> = 2.89*	F <sub>(3,45)</sub> = 1.05	.18	.07	PRPBI Detachment	.00	-.06
						PRPBI Acceptance	-.30	.18
						PRPBI Strictness	.33*	.10

Table 11 (cont'd).

Social Competence		F		R <sup>2</sup>		Predictor	β	
		LOW	HIGH	LOW	HIGH		LOW	HIGH
Child Rating	CRPB	F <sub>(3,58)</sub> = 3.54*	F <sub>(3,59)</sub> = 2.86*	.16	.13	CRPBI Detachment	-.25	-.19
						CRPBI Acceptance	.24	.27*
						CRPBI Strictness	-.02	-.14
	PRPB	F <sub>(3,40)</sub> = 1.87	F <sub>(3,45)</sub> = 1.39	.12	.09	PRPBI Detachment	.26	-.16
						PRPBI Acceptance	.30	.20
						PRPBI Strictness	.09	-.23
Peer Rating	CRPB	F <sub>(3,58)</sub> = 1.18	F <sub>(3,59)</sub> = .92	.06	.04	CRPBI Detachment	-.18	-.20
						CRPBI Acceptance	.04	.05
						CRPBI Strictness	.11	-.00
	PRPB	F <sub>(3,40)</sub> = .95	F <sub>(3,45)</sub> = .32	.07	.02	PRPBI Detachment	-.16	-.11
						PRPBI Acceptance	-.08	-.10
						PRPBI Strictness	.24	.14
Teacher Rating	CRPB	F <sub>(3,17)</sub> = 1.66	F <sub>(3,11)</sub> = 4.57*	.23	.56	CRPBI Detachment	-.47	-.33
						CRPBI Acceptance	-.08	.16
						CRPBI Strictness	.01	-.64**
	PRPB	F <sub>(3,13)</sub> = 4.46*	F <sub>(3,9)</sub> = 3.60	.51	.55	PRPBI Detachment	.44*	.53
						PRPBI Acceptance	.64**	-.14
						PRPBI Strictness	.06	-.67*
Social Problems		F		R <sup>2</sup>		Predictor	β	
		LOW	HIGH	LOW	HIGH		LOW	HIGH
Parent Rating	CRPB	F <sub>(3,40)</sub> = .91	F <sub>(3,45)</sub> = 2.91*	.06	.16	CRPBI Detachment	-.26	.33*
						CRPBI Acceptance	-.18	-.23
						CRPBI Strictness	.05	.17



Table 11 (cont'd).

	PRPB	$F_{(3,40)} = 6.22^{**}$	$F_{(3,45)} = 10.30^{**}$	.32	.41	PRPBI Detachment	.35*	.39**
						PRPBI Acceptance	-.16	.02
						PRPBI Strictness	.34*	.43**
<b>Teacher Rating</b>	CRPB	$F_{(3,17)} = 1.25$	$F_{(3,11)} = 1.84$	.18	.34	CRPBI Detachment	-.09	.28
						CRPBI Acceptance	.20	.05
						CRPBI Strictness	-.45	.57*
	PRPB	$F_{(3,13)} = 2.09$	$F_{(3,9)} = 2.88$	.33	.49	PRPBI Detachment	-.22	-.48
						PRPBI Acceptance	-.42	-.01
						PRPBI Strictness	-.27	.72*

Table 12: Hypothesis 2b – Parenting by Child Gender (all neighborhoods)

Academic Competence		F		R <sup>2</sup>		Predictor		$\beta$	
Child Rating	CRPB	Boys	Girls	Boys	Girls			Boys	Girls
		$F_{(3,53)} = 1.00$	$F_{(3,65)} = 5.68^{**}$	.06	.21			-.12	-.23
								.18	.34**
								.07	-.04
	PRPB	$F_{(3,35)} = .87$	$F_{(3,50)} = .51$	.07	.03			-.04	.05
								.21	.12
								.12	.08
Teacher Rating									
	CRPB	$F_{(3,12)} = .45$	$F_{(3,16)} = 13.87^{**}$	.10	.72			.09	.53**
								.20	.35*
								-.19	.53**
Behavioral Competence		F		R <sup>2</sup>		Predictor		$\beta$	
Child Rating	CRPB	Boys	Girls	Boys	Girls			Boys	Girls
		$F_{(3,52)} = 2.28$	$F_{(3,65)} = 2.92^*$	.12	.12			-.23	-.07
								.19	.31*
								-.10	.02
	PRPB	$F_{(3,35)} = .65$	$F_{(3,50)} = .72$	.05	.04			-.07	-.18
								.01	-.02
								-.14	-.07
Teacher Rating									
	CRPB	$F_{(3,12)} = 2.23$	$F_{(3,16)} = 3.29^*$	.36	.38			.15	-.56*
								.47	-.19
								-.28	.14

Table 12 (cont'd).

Behavior Problems		F		R <sup>2</sup>		Predictor		$\beta$	
		Boys	Girls	Boys	Girls			Boys	Girls
Parent Rating	CRPB	$F_{(3,35)} = 2.81^*$	$F_{(3,50)} = 1.15$	.19	.06	CRPBI Detachment		.44**	.05
						CRPBI Acceptance		.02	-.26
						CRPBI Strictness		.11	.08
	PRPB	$F_{(3,35)} = 11.95^{**}$	$F_{(3,50)} = 5.03^{**}$	.51	.23	PRPBI Detachment		.06	.26*
						PRPB Acceptance		-.20	-.13
						PRPBI Strictness		.71**	.39**
Teacher Rating	CRPB	$F_{(3,12)} = 2.33$	$F_{(3,16)} = 1.04$	.37	.16	CRPBI Detachment		.25	.23
						CRPBI Acceptance		-.50	.28
						CRPBI Strictness		.14	.23
Peer Rating	CRPB	$F_{(3,52)} = 4.20^{**}$	$F_{(3,65)} = 2.21$	.20	.09	CRPBI Detachment		-.01	-.15
						CRPBI Acceptance		-.41**	-.28*
						CRPBI Strictness		.14	.24
	PRPB	$F_{(3,35)} = 2.12$	$F_{(3,50)} = 1.32$	.15	.07	PRPBI Detachment		-.01	-.10
						PRPBI Acceptance		.17	-.27
						PRPBI Strictness		.32	.23
Social Competence		F		R <sup>2</sup>		Predictor		$\beta$	
		Boys	Girls	Boys	Girls			Boys	Girls
Child Rating	CRPB	$F_{(3,52)} = 3.47^*$	$F_{(3,65)} = 2.48$	.17	.10	CRPBI Detachment		-.25*	-.17
						CRPBI Acceptance		.24	.23
						CRPBI Strictness		-.12	-.01
PRPB		$F_{(3,35)} = 2.07$	$F_{(3,50)} = .56$	.15	.03	PRPBI Detachment		.27	-.16
						PRPBI Acceptance		.35*	.03
						PRPBI Strictness		-.13	.08

Table 12 (cont'd).

<b>Peer Rating</b>	CRPB	$F_{(3,52)} = 2.17$	$F_{(3,65)} = .59$	.11	.03	CRPBI Detachment	-.26	-.12
						CRPBI Acceptance	.13	.01
						CRPBI Strictness	.14	.07
	PRPB	$F_{(3,35)} = .38$	$F_{(3,50)} = 1.26$	.03	.07	PRPBI Detachment	.04	-.20
						PRPBI Acceptance	.02	-.14
						PRPBI Strictness	-.19	.24
<b>Teacher Rating</b>	CRPB	$F_{(3,12)} = 1.04$	$F_{(3,16)} = 2.38$	.20	.31	CRPBI Detachment	-.28	-.58*
						CRPBI Acceptance	.19	-.00
						CRPBI Strictness	-.34	-.22
<b>Social Problems</b>		<b>F</b>	<b>F</b>	<b>R<sup>2</sup></b>	<b>R<sup>2</sup></b>	<b>Predictor</b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>
<b>Parent Rating</b>	CRPB	$F_{(3,35)} = 1.08$	$F_{(3,50)} = 1.43$	.09	.08	CRPBI Detachment	.24	-.12
						CRPBI Acceptance	.12	-.33*
						CRPBI Strictness	.17	.11
	PRPB	$F_{(3,35)} = 10.21^{**}$	$F_{(3,50)} = 8.01^{**}$	.47	.33	PRPBI Detachment	.31*	.44**
						PRPBI Acceptance	-.13	.01
						PRPBI Strictness	.54**	.32**
<b>Teacher Rating</b>	CRPB	$F_{(3,12)} = .25$	$F_{(3,16)} = .39$	.06	.07	CRPBI Detachment	.01	.20
						CRPBI Acceptance	-.24	.18
						CRPBI Strictness	-.03	.05

Table 13: Hypothesis 2b – High Concentrated Neighborhood Disadvantage

Academic Competence		F	R <sup>2</sup>	Predictor	β	β
Child Rating	CRPB	F <sub>(3,25)</sub> = 1.14	F <sub>(3,30)</sub> = 4.01*	CRPBI Detachment	.15	.03
				CRPBI Acceptance	.30	.61**
	PRPB	F <sub>(3,16)</sub> = .42	F <sub>(3,25)</sub> = .55	CRPBI Strictness	.15	-.24
				PRPBI Detachment	.05	-.06
				PRPBI Acceptance	.28	.29
				PRPBI Strictness	.00	-.22
Behavioral Competence		F	R <sup>2</sup>	Predictor	β	β
Child Rating	CRPB	F <sub>(3,25)</sub> = .64	F <sub>(3,30)</sub> = 2.87*	CRPBI Detachment	-.25	-.03
				CRPBI Acceptance	.09	.53**
	PRPB	F <sub>(3,16)</sub> = 1.12	F <sub>(3,25)</sub> = 1.51	CRPBI Strictness	.01	-.19
				PRPBI Detachment	.10	-.33
				PRPBI Acceptance	.37	.15
				PRPBI Strictness	-.40	-.20
Behavior Problems		F	R <sup>2</sup>	Predictor	β	β
Parent Rating	CRPB	F <sub>(3,16)</sub> = 6.17**	F <sub>(3,25)</sub> = 1.52	CRPBI Detachment	.73**	.25
				CRPBI Acceptance	-.15	-.23
	PRPB	F <sub>(3,16)</sub> = 4.73*	F <sub>(3,25)</sub> = 2.58	CRPBI Strictness	-.02	.42
				PRPBI Detachment	.13	.26
				PRPBI Acceptance	-.14	-.14
				PRPBI Strictness	.66**	.45

Table 13 (cont'd).

<b>Peer Rating</b>	<b>CRPB</b>	<b>F</b> $F_{(3,25)} = .53$	<b>F</b> $F_{(3,30)} = .89$	<b>R<sup>2</sup></b> .06	<b>R<sup>2</sup></b> .08	<b>Predictor</b>	<b>Boys</b> .01	<b>Girls</b> -.12
						CRPB Detachment		
						CRPB Acceptance	-.19	.10
						CRPB Strictness	.12	.17
	<b>PRPB</b>	<b>F</b> $F_{(3,16)} = 1.87$	<b>F</b> $F_{(3,25)} = 1.15$	<b>R<sup>2</sup></b> .26	<b>R<sup>2</sup></b> .12	PRPB Detachment	.05	-.20
						PRPB Acceptance	.32	.30
						PRPB Strictness	.30	-.29
<b>Social Competence</b>		<b>F</b> <b>Boys</b>	<b>F</b> <b>Girls</b>	<b>R<sup>2</sup></b> <b>Boys</b>	<b>R<sup>2</sup></b> <b>Girls</b>	<b>Predictor</b>	<b>Boys</b> $\beta$	<b>Girls</b> $\beta$
<b>Child Rating</b>	<b>CRPB</b>	<b>F</b> $F_{(3,25)} = .92$	<b>F</b> $F_{(3,30)} = 1.82$	<b>R<sup>2</sup></b> .10	<b>R<sup>2</sup></b> .15	CRPB Detachment	-.22	-.13
						CRPB Acceptance	.19	.39*
						CRPB Strictness	-.07	-.24
	<b>PRPB</b>	<b>F</b> $F_{(3,16)} = .37$	<b>F</b> $F_{(3,25)} = 1.90$	<b>R<sup>2</sup></b> .07	<b>R<sup>2</sup></b> .19	PRPB Detachment	.17	-.33
						PRPB Acceptance	.22	.27
						PRPB Strictness	-.25	-.27
<b>Peer Rating</b>	<b>CRPB</b>	<b>F</b> $F_{(3,25)} = 2.05$	<b>F</b> $F_{(3,30)} = .50$	<b>R<sup>2</sup></b> .20	<b>R<sup>2</sup></b> .05	CRPB Detachment	-.27	-.18
						CRPB Acceptance	.19	.08
						CRPB Strictness	.34	-.15
	<b>PRPB</b>	<b>F</b> $F_{(3,16)} = .36$	<b>F</b> $F_{(3,25)} = .74$	<b>R<sup>2</sup></b> .06	<b>R<sup>2</sup></b> .08	PRPB Detachment	-.07	-.11
						PRPB Acceptance	.15	-.27
						PRPB Strictness	-.21	.36
<b>Social Problems</b>		<b>F</b> <b>Boys</b>	<b>F</b> <b>Girls</b>	<b>R<sup>2</sup></b> <b>Boys</b>	<b>R<sup>2</sup></b> <b>Girls</b>	<b>Predictor</b>	<b>Boys</b> $\beta$	<b>Girls</b> $\beta$
<b>Parent Rating</b>	<b>CRPB</b>	<b>F</b> $F_{(3,16)} = 1.52$	<b>F</b> $F_{(3,25)} = 2.21$	<b>R<sup>2</sup></b> .22	<b>R<sup>2</sup></b> .21	CRPB Detachment	.47*	.26
						CRPB Acceptance	-.02	-.42
						CRPB Strictness	.08	.33

Table 13 (cont'd).

PRPB	$F_{(3,16)} = 4.75^*$	$F_{(3,26)} = 5.24^{**}$	.47	.39	PRPB Detachment	.31	.42**
					PRPB Acceptance	.04	.03
					PRPB Strictness	.51*	.40

Table 14: Hypothesis 2b – Low Concentrated Neighborhood Disadvantage

Academic Competence		F		R <sup>2</sup>		Predictor		$\beta$	
		Boys	Girls	Boys	Girls			Boys	Girls
Child Rating	CRPB	$F_{(3,23)} = .34$	$F_{(2,32)} = 4.01^*$	.04	.28	CRPBI Detachment		-.08	-.41*
						CRPBI Acceptance		.17	.16
						CRPBI Strictness		.05	.06
	PRPB	$F_{(3,15)} = .43$	$F_{(3,21)} = 1.83$	.08	.21	PRPBI Detachment		.04	.57
						PRPBI Acceptance		.22	.59
						PRPBI Strictness		-.22	.25
Behavioral Competence		F		R <sup>2</sup>		Predictor		$\beta$	
		Boys	Girls	Boys	Girls			Boys	Girls
Child Rating	CRPB	$F_{(3,23)} = 1.73$	$F_{(3,33)} = 1.14$	.18	.10	CRPBI Detachment		-.20	-.09
						CRPBI Acceptance		.28	.17
						CRPBI Strictness		-.19	.15
	PRPB	$F_{(3,15)} = .19$	$F_{(3,21)} = .11$	.04	.02	PRPBI Detachment		-.12	.11
						PRPBI Acceptance		.10	.08
						PRPBI Strictness		-.08	-.10
Behavior Problems		F		R <sup>2</sup>		Predictor		$\beta$	
		Boys	Girls	Boys	Girls			Boys	Girls
Parent Rating	CRPB	$F_{(3,15)} = 1.41$	$F_{(3,21)} = 2.12$	.22	.29	CRPBI Detachment		.16	-.34
						CRPBI Acceptance		.01	-.51*
						CRPBI Strictness		.46	-.31
	PRPB	$F_{(3,15)} = 7.17^{**}$	$F_{(3,21)} = 1.69$	.59	.19	PRPBI Detachment		.05	.35
						PRPBI Acceptance		-.39*	-.01
						PRPBI Strictness		.71**	.29



Table 14 (cont'd).

<b>Peer Rating</b>	<b>CRPB</b>	<b>F</b> $F_{(3,23)} = 8.72^{**}$	<b>F</b> $F_{(3,31)} = 2.30$	<b>R<sup>2</sup></b>	<b>Predictor</b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>
				.53	CRPBI Detachment	-.07	-.20
					CRPBI Acceptance	-.72**	-.46*
					CRPBI Strictness	.20	.22
	<b>PRPB</b>	<b>F</b> $F_{(3,15)} = .22$	<b>F</b> $F_{(3,21)} = 2.63$	.04	PRPBI Detachment	-.03	.12
					PRPBI Acceptance	-.05	-.29
					PRPBI Strictness	.22	.39*
<b>Social Competence</b>		<b>F</b> <b>Boys</b>	<b>F</b> <b>Girls</b>	<b>R<sup>2</sup></b> <b>Boys</b>	<b>R<sup>2</sup></b> <b>Girls</b>	<b><math>\beta</math></b> <b>Boys</b>	<b><math>\beta</math></b> <b>Girls</b>
<b>Child Rating</b>	<b>CRPB</b>	$F_{(3,23)} = 2.97^*$	$F_{(3,31)} = 1.45$	.28	.12	CRPBI Detachment	-.28
						CRPBI Acceptance	.33
						CRPBI Strictness	-.18
	<b>PRPB</b>	$F_{(3,15)} = 2.94$	$F_{(3,21)} = .96$	.37	.12	PRPBI Detachment	.44
						PRPBI Acceptance	.49*
						PRPBI Strictness	-.27
<b>Peer Rating</b>	<b>CRPB</b>	$F_{(3,23)} = .94$	$F_{(3,31)} = .62$	.11	.06	CRPBI Detachment	-.29
						CRPBI Acceptance	.09
						CRPBI Strictness	.03
	<b>PRPB</b>	$F_{(3,15)} = .31$	$F_{(3,21)} = 1.49$	.06	.18	PRPBI Detachment	.17
						PRPBI Acceptance	-.09
						PRPBI Strictness	-.20
<b>Social Problems</b>		<b>F</b> <b>Boys</b>	<b>F</b> <b>Girls</b>	<b>R<sup>2</sup></b> <b>Boys</b>	<b>R<sup>2</sup></b> <b>Girls</b>	<b><math>\beta</math></b> <b>Boys</b>	<b><math>\beta</math></b> <b>Girls</b>
<b>Parent Rating</b>	<b>CRPB</b>	$F_{(3,15)} = .52$	$F_{(3,21)} = 2.32$	.09	.25	CRPBI Detachment	.07
						CRPBI Acceptance	.14
						CRPBI Strictness	.28
							-.63*
							-.44
							-.16

Table 14 (cont'd).

PRPB	$F_{(3,15)} = 4.66^*$	$F_{(3,21)} = 3.99^*$	.48	.36	PRPB Detachment	.32	.80**
					PRPB Acceptance	-.27	.34
					PRPB Strictness	.48*	.24

Table 15: Hypothesis 3 – ANOVA by Race

N	African American Mean (SD)	Non-African American Mean (SD)*	Caucasian Mean (SD)	Non-Caucasian Mean (SD)	P**
67	51	16	109		
<b>Academic Competence</b>					
Child Rating	17.71 (3.92)	15.58 (4.71)	15.27 (4.23)	17.15 (4.34)	a, c
Teacher Rating	9.45 (3.73)	8.35 (2.48)	8.35 (2.47)	9.47 (3.53)	-
<b>Behavioral Competence</b>					
Child Rating	17.27 (3.81)	17.10 (4.94)	16.82 (5.36)	17.31 (4.13)	-
Teacher Rating	9.29 (2.85)	11.11 (1.83)	11.11 (1.83)	9.19 (2.92)	-
<b>Behavioral Problems</b>					
Parent Rating	11.11 (8.95)	9.78 (8.89)	7.07 (8.33)	10.94 (8.77)	-
Teacher Rating	6.50 (8.60)	2.49 (3.43)	2.49 (3.43)	7.00 (8.58)	-
Peer Rating	1.56 (2.49)	1.39 (2.48)	2.06 (3.47)	1.39 (2.24)	-
<b>Social Competence</b>					
Child Rating	17.64 (8.45)	15.45 (4.15)	15.95 (3.66)	16.92 (4.90)	a
Teacher Rating	9.33 (2.50)	9.67 (2.12)	9.67 (2.12)	9.30 (2.37)	-
Peer Rating	2.17 (2.82)	2.66 (3.07)	2.28 (1.93)	2.31 (2.98)	-
<b>Social Problems</b>					
Parent Rating	3.83 (3.03)	3.69 (3.65)	2.57 (2.98)	3.93 (3.27)	-
Teacher Rating	1.33 (1.37)	.56 (1.33)	.56 (1.33)	1.59 (1.63)	-
<b>Child-Rated Parent Behaviors</b>					
Detachment	31.09 (21.25)	24.04 (17.67)	24.97 (13.96)	26.63 (20.23)	a
Acceptance	33.04 (8.66)	32.50 (9.46)	30.61 (10.56)	33.38 (8.54)	-
Strictness	21.96 (6.86)	21.70 (6.93)	19.10 (5.61)	22.17 (6.83)	-

Table 15 (cont'd).

Parent-Rated Parent Behaviors		
Detachment	16.45 (14.65)	14.39 (12.70)
Acceptance	25.47 (6.63)	26.21 (6.18)
Strictness	20.77 (7.45)	17.85 (8.14)

\* 7 children who identified as bi-racial (African American and other), were excluded from this analysis

\*\* a – Comparison: African American vs. Non-African American

b – Comparison: Caucasian vs. Non-Caucasian

c – Comparison: African American vs. Caucasian

9.27 (5.80) 16.39 (14.42) -  
27.71 (4.86) 25.53 (6.51)  
15.07 (6.06) 20.21 (7.82) b, c

## REFERENCES

## REFERENCES

- Achenbach, T. M. & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms and Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth , & Families.
- Amato, P., & Fowler, F. (2002). Parenting practices, child adjustment, and family diversity. *Journal of Marriage & the Family*, 64(3), 703-716.
- Attar, B. K., Guerra, N. G., & Tolan, P. H. (1994). Neighborhood disadvantage, stressful life events, and adjustment in urban elementary-school children. *Journal of Clinical Child Psychology*, 23, 391-400.
- Auerbach, J., Lerner, Y., Barasch., M., & Palti, H. (1992). Maternal and environmental characteristics as predictors of child behavior problems and cognitive competence. *American Journal of Orthopsychiatry*, 62, 409-420.
- Bates, L., Luster, T., & Vandenbelt, M. (2003). Factors related to social competence in elementary school among children of adolescent mothers. *Social Development*, 12(1), 107-124.
- Baumer, E. P., & South, S. J. (2001). Community effects on youth sexual activity. *Journal of Marriage and the Family*, 63(2), 540-554.
- Baumrind, D., & Black, A. E. (1967). Socialization practices associated with dimensions of competence in preschool boys and girls. *Child Development*, 38(2), 291-327.
- Benson, M. L., Fox, G. L., DeMaris, A., & Van Wyk, J. (2003). Neighborhood disadvantage, individual economic distress and violence against women in intimate relationships. *Journal of Quantitative Criminology*, 19, 207-235.
- Beyers, J. M., Bates, J. E., Pettit, G. S., & Dodge, K. A. (2003). Neighborhood structure, parenting processes, and the development of youths' externalizing behaviors: A multilevel analysis. *American Journal of Community Psychology*, 31(1-2), 35-53.
- Blyth, C. R. (1972). On Simpson's Paradox and the 'Sure Thing' principle. *Journal of American Statistical Association*, 67, 364-366.
- Boardman, J. D. & Robert, S. A. (2000). Neighborhood socioeconomic status and perceptions of self-efficacy. *Sociological Perspectives*, 43 (1), 117-136.
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53, 371-399.

- Brody, G. H., Ge, X., Conger, R., Gibbons, F. X., McBride Murry, V., Gerrard, M., & Simons R. L. (2001). The influence of neighborhood disadvantage, collective socialization, and parenting on African American children's affiliation with deviant peers. *Child Development*, 72(4), 1231-1246.
- Brody, G. H., Ge, X., Kim, S. Y., Murry, V. M., Simons, R. L., Gibbons, F. X., Gerard, M., & Conger, R. D. (2003). Neighborhood disadvantage moderates associations of parenting and older sibling problem attitudes and behavior with conduct disorders in African American children. *Journal of Consulting & Clinical Psychology*, 71(2), 211-222.
- Brooks-Gunn, J., Duncan, G. J. & Aber, J. L. (Eds.), *Neighborhood Poverty: Context and Consequences for Children* (Vol. 1). New York: Russell Sage Foundation.
- Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K. & Sealand, N. (1993). Do neighborhoods influence child and adolescent development? *American Journal of Sociology*, 99, 353-395.
- Burton, L. M., Allison, K. W., & Obeidallah, D. (1995). Social context and adolescence: Perspectives on development among inner city African American teens. In A. C. Crouter & L. J. Crockett (Eds). *Pathways through Adolescence: Individual Development in Relation to Social Context* (pp 119-138). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Burton, L. M., & Jarrett, R. L. (2000). In the mix, yet on the margins: The place of families in urban neighborhood and child development research. *Journal of Marriage and the Family*, 62, 114-1135.
- Caughy, M. O. B., Brodsky, A. E., O'Campo, P. J., & Aronson, R. (2001). Perceptions of parenting: Individual differences and the effect of community. *American Journal of Community Psychology*, 29(5), 679-699.
- Chase-Lansdale, P. L., Gordon, R. A., Brooks-Gunn, J., & Klebanov, P. K. (1997). Neighborhood and family influences on the intellectual and behavioral competence of preschool and early school-age children. In J. Brooks-Gunn, G. J. Duncan & J. L. Aber (Eds.), *Neighborhood Poverty: Context and Consequences for Children* (Vol. 1, pp. 79-118). New York: Russell Sage.
- Chen, X. Y., Liu, M. W., Rubin, K. H., Cen, G. Z., Gao, X. P., & Li, D. (2002). Sociability and prosocial orientation as predictors of youth adjustment: A seven-year longitudinal study in a Chinese sample. *International Journal of Behavioral Development*, 26(2), 128-136.
- Cole, D. A., Cho, S., Martin, J. M., Seroczynski, A. D., Tram, J., & Hoffman, K. (2001). Effects of validity and bias in gender differences in the appraisal of children's

competence: Results of MTMM analyses in a longitudinal investigation. *Structural Equation Modeling*, 8(1), 84-107.

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, s95-s120.

Connell, J. P., & Halpern-Felsher, B. L. (1997). How neighborhoods affect educational outcomes in middle childhood and adolescence: Conceptual issues and an empirical example. In J. Brooks-Gunn, G. J. Duncan & J. L. Aber (Eds.), *Neighborhood Poverty: Context and Consequences for Children* (Vol. 1, pp. 174-199). New York: Russell Sage Foundation.

Connell, J. P., Spencer, M. B., & Aber, J. L. (1994). Education risk and resilience in African American youth: Context, self, action, and outcomes in school. *Child Development*, 65, 493-506.

Conrade, G., & Ho, R. (2001). Differential parenting styles for fathers and mothers: Differential treatment for sons and daughters. *Australian Journal of Psychology*, 53, 29-35.

Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10 (7). Available online: <http://pareonline.net/getvn.asp?v=10&n=7>.

Cote, L. R., & Azar, S. T. (1997). Child age, parent and child gender, and domain differences in parents' attributions and responses to children's outcomes. *Sex Roles*, 36, 23-50.

Curtis, L. J., Dooley, M. D., & Phipps, S. A. (2004) Child well-being and neighbourhood quality: Evidence from the Canadian National Longitudinal Survey of Children and Youth. *Social Science and Medicine*, 58, 1917-1927.

Dishion, T. J. (1990). The family ecology of boys' peer relations in middle childhood. *Child Development*, 61, 874-892.

Dishion, T. J., Patterson, G.R., Stoolmiller, M., & Skinner, M. L. (1991). Family, school, and behavioral antecedents to early adolescent involvement with antisocial peers. *Developmental Psychology*, 27 (1), 172-180.

Dorsey, S., & Forehand, R. (2003). The relation of social capital to child psychosocial adjustment difficulties: The role of positive parenting and neighborhood dangerousness. *Journal of Psychopathology & Behavioral Assessment*, 25(1), 11-23.



- Duncan, G. J. (1994). Families and neighbors as sources for disadvantage in the schooling decisions of White and Black adolescents. *American Journal of Education*, 103, 20-53.
- Eccles, J. S. (1999). The development of children ages 6-14. *The Future of Children*, 9(2), 30-44.
- Entwisle, D. R. & Astone, N. M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. *Child Development*, 65, 1521-1540.
- Evans, G. W., & English, K. (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress, and socioemotional adjustment. *Child Development*, 73(4), 1238-1248.
- Franco, N., & Levitt, M. J. (1998). The social ecology of middle childhood: Family support, friendship quality; and self-esteem. *Family Relations: Special Issue on the Family as a Context for Health and Well-Being*, 47, 315-321.
- Furstenberg, F. F. & Harris, K. M. (1993). When fathers matter/why fathers matter: The impact of paternal involvement on the offspring of adolescent mothers. In D. L. Rhodes & A. Lawson (Eds.). *The Politics of Pregnancy: Adolescent Sexuality and Public Policy* (pp. 189-215). New Haven, CT: Yale University Press.
- Galambos, N. L., & Maggs, J. L. (1991). Out-of-school care of young adolescents and self-reported behavior. *Developmental Psychology*, 27(4), 644-655.
- Gephart, M. A., & Brooks-Gunn, J. (1997). Neighborhoods and communities as contexts for development. In J. Brooks-Gunn, G. J. Duncan & J. L. Aber (Eds.), *Neighborhood Poverty: Context and Consequences for Children* (Vol. 1, pp. 1-43). New York: Russell Sage Foundation.
- Gonzales, N. A., Cauce, A. M., Friedman, R. J., & Mason, C. A. (1996). Family, peer, and neighborhood influences on academic achievement among African-American adolescents: One-year prospective effects. *American Journal of Community Psychology*, 24(3), 365-387.
- Gorman Smith, D., Tolan, P. H., & Henry, D. B. (2000). A developmental-ecological model of the relation of family functioning to patterns of delinquency. *Journal of Quantitative Criminology*, 16(2), 169-198.
- Halpern-Felsher, B.J., Connell, J.P., Spencer, M., Aber, J., Duncan, G., Clifford, E., Chichlow, W., Usinger, P., Cole, S., Allen L., & Seidman, E. (1997). Neighborhood and family factors predicting educational risk and attainment in African American and White children and adolescents. In J. Brooks-Gunn, G. J. Duncan & J. L. Aber (Eds.), *Neighborhood Poverty: Context and Consequences for Children* (Vol. 2, pp. 146-173). New York: Russell Sage Foundation.

- Harter, S. (1982). The Perceived Competence Scale for Children. *Child Development*, 53(1), 87-97.
- Hill, N. E., & Herman-Stahl, M. A. (2002). Neighborhood safety and social involvement: Associations with parenting behaviors and depressive symptoms among African American and Euro-American mothers. *Journal of Family Psychology*, 16(2), 209-219.
- Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin*, 111(1), 127-155.
- Homel, R., & Burns, A. (1989). Environmental quality and the wellbeing of children. *Social Indicators Research*, 21, 133-158.
- Hymel, S., Rubin, K. H., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing problems. *Child Development*, 61, 2004-2021.
- Jargowsky, P. A. & Yang, R. (2006). The "unclass" revisited: A social problem in decline. *The Journal of Urban Affairs*, 28, 55-70.
- Jarrett, R. L. (1997). Bringing families back in: Neighborhoods' effects on child development. In J. Brooks-Gunn, G. J. Duncan & J. L. Aber (Eds.), *Neighborhood Poverty: Policy Implications in Studying Neighborhoods* (Vol. 2, pp. 48-64). New York: Russell Sage Foundation.
- Jencks, C., & Mayer, S. (1990). The social consequences of growing up in a poor neighborhood. In L. Lynn Jr. & M. G. H. McGeary (Eds.), *Inner-City Poverty in the United States* (pp. 111-185). Washington, D.C.: National Academy Press.
- Kawash, G. F., & Clewes, J. L. (1988). A factor analysis of a short form of the CRPBI: Are children's perceptions of control and discipline multidimensional? *Journal of Psychology*, 122, 57-67.
- Klebanov, P. K., Brooks-Gunn, J., & Duncan, G. J. (1994). Does neighborhood and family poverty affect mothers' parenting, mental health, and social support? *Journal of Marriage & the Family*, 56(2), 441-455.
- Kling, J. R., Liebman, J. B., & Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica*, 75, 83-119.
- Kohlberg, L., Ricks, D., & Snarey, J. (1984). Childhood development as a predictor of adaptation in adulthood. *Genetic Psychology Monographs*, 110, 91-172.

- Kotchick, B. A. & Forehand, R. (2002). Putting parenting in perspective: A discussion of the contextual factors that shape parenting practices. *Journal of Child and Family Studies*, 11(3), 255-269.
- Krevans, J., & Gibbs, J. C. (1996). Parent's use of inductive discipline: Relations to children's empathy and prosocial behavior. *Child Development*, 67(6), 3263-3277.
- Kroneman, L., Loeber, R., & Hipwell, A. E. (2004). Is Neighborhood Context Differently Related to Externalizing Problems and Delinquency for Girls Compared with Boys? *Clinical Child and Family Psychology Review*, 7, 109-122.
- Kupersmidt, J. B., Griesler, P. C., DeRosier, M. E., & Patterson, C. J. (1995). Childhood aggression and peer relations in the context of family and neighborhood factors. *Child Development*, 66(2), 360-375.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62(5), 1049-1065.
- Lerner, R. M., Lerner, J. V., Almerigi, J., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Albert, A., Ma, L., Smith, L., Bobek, D., Simpson, I., Christiansen, E.D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-h study of positive youth development. *The Journal of Early Adolescence*, 25(1), 17-71.
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in; The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309-337.
- Leventhal, T., & Brooks Gunn, J. (2004). A Randomized Study of Neighborhood Effects on Low-Income Children's Educational Outcomes. *Developmental Psychology*, 40(4), 488-507.
- Li, S. T., Nussbaum, K. M., & Richards, M. H. (2007). Risk and protective factors for urban African-American youth. *American Journal of Community Psychology*, 39, 1573-2770.
- Locke, L. M., & Prinz, R. J. (2002). Measurement of parental discipline and nurturance. *Clinical Psychology Review*, 22(6), 895-929.
- Luthar, S. S. (1995) Social competence in the school setting: Prospective cross-domain associations among inner-city teens. *Child Development*, 66, 416-429

- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(4), 857-885.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- Luthar, S. S., & Cushing, G. (1999). Neighborhood influences and child development: A prospective study of substance abusers' offspring. *Development and Psychopathology*, 11(4), 763-784.
- Mandara, J. (2003). The typological approach in child and family psychology: A review of theory, methods, and research. *Clinical Child and Family Psychology Review*, 6(2), 129-146.
- Margolies, P. J., & Weintraub, S. (1977). The revised 56-item CRPBI as a research instrument: Reliability and factor structure. *Journal of Clinical Psychology*, 33(2), 472-476.
- Massey, D. S. & Denton, N. A. (1993). *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53(2), 205-220.
- Masten, A. S., Coatsworth, J. D., Neemann, J., Gest, S. D., Tellegen, A., & Garmezy, N. (1995). The structure and coherence of competence from childhood through adolescence. *Child Development*, 66(6), 1635-1659.
- Masten, A. S., & Curtis, W. J. (2000). Integrating competence and psychopathology: Pathways toward a comprehensive science of adaptation in development. *Development and Psychopathology*, 12(3), 529-550.
- Masten, A. S., Morison, P., & Pellegrini, D. S. (1985). A revised class play method of peer assessment. *Developmental Psychology*, 21, 523-533.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204.
- McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H. L., & Sekino, Y. (2004). A multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. *Psychology in the Schools*, 41(3), 363-377.
- Morrison, P., & Masten, A. (1991). Peer reputation in middle childhood as a predictor of

adaptation in adolescence: A seven-year follow-up. *Child Development*, 62, 991-1007.

Morrison, E. F., Rimm Kauffman, S., & Pianta, R. C. (2003). A longitudinal study of mother-child interactions at school entry and social and academic outcomes in middle school. *Journal of School Psychology*, 41(3), 185-200.

Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin*, 113(1), 99-128.

*Neighborhood Data Center* [Online Electronic Database]. Milwaukee, WI: The Nonprofit Center of Milwaukee, Inc. Available:  
<http://www.nonprofitcentermilwaukee.org/datacenter>

Nickerson, A. B., & Nagle, R. J. (2004). The Influence of Parent and Peer Attachments on Life Satisfaction in Middle Childhood and Early Adolescence. *Social Indicators Research*, 66, 35-60.

O'Connor, T. G. (2002). Annotation: The 'effects' of parenting reconsidered: findings, challenges, and applications. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 43(5), 555-572.

O'Hare, W. & Mather, M. (2003). *The growing number of kids in severely distressed neighborhoods: Evidence from the 2000 Census*. A report for the Annie E. Casey Foundation and the *Population Reference Bureau*.

Patterson, G. R. (1986). Performance models for antisocial boys. *American Psychologist*, 41, 432-444.

Pinderhughes, E. E., Nix, R., Foster, E. M., & Jones, D. (2001). Parenting in context: Impact of neighborhood poverty, residential stability, public services, social networks, and danger on parental behaviors. *Journal of Marriage & the Family*, 63(4), 941-953.

Plybon, L. E., & Kliwer, W. (2001). Neighborhood types and externalizing behavior in urban school-age children: Tests of direct, mediated, and moderated effects. *Journal of Child and Family Studies*, 10(4), 419-437.

Roeser, R. W., Eccles, J. S., & Freedman-Doan, C. (1999). Academic functioning and mental health in adolescence: Patterns, progressions, and routes from childhood. *Journal of Adolescent Research*, 14(2), 135-174.

Roosa, M. W., Jones, S., Tein, J. Y., & Cree, W. (2003). Prevention science and neighborhood influences on low-income children's development: Theoretical and

- methodological issues. *American Journal of Community Psychology*, 31(1-2), 55-72.
- Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social Development*, 6(1), 111-135.
- Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology*, 94(4), 774-802.
- Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "neighborhood effects": Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- Sampson, R. J., Raudenbusch, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277, 918-924.
- Schaefer, E. S. (1965). Children's report of parental behavior: An inventory. *Child Development*, 25, 413-424.
- Schludermann, E., & Schludermann, S. (1970). Replicability of factors in children's report of parent behavior (CRPBI). *Journal of Psychology*, 76(2), 239-249.
- Schneiders, J., Drukker, M., van der Ende, J., Verhulst, F. C., van Os, J., & Nicolson, N. A. (2003). Neighbourhood socioeconomic disadvantage and behavioural problems from late childhood into early adolescence. *Journal of Epidemiology and Community Health*, 57(9), 699-703.
- Schwartz, J. C., Barton-Henry, M. L. & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development*, 56, 462-479.
- Sheidow, A. J., Gorman-Smith, D., Tolan, P. H., & Henry, D. B. (2001). Family and community characteristics: Risk factors for violence exposure in inner-city youth. *Journal of Community Psychology*, 29(3), 345-360.
- Shumow, L., Vandell, D. L., & Posner, J. (1998). Perceptions of danger: A psychological mediator of neighborhood demographic characteristics. *American Journal of Orthopsychiatry*, 68(3), 468-478.
- Simons, R. L., Johnson, C., Beaman, J., Conger, R. D., & Whitbeck, L. S. (1996). Parents and peer group as mediators of the effect of community structure on adolescent problem behavior. *American Journal of Community Psychology*, 24(1), 145-171.
- South, S. J. & Crowder, K. D. (1999). Neighborhood effects on family formation: concentrated poverty and beyond. *American Sociological Review*, 64 (1), 113-132.

- Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 65(3), 754-770.
- Steptoe, A., & Feldman, P. J. (2001). Neighborhood problems as sources of chronic stress: Development of a measure of neighborhood problems, and associations with socioeconomic status and health. *Annals of Behavioral Medicine*, 23(3), 177-185.
- Stevenson, J., Richman, N., & Graham, P. (1985). Behaviour problems and language abilities at three years and behavioural deviance at eight years. *Journal of Child Psychology and Psychiatry*, 26, 215-230.
- Taylor, C. S., Lerner, R. M., von Eye, A., Bilalbegovic Balsano, A., Dowling, E. M., Anderson, P. M., Bobek, D. L., & Bjelobrck, D. (2002). Individual and ecological assets and positive developmental trajectories among gang and community-based organization youth. *New Directions for Youth Development*, 95, 57-72.
- Terrisse, B., Roberts, D. S. L., Palacio-Quintin, E., & MacDonald, B. E. (1998). Effects of parenting practices and socioeconomic status on child development. *Swiss Journal of Psychology*, 57(2), 114-123.
- Tiet, Q. Q., & Huizinga, D. (2002). Dimensions of the construct of resilience and adaptation among inner-city youth. *Journal of Adolescent Research*, 17(3), 260-276.
- Wagner, C. H. (1982). Simpson's paradox in real life. *The American Statistician*, 36, 46-48.
- Widaman, K. (2006). III. Missing data: What to do with or without them. *Monographs of the Society for Research in Child Development*, 71, 42-64.
- Wigfield A., Eccles J. S., Yoon K. S., Harold R. D., Arbreton A., Freedman, D. C., & Blumenfeld, P. C. (1997). Changes in children's competence beliefs and subjective task values across the elementary school years: a three-year study. *Journal of Educational Psychology*, 89, 451- 469.
- Wilson, W. J. (1987). *The Truly Disadvantage: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.
- Wilson, W. J. (1996). *When Work Disappears*. New York: Vintage Books.

