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Social and Emotional Development of Children 0 to 36 Months in Poverty

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To the Graduate Council:

I am submitting herewith a dissertation written by Valentina Bopkova entitled "Social and Emotional Development of Children 0 to 36 Months in Poverty." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Social Work.

John S. Wodarski, Major Professor

We have read this dissertation and recommend its acceptance:

William R. Nugent, Rodney Ellis, Schyler Huck

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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William R. Nugent

Rodney Ellis

Schyler Huck

Accepted for the Council:

Anne Mayhew
Vice Chancellor and Dean of
Graduate Studies

(Original signatures are on file with official student records)

**SOCIAL AND EMOTIONAL DEVELOPMENT OF CHILDREN
0 TO 36 MONTHS IN POVERTY**

A Dissertation Presented for
The Degree of Doctor of Philosophy

The University of Tennessee, Knoxville

Valentina Bopkova

August 2005

DEDICATION

I dedicate this dissertation to my parents Zora and Risto Bopkovi, who always supported me in my educational and professional endeavors, even if it meant being so far away from them. They provided the perfect balance of courage and unconditional love that fueled my ambition.

ПОСВЕТУВАЊЕ

Дисертацијата им ја посветувам на моите родители Зора и Ристо Бопкови чија подршка, без оглед на географската оддалеченост, ги охрабри моите образовни и професионални достигнувања. Тие го обезбедија балансот на храброст и безусловна љубов што ја подгреа мојата амбиција.

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ABSTRACT

The study examined the effects of poverty on young children's social and emotional development through the effects poverty has on parenting. National Longitudinal Survey of Youth (NLSY) was the chosen data set. Total of 148 children and their parents (primarily mothers) took part in the study, at two survey time points 1998 and 2000. The study was a reanalysis of survey data and not an original survey data collection. There were two types of regression analyses performed ("snap-shot" and motion-picture"). First each of the four crafted hypotheses was tested within one time frame, and then year 1998 was used as a baseline to predict change in 2000 outcome. Some effects of poverty on child's social and emotional development were found when hypotheses were tested for each year separately. These effects are present even after controlling for a range of individual and family characteristics that affect child development, including those that are likely to be correlated with parenting. However the significance of that effect in most cases went away when 1998 year was used as a baseline to predict change in score for 2000. This study drew a much clearer picture on drawing conclusions based on results from "snap-shot" analyses as compared to "motion-picture" analyses.

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CHAPTER I: The Study

Introduction

Past research clearly shows that there is a relationship between poverty and early childhood development. However, this research has primarily focused on the relationship between poverty and physical and cognitive development. Despite the general consensus that poverty is a risk factor for emotional and behavioral problems, the field has not advanced past this general finding (Haggerty, 1988). Takeuchi, Williams and Adair (1991) attribute this fact to the predominance of cross-sectional data used in research. According to them, "cross-sectional data make it difficult to determine whether poverty conditions 'cause' mental health problems or whether families that have children with emotional problems drift into poverty conditions" (p.1032). Cross-sectional studies (CSS) may view poverty status as static, thus limiting conclusions that are drawn. By comparison, longitudinal studies could be used to show the dynamic nature of poverty, enabling conclusions to be drawn over time and in greater detail. As stressed by Parnes (1972), "for some kinds of research questions, however, a series of "snap-shots" of a changing population is inadequate. What is required is a "motion picture" of the same group of individuals over time"(p.11). "The key difference between cross-sectional surveys... and longitudinal surveys, is that annual interviews with the same individuals enable researchers to chronicle important events that individuals experience over the course of their lifetime" (Horrigan, & Walker, 2001 p.3).

Statement of the problem

This study targets people living in poverty and focuses on the social and emotional development of young children. Childhood development is potentially influenced by multiple factors. Identifying these factors is a crucial first step in developing better-targeted programs. Additional research in this area is needed so that better-targeted programs and practices may be developed. Specifically, this study researches the social and emotional development of young children between the ages of 12 and 36 months using longitudinal data. Despite the availability of longitudinal surveys, such as the National Longitudinal Survey of Youth (NLSY79), the potential has not been fully explored to help establish a relationship between poverty and childhood development. Analyses of this type of information are essential because of the ever-increasing number of young children living in poverty. The field of social work has not produced substantial research in early childhood development as have other fields or disciplines such as psychology. This study helps fill this gap in social work research.

Purpose of the study

The primary purpose of this study was to identify and examine predictors of social and emotional development in young children with special emphasis on the identification of factors related to impaired child development. Additionally, in order to test the effectiveness of longitudinal data in young childhood developmental research and compare it with “snap-shot” research results, this study tests longitudinal data for two time frames on children and parents in addition to “snap-shot” analyses for the two time frames separately. However, the purpose of the study remains realistic. A complete solution of the problem is not suggested, only explanations of the avenues that can best

facilitate good social and emotional development in young children. Factors related to impairment are offered.

Justification for study

While psychologists have investigated social and emotional development in young children, the field of social work has not been as involved in this area of research. It is important that other research, with practical solutions in aim, be conducted in order to link the research on child development with practical solutions to the problem.

The results of this study will have implications for preventing the negative effects of poverty on the social and emotional development in children. The NLSY79 database will be used since longitudinal data regarding social and emotional development of young children have not been available or adequately statistically analyzed or used in the past. Furthermore, there are a limited number of social scientists that use NLSY79 database in their research, and its use in this study contributes to the limited pool of results drawn from it.

Theoretical framework

As previously mentioned, the effects of poverty on children's physical and cognitive development have been well explored and consequently many theories have been developed. However, the relationship between social and emotional development and poverty has not been thoroughly investigated. The lack of research done in this area is compounded by the lack of full-fledged theories created to explain the short and/or long-term consequences of poverty on social and emotional development. There are some theories such as attachment theory that establish a connection between parental availability and affection on emotional development, but fail to address how material

deprivation affects social and emotional development. The belief that poverty affects the social and emotional development of children has been widely accepted. Theories focusing on this aspect of young children's social and emotional development that explain the medium through which their development is affected are lacking.

Some social and economic theories such as the social and human capital theories that have characteristics belonging to the economic endogenous system make initial steps in establishing the connection between the social and economic constructs. Social and human capital theories have been incorporated into the economic system theories due to their characteristics of encompassing economic traits. According to Castle (2002), the presence of social capital is evident when one can show that the norms and networks, which facilitate collective action, contribute to useful goods and services (p. 335). Therefore, "social capital is defined as those group relations or norms and networks which facilitate accomplishments by social and economic systems" and are based on trust (Castle, 2002 p. 336, Cox, 1996). "Social means that more than one individual is involved" (Castle, 2002 p. 333), and "human capital refers to individuals' capacity to contribute to their own and others' satisfaction" (Castle, 2002 p. 335). Furthermore, capital focuses on the passage of time as an understanding of the potential to achieve specific objectives (Castle, 2002) at a specific point in time. Sharp (2001) stressed that sociologists have long recognized the importance of time in the community studies, and although the term capital was used to stress the passage of time, economic theories often employ static analyses and neglect time as a variable. Needless to say, this is similar to the problems in the research on poverty, and its effects on young children's social and emotional development as a time sensitive task whose achievement starts in early

childhood. Therefore, inasmuch as social and human capital theories permit, defining family as a social and economic system, we can say that parenting with its usefulness and durability and as group relations that involves more than one individual with specific norms and networks with the passage of time can be considered a social capital. The lack of good parenting as a social capital may impair social and economic accomplishments by the family (i.e. child), while the presence of good parenting may facilitate it.

Although the incorporation of social capital theory into the research on poverty is a way of modifying the field of social work so that group and social relations are included, social scientists do not combine the economic and social constructs easily. This provides another explanation for the lack of theories that explain constructs that encompass traits affected by both fields. This is due to the ambiguous conceptual base of social constructs that become even more ambiguous when two approaches (social and economic) are combined. Limiting the empirical verification of the construct in this way provides a possible explanation for the lack of connections between the theories.

Nevertheless, some social science researchers ventured into the economic theories looking for answers to social problems but mainly studied sociological issues on kinship, neighborhoods, etc. None ventured into the field of child development (especially early childhood social and emotional development) because the concept of social capital was not considered to have any emotive content (Baron, Field, & Schuller, 2000). Despite encompassing traits of social capital (norms and networks, trust, passage of time), few considered parenting as a social capital mainly because they did not attribute emotive traits to the concept. Undeniably, parenting carries the attributes of emotions such as love. Thus parenting, already owning many attributes of social capital, adds the emotive

attributes to the social capital construct making it appropriate for researching the social and emotional development of young children in the present study. Coleman (1988), one of the early social scientists who considered parenting as social capital, stressed the importance of social capital available within families and its influence on children's outcomes. However, he focused on parental (i.e. maternal) employment as an impairment of the development of social capital in the family. According to Coleman (1988), within a family, social capital includes the relationships among parents, children, and other family members; its amount is influenced by the strength of the bonds among family members. He speculates that parental employment, more particularly maternal employment outside the family will limit the development of social capital resulting in reduced opportunities for children to benefit from parental human capital. Others (Parcel & Meneghan: 1994a, 1994b) abate this stand, and state that parental (i.e. maternal) nonemployment does not necessarily mean positive effect on child development.

In any case, the initial steps in employing social capital theory in social sciences have been taken, but much remains to be explored in order to establish a firm connection between social and economic constructs in the development literature. This study builds on the existing knowledge of social capital and its use in social sciences, and explores the effects of social capital on young childhood development, and specifically on social and emotional development using longitudinal data.

Research questions in this study

Research Question 1: To what extent does poverty have an impact on the social and emotional development of young children?

Research Question 2: To what extent are the parenting practices affected by poverty?

Research Question 3: To what extent does poverty predict a noticeable change in parenting behavior and home environment?

Research Question 4: To what extent does parenting, after controlling for poverty, affect young children's social and emotional development?

Summary

Young children living in poverty are at a very high risk of poor social and emotional development. In fact, 46% of children under age six live in poverty (NCCP, 2002), in the U.S. In order to closely identify the consequences of poverty on young children's social and emotional development, it is important to have research that helps identify factors that both foster and hinder social and emotional development. Identifying these factors will help create better-targeted practices and prevent long-term damage. It is also crucial that the data used in this research be representative and accurate in depicting the poverty situation in which young children live. Additionally, since social workers traditionally have not been involved in research on young children's social and emotional development, their contribution may be very valuable because they use instrumentally different approach.

In this study, social capital theory is used to explore the consequences of poverty on young children's social and emotional development through parenting. Parenting is considered an aspect of group relations with norms and networks, thus constituting a social capital. The social capital theory is the theoretical foundation for this study. On a more practical level, there is a need for more research that focuses on the young children's social and emotional development as a social and human capital over a period of time. The importance of connecting the constructs lies in the fact that when social

problems are given an economic weight, the possibility of a wider action to resolve the social problem is more likely. Additionally, the earlier in life a connection is established, the better the programs will be that are created to solve the social problem. Furthermore, this research needs to have a practical application and provide information on the consequences of impaired social and emotional development through dissemination of research results to the general public.

In this chapter, the introduction, purpose, and research questions that guide the study were presented. Justifications and the statement of the problem were discussed, and the theoretical framework was laid out. The following chapter presents the literature review. The third chapter offers an explanation of the data set, the selection of the subset, and planned methodology and data analysis.

CHAPTER II: Review of Literature

Introduction

Child poverty is endemic in the United States. It increased during the 1970s, 1980s, and continued to increase at a high rate in the 1990s (Huston, 1991). In 1992, 26% of American children were poor, the highest rate in 25 years (Knitzer & Aber, 1995). Over 14 million children (14.6 million) were counted as living in poverty (Betson & Michael, 1997, p.35). Furthermore, 42% of children under age six live in poverty or near poverty (NCCP, 2002) in the U.S.

Young children are especially at risk because of their developmental sensitivity. Twenty four percent of children under age of three lived in poverty in 1995 (NCCP, 2001), putting a quarter of this population at developmental risk. Home environments affect young child's development thus parents and the resources available to them within this ecological system will shape the way development occurs. In turn, this will determine the way children interact with other people and establish relationships later in life (i.e. their social and emotional life).

A complete literature review of how poverty affects children's lives is beyond the scope of this study. However, how it affects certain, closely identified, aspects of young children's lives such as social and emotional development early in life is possible. The current study is limited to young children's social and emotional development in the environment of poverty. There is a great deal of research in this area, but mainly in psychology and developmental sciences, while social work has been less involved. The importance of social work's involvement lies in the fact that as a profession, social work looks for practical solutions to the problems.

This study focuses on young children, their development, and poverty, as well as on the effects of poverty on children's development, and more narrowly, on their socio-emotional development in poverty. The objective of this chapter is to present part of the literature on poverty and its effect on young child's social and emotional development, as pertinent to this study. Its core objective is to comprehensively review the National Longitudinal Survey of Youth (NLSY) studies written on this topic, and present the knowledge gaps and pitfalls of the methodology used to research the issue.

Review process

Studies presented in this chapter have been located through a search of the literature. The main source was University of Tennessee's Hodges library, which also served as a medium in locating other relevant studies not existent on its floors. Furthermore, from primary study reference lists, additional studies were found. Electronic searches were performed on Proquest, Web of Science, and many electronic sites of journals, such as Ingenta, for articles starting 1970 until present (list available from the author). Several web pages served as a source of updating information and statistics, such as the U.S. Census Bureau and the National Center for Children in Poverty (NCCP). The list of search keywords included: children, poverty, social and emotional development, physical and motor development, child development, toddler's development, child poverty, NLSY, etc. As some of the keyword searches resulted in great number of articles, in order to closer locate relevant studies, a combined search was performed. Studies were evaluated on the base of comprehensiveness of the literature review, methodology, data analyses, data sets used, location of the study, etc. Determining the importance of the studies' findings for this chapter was based on the

strengths and weaknesses of its methodology. Since the core of the paper focuses on the NLSY data set, studies using this data set and their findings are given greater importance, unless a methodology weakness was detected.

Poverty and child poverty

Poverty varies by level of severity, lengths of time (i.e, persistent or transitory), and ecological and cultural settings (Huston, 1991). Increased attention turned towards poverty in the United States because of the politics in the 1960s. A major contributing factor for the public turning its attention to the poor has been the publishing of Michael Harrington's book "The Other America" in 1964. Written by a social worker, it is an excellent sociological study of poverty. Through examples, it gives a thorough chronological description of the poverty in the U.S. until the early 1960s, and the path of the poor in becoming the "other" America. As Williams (1994), three decades later stated, the fast pace of changes in social conditions and economic upheavals blurred the vision of prosperity and stability. The 1960s was the decade when the academic environment turned its attention to poverty, mainly because of to the rising federal funding for research (Mead, 1994). As a result there was an outpouring literature, which caused confusion regarding the definition of poverty.

A poor family in the U.S. is defined as one whose annual income before taxes and other deductions falls below the official poverty threshold (Betson & Michael, 1997). The most widely used index of poverty is the official poverty level established by the U.S. government in 1963. Originally based on the estimated economy food budget times three for a farm family, it is annually adjusted for the cost of living (Huston, 1991). The Census Bureau uses a set of income thresholds that vary by family size and composition

to determine who is poor. Although updated annually for inflation, these thresholds are not geographically different (U.S. Census, 1999). Poverty threshold for a family of four was \$18,500 a year in 2004 (www.census.gov).

The official poverty line has been widely criticized due to many shortfalls, such as not taking into account the in-kind benefits of poor families (Betson and Michael, 1997), the income distribution within the family, its static character, the geographical variations in the cost of living (Sherman, 1994). It also does not account for certain groups such as people; in military barracks, institutional group quarters, under age 15 (such as foster children) (U.S. Census Bureau, 1999). "One fairly consistent criticism of poverty measurement in the U.S. is that official poverty statistics misstate both the level and the rate of growth of the poverty population" (Betson & Michael, 1997, p. 6). One reason for this is the "definition of poverty, which focuses more on the adequacy of income than on the other aspects of quality of life associated with cash income" (Hill & Sandford, 1995), consequently leading towards the creation of two definitions of poverty: absolute and relative.

Absolute poverty is when only the official poverty threshold has been taken into account to research the issue. Relative poverty is when the poverty measure has been "softened up" and instead of using the fixed official poverty threshold, one-half the median after tax family income has been taken into account (Betson & Michael, 1997) or when poverty is defined relative to the median income in the population (Huston, 1991). In order to more accurately represent poverty and its true meaning, "any new poverty threshold should be based on how families actually spend their income on the necessities of food, clothing, and shelter, including utilities" (Betson and Michael, 1997, p. 35).

Furthermore, relative poverty should account for poverty trends such as age, family situation, race, and even what is considered minimum at a given time and place.

Although flawed, the absolute definition is important as a reference point for research on poverty. However, "unless the national measure of poverty accurately reflects the needs and the resources of families, there will be no way to determine which state's strategies work better and which work less well in alleviating poverty" (Betson and Michael, 1997 p.38). Thus the flexibility of the poverty measure is the transformation most necessary in the official poverty measure when determining poverty levels accurately.

Therefore, this study will have an operational definition of poverty as: any situation in which people face financial strains, due to low or fluctuating income, preventing them from satisfying their basic material and spiritual needs. Financial strains are constraints on buying food, medical care, clothing, and on adequate financial resources to cover the basic bills each month (Sherman, 1994), and are often associated with poor physical and mental health (Kessler, 1987).

Unique aspects of child poverty

A child lives in poverty if he/she lacks goods and services considered essential to human well-being. However, child poverty is not static. It closely corresponds to the trends in poverty in general and follows changes in society such as stalled economic growth, the increased number of families headed by females, etc., all causing child poverty to increase. Other trends such as decreased family size and increases in parental schooling cause child poverty to be reduced. According to Corcoran and Chaudry (1997), changes in the family structure, divorce, family size, the attitude of a society towards a

family, immigrants with high birth rate, parental schooling, etc. have caused the increase in child poverty (pp. 42-44). However, trends in child poverty follow to a great extent the trends in poverty for adults because in most cases children's resources depend upon the resources of their parents.

Several characteristics of child poverty in the U.S. stand out: one in every five children in America is poor, and child poverty has increased consistently since the 1950s. Although there was a small decline in the 1960s, the rate had increased by 50% from the 1950s until 1983 and presently fluctuates around 21% (Betson & Michael, 1997; Keefe & McCullagh, 1995). For children age three and below, the percentage went up to 24 in 1995. In 2002, according to the National Center for Children in Poverty (NCCP) while poverty in general marked a small decline in 2000 (11.8 % in 1999, 11.3% in 2000) child poverty rates are on the rise. Additionally, they found that most of the poor young children live in suburbs, and the poverty rate for these children has grown twice as fast among whites as among blacks. Also poverty for Hispanic children has increased more rapidly than for any other group. Moreover, the study found that most of young children live in working families with single parenthood posing greater threat of poverty. Finally the study stated that poverty rates vary from city to city and to state to state (NCCP, March 2002).

No matter how child poverty is defined, in absolute or relative terms, both definitions assume that children are part of a family that supports them. This disregards a large number of children who live in institutions or on streets and have no families to care for them. Even the U.S. Census Bureau official poverty definition does not include in its

estimates unrelated individuals such as foster children under age 15 (U.S. Census Bureau, 1999).

While there are many reasons for child poverty, the financial standing of the adults in the family is paramount. A child's well being greatly depends of how many resources are available to him/her, and how those resources are allocated in the family over any period of time (Betson & Michael, 1997). Therefore, the logical conclusion is that children born to poor adults face an increased risk of not having their material needs satisfied, and not achieving their full potential.

The more complex nature of child poverty lies in the developmental tasks that a child has to accomplish. Developmental tasks of early childhood are very specific and occur at certain times. The normal progression of these tasks is greatly affected by the deprivation caused by poverty. Early childhood is the period that is especially developmentally sensitive. Additionally, a major feature of poverty that greatly influences children's early physical health and social and emotional development, is the duration and timing of poverty.

Duration and timing of poverty

Poverty is a dynamic process that greatly fluctuates throughout the many family's life course, affecting family members differently at different time periods. Bane and Ellwood, (1986) discussed the dual nature of poverty in the U.S., stating that some people spend a lifetime in poverty while for others it is only a transient phenomenon. A common hypothesis is that persistent poverty is more harmful than transient poverty because it implies greater economic deprivation (Devine, Plunket, & Wright, 1992). Although transitory poverty often results in temporary unemployment or income volatility and

probably entails fewer social and environmental risks for children long-term, it can nonetheless have a lasting impact on children's development due to its timing. The above is a common expectation of scientists and it is supported in studies of the effects of short-term poverty.

Consequently, it is expected that the effects of long-term poverty on children will be much worse. The National Longitudinal Study of Youth (NLSY), a data set chosen for this study, has collected data on family income over several decades, and many researchers have used the data to establish whatever connection they were looking for on the duration of poverty and its effects. Koreman and Miller (1997) based their research on the NLSY Child Supplements data on the effects of long-term poverty on physical health of children measured as low weight-for-height (wasting) and low height-for-age (stunting). The study failed to establish a connection between physical health and the duration of poverty. Their outcomes varied too widely to “make precise quantitative statements about the relationship between poverty and the physical health of children in the NLSY” (Koreman and Miller, 1997 p.94). While stunting appeared to be associated with long durations of poverty, wasting did not establish that connection. Even more so, for the black children in the sample, even stunting was not associated with the long duration of poverty. This outcome might be a result of incomplete data as well, because NLSY collects longitudinally extensive data on income but almost none on diets. Thus formulating research questions involving possible effects of diet results in inconclusive findings.

Other studies establish the connection between a child's physical health and poverty, but they only offer one year measurements. Short-term measures make the

connection between the child's physical health, especially wasting, and poverty easier to establish. Studies show that short-term poverty definitely results in adjustments in body weight, especially noticeable at the beginning of the deprivation period (Martorell and Ho, 1984; Jones, Nesheim, & Habicht, 1985).

It has been said that the most detrimental effects of transient poverty are experienced at the beginning of the deprivation. Some (Augustiniak, Dunkan, & Liker 1985; Pearlin, Liberman, Menaghan, & Mulin 1981) say that this may be more a consequence of the family not being adjusted to the loss than by the loss itself. Furthermore, there are theorists (Elder & Caspi, 1988) who claim that once a family has become accustomed to lowered economic status, the detrimental effects of poverty are not that severe. This assertion compliments the statement that individuals are more psychologically affected by the initial loss. Thus it would be expected that current poverty has a stronger relationship with social and emotional factors in families who recently become poor, as opposed to families who persistently live in poverty and display more signs of delayed physical development due to undernutrition, underweight, etc.

Confirming the above, in the large nation-wide sample research done by McLeod and Shanahan (1993), the persistence of poverty is significantly and positively related to the presence of internalizing symptoms such as shyness, depression, anxiety, whereas being currently poor has no relationship with these symptoms. In their research, being currently poor had a significant effect on the parenting practices (1993), thus jeopardizing a child's social and emotional well-being, and supporting the theory that the initial shock of poverty has its most detrimental effects at the beginning. However, their research does not dispute the theory that the longer poverty lasts the worse its effects on young

children. On the contrary, as the length of time spent in poverty increases, so too do children's feelings of unhappiness, anxiety, and dependence, although family interactions apparently stabilize as poverty persists (McLeod and Shanahan, 1993). At the end, long-term poor children are more likely to end up being poor adults due to, for instance, incomplete education. Therefore, children living in long-term poverty were not only poor for long periods but they also experienced severe poverty (Corcoran & Chaudry, 1997 p. 45).

In the research on poverty, timing effects are important as well. As stressed by Brooks-Gunn, Duncan, and Maritato (1997), the developmental theory postulates that the timing of events is critical to an understanding of their effects on children. Furthermore, Brooks-Gunn and Duncan (1997) suggest that the timing of poverty needs to be taken into account since it affects children differently at different ages, possibly having the most damaging effects early in childhood. "The consequences of experiencing the conditions associated with growing up in poverty are not in doubt. Undernutrition, inadequate parental care, exposure to toxicants and infectious diseases *in utero* and in the surrounding external environment, unsafe living conditions... are all more common in poverty circumstances" (Thompson, 1992 p. 7). More on the effects of poverty on young children follows later in the paper.

According to some authors (Corcoran, Gordon, Laren, & Solon, 1992), this raises the question of the sensitivity of developmental outcomes to both the duration and the timing of poverty. The above named authors found that children who grew up in poverty have less school attainment and early career outcomes, as expected. Koreman, Miller and Sjaastad (1995), in their research of 6000 NLSY women with children nationwide,

conclude that poor children in the U.S. are at heightened developmental risk in early childhood and show that these risks are substantial among the long-term poor.

Research on poverty and its limitations

An examination of the research on poverty should consider the inherent limitations of the body of knowledge. Probably the biggest pitfall of many studies on the effect of poverty is the focus on a snap-shot period rather than longitudinal observations. Although snap-shot surveys generate important data about the effects of the short-term poverty on people, especially children due to their developmental tasks early in life, they fail to provide data on the long-term effects, which significantly impairs the ability to stretch the findings over the measurement time. Survey “snap-shots” of poor children rarely provide much information about the duration of the material deprivation of poor children and its effect on them. Goldstein (1990) points out that many studies that measure social and economic status treat it as static, and usually measure it at only one point in time in a child's life, sometimes even failing to specify when it was measured. This may be misleading, because family income and parent's occupational status are quite dynamic, changing substantially from year to year (p.4). Furthermore Blau (1999) critiques “snap-shot” evaluations and stresses that the household's long-term economic status has a much greater association with achievement and behavior problems than can be seen from single-year income measures.

Moreover, failing to account for the duration of poverty risks underestimating or overestimating the effects of poverty. Duncan (1991) supports that single year estimates of the poverty rate of children substantially “understate the fraction of children who ever come into contact with poverty and overstate the extent of quite persistent childhood

poverty” (p.45). This happens due to the point sampling mixing the individuals who enter and leave the status quickly and those who stay in that status long-term. Single year estimates underestimate the number of children due to the fact that they treat the numbers as static, thus underestimating the number of children who throughout their life will live in poverty for some time.

However, those same numbers tend to overstate the extent of persistent childhood poverty. For most of the children poverty is a transient phenomenon, and stating the extent of persistent poverty on the base of single year estimates will result in numbers much bigger than the actual numbers of children that live in poverty throughout their life. This is due to the fact that as a result of some environmental reasons the poverty rate in general, and consequently the child poverty rate, is larger that year than the years proceeding or preceding the measurement year. Therefore accounting for the duration and timing of poverty is important for getting real estimates about its extent.

The effect of poverty on young child’s development

Healthy development occurs when the infant and/or toddler progresses from one stage to the next, having successfully reached the level of development of every successive stage. It is not a question that deprivation, especially economic deprivation, leads towards diminished life chances of reaching the desired level at every stage of life. This holds even more for children and the deprivation they experience early in their lives. The poverty rate for children under age three has grown at an alarming rate, from 1.7 million to 2.8 million, from 18 percent to 24 percent respectively, between 1979 and 1995 (National Center for Children in Poverty, 1997). The 2.8 million children aged three and under, face a greater likelihood of impaired development due to increased exposure

to environmental risks associated with poverty, such as, inadequate nutrition, environmental toxins, trauma and abuse, lower quality child care, diminished interaction due to maternal depression, drugs and substance abuse, etc (NCCP, 1997). "The consequences of experiencing the conditions associated with growing up in poverty are not in doubt. Undernutrition, inadequate parental care, exposure to toxicants and infectious diseases *in utero* and in the surrounding external environment, unsafe living conditions... are all more common in poverty circumstances". (Thompson, 1992 p. 7).

Poverty and its effect on young children's physical development

Growing number of publications describe the connection between socioeconomic status (SES) and health. One of the most consistent associations in developmental science is between economic hardship and compromised child development (Shonkoff & Philips, 2000). This connection has been made for all age groups. According to Klerman (1991) one-third of infant deaths are related to the environments that infant experience after returning home, associating these deaths with socioeconomic conditions. In general, as reported by the National Center for Health Statistics (NCHS), the U.S. in 1990 had an infant mortality rate of 9.1 that was considered the lowest they ever had (NCHS, 1991). Nevertheless, the U.S. still had a much higher rate than many European countries and Japan (Klerman, 1991). "In 1986 Americans with a yearly income of less than \$9,000 had a death rate three to seven times higher (depending on sex and race) than those with a yearly income of \$25,000 or more..." (Angell, 1993 p. 126), clearly associating the mortality rate with the SES. Additionally, children that are poor are more likely to be stunted (low height for age), and/or wasted (low weight for height) than other children (Miller & Korenman, 1993), and there is a significant difference in weight and height

between poor children and non-poor children at the same age (Jones, Nesheim, & Habicht, 1985).

The study conducted by Padilla, Boardman, Hummer, Espitia (2002) examined the influence of the “epidemiologic paradox” i.e. relatively good health at birth in the Hispanic, more specifically Mexican American population, on their subsequent well-being. In their comparative study of the children in all ethnic groups (Mexican American, non-Hispanic black, and non-Hispanic white) in the NLSY – CD sample, 3,710 children age 3 - 4 were selected. The “epidemiologic paradox”, termed as such by Markides and Coreil (1986) has been explained with the prevailing culture of the parents and some culturally determined and healthy habits such as not smoking, drinking or use of drugs. The research aimed at establishing a connection between the effect of poverty and child development among the Mexican American population in the NLSY – CD based on the mitigating effects of the normal birth weight that these children are born with despite the poverty they live in. Many studies showed the connection between the low-birth weight and poor long-term outcomes in children (Pollitt, 1988; Connors & Blouin, 1982/83; Werner, 1985) therefore it is logical to expect that being born with a normal birth weight would have favorable outcomes for children. However, the environmental conditions need to be taken into account. Consequently the expectations of the authors were that despite the relative weight advantage, Mexican American children will have less than optimal developmental outcomes due to poverty and lack of health care. Their results showed that despite the favorable start, Mexican American children lagged behind their non-Hispanic white counterparts and were almost at the same level with African American children in the PPVT–R scores. “ To illustrate, the rate of low birth weight

among Mexican American and non-Hispanic white children differed by only 1% (i.e. 7.2% for Mexican American children versus 6.0% for non-Hispanic whites), while the disparity in average PPVT scores between these two groups was about 26 points on a 100 point scale (Padilla et. al., 2002)”. This illustrates that the birth weight did not explain any racial/ethnic variance in development scores, making the racial/ethnic compatibility of the PPVT – R questionable. As expected, it did show that the living conditions, socioeconomic and household resources after birth greatly affect child development, and if these are improved through federal, state or local programs Mexican American children may continue their development at a better rate and close the developmental gap with their non-Hispanic white counterparts.

Another NLSY – CD based study, Boardman, Powers, Padilla, Hummer (2002), explored the relative impact of adverse birth outcomes vis-a-vis social risk factors on children’s developmental outcomes. However, the cohort of interest is 6 to 14 year olds, making the results of this study, although important, less pertinent to younger children’s development. Nevertheless, the results of this study, again, imply that low-birth weight (LBW) matters a great deal for the later development of the child. Furthermore, as previously analyzed by Guo (1998), the study stresses that some environmental resources (i.e. maternal education, home environment) outweigh the importance of LBW as predictors of children’s test scores.

The results of the Padilla et. al. study (2002) and Boardman et. al. (2002) strongly suggest that environment counts and that it counts a great deal for poor children’s development. However, the deserved criticism goes in the direction of compromised generalizability. Although research subjects are Hispanic children (Padilla et. al. study),

the results cannot be easily generalized for the whole Hispanic population that lives in poverty. This important acknowledgement has not been properly addressed, and it springs from the limitation of the tests originally used to collect the data. Hill and Sanford (1995) stress this limitation to standardized tests used in big national data sets. All measurement instruments for assessing child abilities need to be better adapted to measure change for a given child, as he or she progresses through childhood (Hill & Sanford, 1995). Boardman et. al. (2002) diminishes the possibility of applying its results to younger children, since they researched children age 6 to 14.

These studies present the impact of poverty on a child's physical health. The other group closely connected with it is psychological and social stress. The two, physical and psychological, are interrelated because acute or chronic illness due to poverty may cause serious psychological or social stresses. "Disease and physical handicaps can also have a negative impact on the social development of children" (Klerman, 1991 p. 146).

Researchers found that poor children have more behavioral problems (Verhalst, Akkerhais, & Althaus, 1985; Werner 1985; Duncan & Gunn, 1997), depression (Gibbs 1986; Elder, Conger, Foster, Ardel, 1992), low levels of self-esteem and social adaptation (Langner, Herson, Greene, Jameson & Goff, 1970; Kellam, Elsminger, & Turner, 1977), as well as increased child abuse reports (Baumrind, 1996).

Poverty, its effect on parenting and young child's social and emotional development

Social and emotional development of children who live in poverty can be affected in many different ways. The direct way of children's social and emotional development being affected by poverty is through the changed social and physical environment in the home. Poverty has been associated with many environmental risks such as unsafe living

conditions and exposure to stress and violence (Shore, 1997). Even for children that are born healthy, if they live in poverty, poverty tends to take its toll, and they start to show decline in motor, mental and socioemotional development (Padilla et. al, 2002; Sroufe, 1995). Their problems include difficulty in self-regulating, and later behavioral problems (Sroufe, 1995). Sroufe (1995) related these problems with negative environmental conditions that are associated with poverty jeopardizing prosocial behavior in children. The reason is that prosocial and altruistic behaviors in children change very quickly for the first 2 or 3 years, and the research has shown that it is during this period of a child's life that he/she is very sensitive to environmental changes (Robinson, Zahn-Waxler, & Emde, 1994).

Parenting behavior has been found to be associated with the development of prosocial behavior in children. Previous literature (Elder, 1974; Chase-Lansdale, Brooks-Gunn & Zamsky, 1994; McLoyd, 1990) shows that poverty has been associated with inadequate parenting. However, these studies included only unemployed parents or single parents and did not focus on the home environment and the provision of learning experiences.

The pathway of poverty affecting children's social and emotional development is complicated. Many times children's social and emotional development is affected from the indirect consequences of poverty such as parental distress. McLoyd and Wilson (1991), reporting on results of a study of children and mothers who received Aid to Families with Dependant Children (AFDC), state that maternal environmental stress and psychological distress were associated with less nurturing parenting which resulted in children exhibiting high levels of distress.

Positive parenting involving several principles that appear to increase the probability of children to exercise prosocial behavior such as provision of clear rules and principles, modeling by the parent, emotional convictions on the part of the parent, etc. (Bronson, 2000), may be in a short supply if a family is affected by poverty. Thus any distress in the parenting habits or parents' personality can and will negatively affect children's social and emotional development. Parental distress is one of the effects poverty has on parents, which in turn indirectly affect children and their social and emotional development. McLoyd (1990) stresses that

because [parents] are more emotionally distressed than their advantaged counterparts, it is not surprising that the capacity of poor parents for supportive, sensitive, and involved parenting is diminished.... Rewarding, explaining, consulting, and negotiating with the child require patience and concentration - qualities typically in short supply when parents feel harassed and overburdened. (p. 323)

Children who experience primarily accepting and loving relationships view the intent of others in a more positive light than the children who experienced a large amount of criticism and rejection. Needless to say, the former tends to be in a short supply when there are accumulated risks in the family, while the latter puts the social and emotional development of children at risk. In poor families children's well-being, physical and/or mental, is always overshadowed with fights about money, family conflicts, abuse and neglect, etc. Furthermore, poverty indirectly influences the home stimulation in a way that parents are not able to provide the verbal stimulation due to their limited education.

Additionally, how young children react to poverty depends a great deal on how their parents react to it, and whether or not they project stress at home. Parental behavior

is one of the chief factors for young children to feel the impact of the economic stress. In poor families the greater the poverty and the risk factors the less maternal warmth (Gunn et al, 1995). As stressed by McLeod and Shanahan (1993), "parental distress is a strong predictor of harsh, unresponsive parenting"(p.358), and such parenting can cause many social and emotional problems with children. Furthermore they say that only being currently poor affects the parental behavior in a way that creates parenting problems. Remaining poor, they say, does not amplify the parental problem. Family interactions apparently stabilize, as poverty persists and the family adapts (McLeod & Shanahan, 1993). Additionally, economically disadvantaged parents may influence the social and emotional development of their children through a more passive mode. This means that due to the additional stresses in their life the climate they create in their home may foster melancholy in a child (McLoyd & Wilson, 1991).

There are many authors (Makosky 1982; Pearlin 1983) who link poor social and emotional development with the economic deprivation, claiming that it is a result of the chronic stress that deprivation creates; the more persistent the poverty the more social and emotional and/or cognitive problems with children have been spotted. Koreman, Miller and Sjastaad (1995), in their "analyses provided evidence that poor nutritional status contributes to impaired cognitive development...[and] have lower scores on tests of cognitive and socioemotional development" (p148). Cognition and emotions in young children are inseparably linked, meaning that one can foster or hinder the other. Gunn, Klebanov, and Liaw (1995), in their study of 704 3-year olds, examined the impact of individual environment and the number of risks on the home environment and its effect on toddlers. Their findings show that the number of risk factors was highly associated

with the less stimulative home environment closely connected with poor families. Risks include biological risks, social and economic, family structural and maternal characteristics. Shortly, poor families were found to have multiple risk factors placing the children in these families at a higher risk of poor achievement. As the number of risks increased, the children's outcomes became poorer. Concluding, they say that family poverty was a strong and significant predictor for the home physical environment, meaning that less stimulative materials were available to poor children which predisposed them to lower outcomes (Gunn, Klebanov & Liaw, 1995).

Furthermore, intergenerational poverty causes low or no education, making poor parents have limited or no knowledge about children's normative development (i.e. when one developmental stage is successfully completed and when the other starts). Consequently, they would be unable to provide the intangible nurturing appropriate for that developmental age. "Recent evidence suggests that unrealistic parental expectations concerning children's normative development abilities may result in ineffective parenting and adverse consequences for children as well as for the parents" (Orme & Hamilton, 1987). The same authors acknowledge that the literature on this may be incomplete or misleading because "knowledge of normative child development is a very broad construct, and the extent to which different scales measure the same construct is unclear" (p.667), and they advise caution when researching the topic and drawing conclusions.

All of the above, the number of direct and/or indirect stressful factors a child encounters in its life, mostly shapes the child's well being. "Poverty forces children to fight a many-front war simultaneously, often without the armors of stable families, adequate health care and schooling, or safe and nurturing communities" (Edelman, 1994).

However, the mere addition of stressors does not explain why poor children experience more troubles than their non-poor counterparts. The feature that adds to the fierceness of the poverty is that the stressors interact in ways that amplify their force. An example for this would be the research done by Sameroff and McDonough (1984), who found that when two or more stressors occurred together, such as being born prematurely and in poverty, the chance of a damaging outcome went up at least fourfold, and when four risks were present, the chances of later damage increased by a factor of ten, stacking the odds against the poor children. "...[P]overty stacks the odds against children before birth, and decreases their chances of being born healthy and of normal birthweight or of surviving, it stunts their physical growth and slows their educational development..." (Edelman, 1994 p. xvi), thus decreasing their chances to compete with their better off counterparts.

Summary

The extent of child poverty in the US has reached proportions that have caught the layperson's eye. Despite the disparity in the percentages of poor children living in the US, some say it is 26% (Knitzer & Lawrence, 1995), and some claim it is 21% (Betson & Michael, 1997; Keefe & McCullagh, 1995) or 20.8% (Baugher & Lamison-White, 1996), the percentage remains very high compared with the other western countries such as Sweden with a 3.5% child poverty rate (Rainwater, 1995). This disparity in numbers mainly springs from the definitions of poverty and which one has been used in the research. Updating the definition of poverty is an issue that needs to be addressed in the US, in order to have one uniform number to work with.

To have the official poverty measure represent the real number of poor people in the U.S. is an important starting point for government agencies to implement new

programs. With 21%, 20.8% or 26% of children living in poverty, those who are interested in social development have a legitimate concern about child poverty.

"All that we have learned about poverty's effects on children leads to one inescapable conclusion: it is essential to [every] nation's moral health and economic future that we eliminate child poverty. Ending child poverty will not be cheap. But I believe that poverty is a lot more expensive in the long run " (Edelman, 1997 p. xxix).

Another problem, which concerns how poverty is fought against in the US, is that all programs aim to eliminate misery, dependency and hopelessness but not income poverty which is more prevalent (Hecl, 1997). Plotnick (1997), also stresses that poverty can be eliminated by helping families earn more, and supplementing low market incomes with other sources of cash.

This leaves a wide-open space for research in the arena of social and emotional development of young children and the many ways it can be affected such as through poverty and poverty influenced parenting practices. Research in this arena is of crucial importance since it needs to supply the numbers and inform about the severity of the problem, thus enabling practitioners and policy creators to target the youngest children in the creation of programs. This research study attempts to fill in the existing gap.

This chapter presented the most important aspects of child poverty and its effects on children's social and emotional development as well as the importance of parenting in the early formative years of childhood. The following chapter describes the research methodology that is used to research the issue of young children's social and emotional development using the NLSY data set as well as sets forth the research hypotheses.

CHAPTER III: Methodology

Introduction

This research study explores the influence of poverty on young children's social and emotional development through parenting using longitudinal data. Therefore, the following chapter describes the methodology that is used in the exploration, the data set used, its background, and the limitations and advantages of the data set. It provides an overview of the tests that are used in the data set, as well as a detailed description of the tests that are pertinent to the proposed study, and reports their internal consistency (Cronbach's Alpha). It further reflects on the use of the data set in child development research. Finally, it sets the research questions and the hypotheses that guide the research.

The data set: National Longitudinal Survey of Youth (NLSY79) and NLSY – Child

Data

Sampling, data collection and data selection procedures

The National Longitudinal Study of Youth (NLSY79) is a Federal data set, one of the nationally representative longitudinal surveys administered by the Bureau of Labor Statistics. The NLSY79 collected data on 12,686 civilian youth aged 14 to 22 in 1979. The data include a nationally representative cross-sectional sample (n = 6,111) and a supplementary sample (n = 5,295) representative of Black, Hispanic and low-income White youths, as well as a military sample (n = 1,280) which was dropped out in 1984, thus broadening the range of analyses that can be done with this data set (NLS Handbook, 2001). It used multistage stratified random sampling, identified through random selection of counties, and enumeration districts – block groups, and then a screening of 75,000 dwellings (Chase – Lansdale, Mott, Brooks-Gunn & Philips, 1991) and oversampled

minorities and poor whites. The sample of poor whites was dropped out in 1990 due to financial issues. The survey had a very high retention rate of above 90% over the subsequent years, and as such it was an excellent opportunity for following the changes in the lives of the original cohort. One of these changes are the 5000 (11,205 in 2000) children born to women respondents sample until the 1980s, presenting an unforeseen opportunity for the researchers. Consequently, the NLSY – Child Data was created and launched as part of the NLSY79 Round 8 in 1986. The NLSY79 data were collected every year, and since 1986 data are collected about the children born to the original respondents of the NLSY79 every two years, thus greatly expanding the breadth of child specific information collected. This new part of the NLSY79, the Child Data contains detailed longitudinal information on health and development outcomes from birth throughout the teenage years for the children of mothers from the original youth cohort (Center for Human Resource Research 1993, 1998). The NLSY – Child Data collected data every two years from 1986 regarding the children of the female NLSY79 respondents and are matched with the data on the mothers from the NLSY79 on a year-by-year basis. The NLSY- CD contains a number of measures that are commonly used in social sciences to assess a range of social, cognitive, and psychological aspects of the children’s development (Boardman, Powers, Padilla, and Hummer, 2002).

The research study uses child and mother data the NLSY79 and Children of the NLSY data from 1998 and 2000. For simplicity, the year 1998 will be referred to as “time 1” and the year 2000 will be referred to as “time 2”. The longitudinal character of the NLSY data coupled with the high retention rate (over 90%), make this data set ideal for researching intergenerational linkages between family behaviors and demographics

and child outcomes. Thus the purpose of the study is to examine the link between family demographics, and behaviors with the social and emotional development of young children. The sampling frame of the study consists of the young children, age 0 to 36 months, of the original female cohort of NLSY79. This age group has been selected for the purpose of solely researching the impact of family behaviors and demographics, such as parenting and poverty, on child's social and emotional development without having the socializing influence of the wider society, i.e. school or preschool. The following criteria were used to select children into the study:

- 1) information was complete in the data set for both time 1 and time 2, and
- 2) the child was reported to live with the mother at time 2.

Additionally, if a mother had more than one child meeting the above criteria (i.e. twins) only one child was randomly selected for the study. These criteria resulted in a final sample size of 148 children.

Mother's data were gathered from the NLSY79 by searching following areas of interest: key variables, common, family background, and income for time 1 and time 2. Child data were gathered from Children of NLSY by searching areas of interest such as child background, family background, maternal household and mother supplements for time 1 and time 2 as well as assessments for the same years.

Limitations of the NLSY and NLSY - CD

By the mere fact that the NLSY – CD springs from the NLSY79, almost the same advantages and limitations apply to the NLSY-CD as well. As with the NLSY79, the NLSY – CD is designed for broad use by social scientists. This unique research opportunity has been labeled atheoretical in nature, and it is on the part of the researcher

to craft hypotheses that can fit the data already at hand (Chase-Lansdale, Mott, Brooks-Gunn, and Phillips, 1991) which is a characteristic that many criticize. The same criticism applies to the NLSY79 as well. The most widely recognized advantages are the longitudinal character of the survey, and the representativeness of the sample, at least the NLSY79. A limitation unique for NLSY – CD is that children do not constitute a nationally representative sample of children due to only sampling the children born to female youths of NLSY79 (Chase-Lansdale et. al. 1991) leaving the children of half of the original cohort not sampled. This subsequent sample loss made later samples less representative. One of the stronger limitations of the NLSY – CD, until the 1994 data collection point, is that the data collected represents only about two thirds of the childbearing years for mothers from the original cohort (CHRR, 1997b), making the data about the older children less representative than the data about younger children. Moreover, even for young children cohort data are representative only for the period in history during which the data were collected (Bradley, Corwyn, McAdoo, and Coll, 2001).

Furthermore, in the years of existence of NLSY79 and based on research done with this data, researchers have identified its weak points. Paradoxically, its weak points are at the same time its strong points as well, and some of them are: “ the greatest strength of the NLS, a vast amount of longitudinal data...is also its great weakness” (p.36) due to the amount of information generated, also since the sample pool is fixed it is not influenced much by the changes in the nation’s demographics (Zagorsky and Gardecki, 1998). Additionally, Zagorsky found out that poorer individuals leave the

survey at a faster rate than wealthier respondents, hindering future analyses of specific problems.

Advantages of the NLSY79 and NLSY-CD

NLSY - CD advantages outweigh its limitations, and the survey is used by the researchers interested in the domain of child development mainly due to the volume of information it generates, the number of people surveyed as well as its representative character. “The availability of comprehensive child data, coupled with longitudinal information on the family background, education, employment histories, and economic well-being of their NLSY79 mother provide researchers with a unique opportunity to examine linkages between maternal – family behavior and attitudes and subsequent child development” (Bureau of Labor Statistics, 2001). Furthermore, the NLS are not static i.e. as the research cohort ages the appropriate surveys are administered (Zagorsky & Gardecki, 1998).

The NLSY – CD and research on child development

Despite all criticism and limitations, the NLSY – CD, with its divisions of the HOME Inventory proved easy to use and generated results that are theoretically validated as well as reliable. Its diverse sample, with over sampled minority groups and poor White people in earlier waves, makes it appropriate to research child development and poverty in any of the represented ethnic groups. Even more so because it connects the child data with the parents data enabling research to link the family trajectories with the developmental outcomes in children.

It has been well researched that children are negatively affected by factors associated with poverty such as low maternal education, poor schools, and household

density, c. (Rutter, 1985; Sameroff, Seifer, Barocas, Zax and Greenspan, 1987). Some of those effects are behavior problems, school failure, physical problems such as low birth weight. The NSLY – CD allows researchers to document such effects across racial groups, or to separate ethnicity from social class (Brooks – Gunn, 1990) due to the overrepresentation of minorities or poor Whites, and the size of the data. However, the data have not been used to craft hypotheses that can be researched with the information available from NLSY – CD, nor the methodology used to research the identified hypotheses has been correctly applied, thus exacerbating the possibility of negative findings. Furthermore, very few studies looked into the social and emotional development of children; mostly physical and cognitive development has been a target of interest because they are easier to measure and are more visible.

Tests used in the NLSY – CD: instrumentation and measures

According to the Bureau of Labor Statistics (2001), a battery of child cognitive, socioemotional, and physiological assessments as well as a variety of attitude, aspiration, and psychological well-being questions have been administered biennially for age appropriate children since 1986. Among these assessments are the Home Observation for Measurement of Environment (HOME) found to be very useful in the assessment of the later cognitive, social, and physical development, a set of Temperament scales, a Behavior Problem Index, the Self-Perception Profile for Children, the Peabody Individual Achievement Test (PIAT) for math and reading recognition, and the Peabody picture Vocabulary test – Revised (PPVT – R). Depending on the age of the respondent the appropriate survey is administered. One of the many advantages of the NLSY79 is that it includes a short form of the HOME Inventory (HOME – SF) as part of the child

supplement (Bradley et.al., 2001). Moreover, there are four versions of HOME: the Infant-Toddler HOME (IT – HOME) for children under the age of three, the Early Childhood HOME (EC – HOME) ages 3 to 5, Middle – Childhood HOME (MC – HOME) ages 6 to 9, and Early Adolescent HOME (EA – HOME) ages 10 to 14. The HOME Inventory is one of the most widely used measures for assessments of the home environment and in respect to that the child development. Above division proved valid and useful to researchers for crafting different hypotheses. All scales have undergone strict validation and standardization before they were employed. Furthermore, research of the HOME inventory has linked it to theoretically relevant parental characteristics such as depression and drug use as well as child status (Bradley, 1994), making the research on different aspects of child development done on the base of this inventory even more valuable.

Reliability of the NLSY - CD tests whose items are used in this study

For this research study, only tests administered to children 0 to 36 months were selected. The HOME – SF, which is a modification of the HOME inventory, is a unique observational measure of the nature and quality of the home cognitive stimulation and emotional support provided by the child’s family (Caldwell & Bradley, 1984). Only the first part of the HOME- SF, HOME A is applicable to the proposed study with all pertinent variables extracted from it and included in the scale. A preliminary analysis on the data set resulted in Cronbach’s Alpha of .55 (n=148) for the items of HOME A.

Furthermore, the temperament scales were developed for the NLSY - CD survey since there was not a single instrument that seemed adequate. The temperament scales (A, B, and C) are based on Rothbart’s Infant Behavior Questionnaire, Campos and Kagan

compliance scale, and other items from Campos (Child and Young Adult Data, User guide, 2000). Items from these scales form a set of maternal-report scales measuring behavioral style over the past two-week period for each child under age three (Young Adult Data, User guide, 2000). Since all three assess children up to age of three, the items in the scales have been extracted as pertinent to this study, and are part of the final variables selected for research. As a result, TEMP A and C have been included, while TEMP B is not pertinent to this study because of lack of children in the age group researched. These TEMP assessments have been criticized the most on their validity and reliability, mainly due to their creation for the needs of the NLSY- CD. Cronbach's Alphas of .66 and .54 were obtained from a preliminary analysis with a sample size of 148 for the TEMP A and TEMP C scales respectively. All of the above scales have a completion rate of above 90% over the years the data were collected.

According to Chase – Lansdale et al. (1991), the strength of the measures in the NLSY – CD is that they cover multiple domains of child development for more than one point of time allowing researchers to examine developmental trajectories in social, cognitive and emotional development. However, they pinpoint several limitations, such as that all of the tests used are subscales or short forms of the original tests. That these tests have compromised reliability was supported in the research of Baker and Mott (1989) who found low internal consistency for some scales and some ages. Additionally, Baydar (1995) criticized the validity and reliability of the temperament scales used in NLSY child assessment and this due to the unavailability of better tests. Another deserved criticism, not addressed in the literature, is that data on child's environment were collected based on the interviewers' observation as well. This was done to validate

the mother-report answers to survey questions as observed by the interviewer. However, anytime data rely on one's observation, an objectivity remark needs to be stressed. Nevertheless, the volume of data (11,205 children and youth and their parents in 2000) and the number of years the same data are collected with basically the same population makes this data set an immense resource for social scientists.

Research questions and hypotheses

This study examines the effect poverty on children's social and emotional development through its effect on parenting. The following research questions and hypotheses were formulated to address the purpose of the study:

Research Question 1: To what extent does poverty have an impact on the social and emotional development of young children?

Hypothesis 1: There is a relationship between poverty and child social and emotional development, meaning that child development is affected by poverty.

Data analysis: A non-directional hypothesis will be tested to determine if the results are consistent with the null hypothesis. A non-directional hypothesis is formulated due to the significance of the result in either direction. Two multiple regression analyses are performed to predict the effect of poverty on social and emotional development raw scores of young children while controlling for other demographic factors (mothers' age, education, child's race and child's gender). First, each point of time, 1998 and 2000, are researched separately, and then social and emotional development raw score of children in 2000 as a dependent variable is researched with the social and emotional development raw score for 1998 as a baseline measure i.e. independent variable entered into the regression equation in addition to the other independent variables.

Research Question 2: To what extent are parents' parenting practices affected by poverty?

Hypothesis 2: Parenting is affected by poverty i.e. parenting practices and style change depending on their economic standing.

Data analysis: The independent variable poverty is added into separate regression equations with the variables about the parenting practices and style raw score for 1998 and 2000 as dependent variables. Additional regression analyses explore the parenting practices for 1998 as a baseline measure i.e. independent variable predicting the change in score for 2000 parenting practices and styles raw score. Variables describing the parenting practices are variables about the meals together, talking to child while workings, spanking, etc. These variables constitute the parenting practices instrument whose raw score (simple summation of items) represents the change in parenting practices. The direction of the relationship was not assumed. The results are analyzed to check the statistical significance of the model, and to determine if the relationship between the independent and dependent variables is consistent with the hypothesis 2.

Research Question 3: To what extent does poverty predict a noticeable change in home environment?

Hypothesis 3: Poverty affects the home environment of children.

Data analyses: A non-directional hypothesis is tested to determine if poverty affects the home environment. The independent poverty variable (which indicates low income and created for the purpose of this data analyses consisting of all cases with value indicating poverty encountered by the family either at 1998 or 2000) was added into a regression equation with the raw scores of the home environment instrument 1998 and 2000 as

dependent variables. An additional regression analysis was performed to test the same hypothesis with 1998 home environment raw score as a predictor for the 2000 home environment raw score. Again, no direction was assumed.

Research Question 4: To what extent does parenting, after controlling for poverty, affect young children's social and emotional development?

Hypothesis 4: It is expected that parenting, over and above the impact of poverty, will have an impact on a child's social and emotional development. However the direction of the impact is not predicted as there may be factors that influence the association.

Data analysis: The variables constituting the parenting practices instrument i.e. its raw scores are added into a regression equation as an independent variable with the variables constituting the children's social and emotional development instrument i.e. its raw scores as a dependent variable. There are two separate regression analyses run for the years 1998 and 2000, and then additional regression analysis predicting the change in social and emotional development raw score in 2000 using the 1998 year as one of the predictors (baseline) in the equation. The results are analyzed to determine the statistical significance of the both models. Results in either direction of the model are significant and no direction has been hypothesized.

Summary

In conclusion, this chapter presented a thorough description of the data set (sampling, data collection and, data selection procedures) with its most pertinent advantages and limitations. Additionally, the research methodology was explained in detail, including the instruments and measures that are applicable to the research study

with their reliability scores, as well as the research questions and hypotheses that guide the research.

The following chapters present the results of the data analyses and their discussion, as well as the implications of this research for social work practice and policy and recommendations for future research.

CHAPTER IV: Results

Data analyses

Descriptive statistics and a correlation matrix are presented for all variables. Hypotheses were tested using regression analyses. There were three regression analyses performed for each research question. Missing data were imputed using the Expectation Maximization Algorithm available in the SPSS 12 package. Additionally, interaction effects were tested as part of the last of regression analysis.

Missing data

One of the strengths of the NLSY and NLSY – CD respectively is the high retention rate of subjects. While over 90% of the original sample was retained over time, attrition occurred and reasons for attrition are not provided in the original data set documentation. Since the current study has two time frames (1998 and 2000), children who did not have a complete survey for both time frames were not included in the study. Only children with complete data for both time frames were analyzed. Some individual likert scale item values were imputed using the Expectation Maximization (EM) method using SPSS 12. However, missing data was not imputed when more than 15% of items within a scale were missing.

Descriptive statistics

Child characteristics: The data set included information on children three and under. While some demographics such as age varied between the two time frames, others were constant such as race and gender. The average child's age was 5 months in 1998 ($SD = 3.37$) and 31 months in 2000 ($SD = 3.33$). Children were 52% ($SD = .50$) female, and 41% ($SD = .49$) minority (i.e. Hispanic or African-American).

Family and parent characteristics: Considerable diversity in variables existed for the family/parent characteristics. As stated earlier the data set is not representative of the U.S. population as a whole. Of 148 families with children under the age of three, 17.6 % had an income below the poverty line at one point in time. This percentage is higher in the general population as a whole, in the neighborhood of 26% for children three years of age and under (Knitzer & Aber, 1995). Consistent with this is the family's average income: \$68,746 for 1998 ($SD = \$49,155$), and \$66,030 for 2000 ($SD = \$52,048$). This is much higher than the national median income of \$43,318 for 2003 (US Census Bureau). Average family size was 4.47 ($SD = 1.58$) family members in 1998 and 4.52 ($SD = 1.38$) family members in 2000. The respondents had an average education of 13.81 ($SD = 2.76$) years in 1998 indicating that the majority of the respondents had finished high school and had some college education, and the same applied for the year 2000 ($M = 13.86$, $SD = 2.8$). The mothers' average age at the birth of child was 35.05 years ($SD = 1.97$). All of the children lived with their mother during both time frames. There were 89% in 1998 ($SD = .32$) and 86% in 2000 ($SD = .34$) of the children who had a father or father figure living with them as well. Table 1 (all tables are attached in the Appendix A) summarizes the descriptive statistics.

Correlations between variables

A correlation matrix exploring the relationship between the variables is presented in Table 2. There was a statistically significant positive relationship between female children and parenting practices 2000 ($r = .257$, $p < .01$), mothers' education and home environment 2000 ($r = .185$, $p < .05$), mothers education and home environment 1998 ($r = .210$, $p < .05$), mothers education and marital status ($r = .238$, $p < .01$), child's age and

parenting practices 1998 ($r = .302, p < .01$), poverty and minority ($r = .256, p < .01$), and mothers marital status and social and emotional development in 1998 ($r = .230, p < .01$).

Poverty was statistically significantly negatively correlated to parenting practices 1998 ($r = -.236, p < .01$), home environment 1998 ($r = -.346, p < .01$), home environment 2000 ($r = -.352, p < .01$), social and emotional development 1998 ($r = -.287, p < .01$), and social and emotional development 2000 ($r = -.169, p < .05$). Minority was statistically significantly negatively correlated with parenting practices 1998 ($r = -.189, p < .05$) and parenting practices 2000 ($r = -.223, p < .05$). There was also a statistically significant negative correlation between the following variables: marital status and poverty ($r = -.309, p < .01$), marital status and minority ($r = -.430, p < .01$), education and minority ($r = -.295, p < .01$), education and poverty ($r = -.413, p < .01$), minority and social and emotional development 1998 ($r = -.231, p < .01$), and minority and home environment 2000 ($r = -.239, p < .01$).

There were many dependent variables that had statistically significant positive relationship. Home environment 1998 and 2000 were statistically significantly positively correlated with parenting practices 2000 ($r = .232, p < .05$) and ($r = .196, p < .05$) respectively. Parenting practices 2000 was statistically significantly positively correlated with social and emotional development 2000 ($r = .333, p < .01$) and parenting practices 1998 ($r = .287, p < .01$). Additionally, statistically significant positive correlations were observed between: home environment 1998 and home environment 2000 ($r = .515, p < .01$), social and emotional development 1998 ($r = .230, p < .05$), social and emotional development 2000 ($r = .199, p < .05$), and home environment 2000 and social and emotional development 2000 ($r = .202, p < .05$). There were no statistically significant

negative correlations observed among the dependent variables in the correlation matrix. Concluding, the dependent variables were intercorrelated in the direction that was theoretically predicted, but their correlation was not high enough to suggest that they were redundant.

Regression analyses

The objective of this study was to identify the predictors (child and/or family/parent characteristics) of impaired social and emotional development in young children living in poverty. In order to investigate this basic research question regression analyses were used. There were four main research questions formulated and each had a single non-directional hypothesis. There were three regression analyses performed for each hypothesis. First, female, minority, child's age, mothers' education and poverty were used as predictors of the dependent variables for 1998. The same regression analysis was done for the dependent variable in 2000. The third regression equation used the same model but added the raw scores for 1998 as an independent variable to predict the change in the raw scores for the dependent 2000 variable. This is the general research approach that was used to test each hypothesis for each research question in this study.

Research Question 1

To what extent does poverty have an impact on the social and emotional development of young children?

Hypothesis: There is a relationship between poverty and child social and emotional development, meaning that child development is affected by poverty. The dependent variable was a 22 item Social and Emotional Scale for 1998 and 27 item Social and Emotional Scale for 2000. Independent variables included in the analysis were: child's

age, female, minority, age and education of mother, and poverty status. Overall there was some support found for this hypothesis. However, that support was evident only for predicting the social and emotional raw scores for 1998. When all variables entered the equation there was a statistically significant effect of poverty on the social and emotional raw scores of children in 1998 ($B = -.275, p < .004$). This part of the regression analysis showed an association between being a minority and the social and emotional development raw scores in 1998 ($B = -.275, p < .034$). The statistical significance between poverty and social and emotional development raw scores disappeared when predicting children's social and emotional raw scores for 2000 ($B = -.116, p < .219$), as well as predicting change in social and emotional raw scores from 1998 to 2000 ($B = -.075, p < .458$). Table 3 presents the results of all three regression analyses.

Research Question 2

To what extent are parents' parenting practices affected by income?

Hypothesis: Parenting is affected by poverty i.e. parenting practices and style change depending on their economic standing. The dependent variable was a 10 item Parenting Scale for 1998 and 2000 with identical items for both time points. The independent variables included in the analyses were: female, minority, child's age and education of mother, and poverty status. The regression analysis showed some support for this hypothesis. Poverty statistically significantly predicted parenting practices raw score for 1998 ($B = -.206, p < .019$). There was also a statistical significant finding between the child's age and parenting practices 1998 ($B = .337, p < .000$) and minority and parenting practices ($B = -.184, p < .030$). However, the replication of the regression analysis for predicting the raw scores for 2000 showed no statistically significant effect of poverty on

parenting practices raw scores ($B = -.086$, $p < .366$), but showed statistically significant results for female children ($B = .288$, $p < .001$) and minorities ($B = -.309$, $p < .001$). In the last regression analysis which predicted change in parenting raw scores from 1998 to 2000, no statistically significant findings were detected between poverty and parenting raw scores for 2000 ($B = -.040$, $p < .680$). It confirmed the previous finding between parenting practices 2000 and females ($B = .255$, $p < .006$), and minorities ($B = -.247$, $p < .012$) plus added the parenting practices raw scores 1998 as a statistically significant predictor of parenting practices raw scores 2000 ($B = .260$, $p < .007$). Table 4 shows the results of all three regression analyses.

Research Question 3

To what extent does income predict a noticeable change in home environment?

Hypothesis: Low income affects the home environment of children. This hypothesis was supported in all three regression analyses performed to test it. The dependent variable was a 12 item Home Environment Scale for 1998 and 2000 with identical items for both time points. There were several independent variables: child's age, female, minority, age and education of mother, and poverty status. The regression equation showed support for this hypothesis. There was a statistically significant relationship between poverty and home environment raw score for 1998 ($B = -.294$, $p < .002$) and 2000 ($B = -.313$, $p < .001$) when the regression was performed separately for the two time points. The third regression analysis predicting change in home environment raw scores from 1998 to 2000 also showed a statistically significant effect ($B = -.184$, $p < .036$). Table 5 presents the results of all three regression analyses.

Research Question 4

To what extent does parenting, after controlling for poverty, affect young children's social and emotional development?

Hypothesis: It is expected that parenting, over and above the impact of poverty, will have an impact on a child's social and emotional development. However, the direction of the impact was not predicted as there may be factors that influence the association. This hypothesis was not supported in any out of the three regression analyses performed when controlled for parenting practices 1998. With all standard variables included in the regression analyses, plus the independent variable parenting practices raw scores 1998, there was no statistically significant effect on the children's social and emotional development raw scores for either time point when analyzed separately: 1998 ($B = -.002$, $p < .980$), 2000 ($B = -.008$, $p < .938$), nor when predicting change from 1998 to 2000 ($B = -.021$, $p < .832$). Furthermore, parenting practices raw scores 1998 entering the equation only confirmed the statistically significant effect of poverty status on the child's social and emotional development raw scores in 1998. This association remained stable, as shown in research question 1 ($B = -.273$, $p < .005$). Minority also showed a statistically significant relationship with social and emotional development raw scores in 1998 in this model ($B = -.199$, $p < .030$). Further regression analyses did not show any statistically significant effects predicting change in children's social and emotional development raw scores for 2000 even when social and emotional development raw scores 1998 were added as predictor variables to the previous regression analyses ($B = .109$, $p < .264$). A summary of the results can be seen in Table 6.

Interaction effects

Regression analyses were conducted to test interaction effects. Two variables were created and included in a linear regression predicting social and emotional development. The first variable was a product of poverty and parenting practices in 1998. The second variable was a product of poverty and home environment in 1998. Each variable was added to the list of predictors in two separate regression analyses. Both of these analyses resulted in no statistically significant findings for interaction effects.

Summary

Chapter IV presented the results of the data analyses in this research study. It explained the method of replacing missing data, and proceeded with the presentation of results. Descriptive statistics were presented for the child and family/parent characteristics. A correlation matrix showed the intercorrelations between variables. The principal data analyses were regression analyses where each research question asked tested the hypothesis assumed. Interaction effects were tested using linear regression.

The next chapter presents the discussion of results in regard to demographics, correlations and each research question with the stated hypothesis, and pinpoints the strengths and the weaknesses of the research study. It proceeds with the implications this study has on social work research and policy, and suggests future research.

CHAPTER V: Discussion

Introduction

This chapter includes a discussion of results, their interpretation as pertinent for each research question, and their fit with the theoretical framework used. This chapter presents the strengths and weaknesses of this research study as well. Furthermore, it discusses the implications of this research study for social work practice and policy, and suggests the direction and improvements needed for future research in this area.

Discussion

This research study primarily explored the effect of poverty on young children's social and emotional development, and then looked into the effect of poverty on parenting practices in connection with the children's social and emotional development. There were four research questions explored, each with one non-directional hypothesis. While the main goal was to explore the research question stated above, the research study proceeded with testing the role of longitudinal data in the research of early life's social and emotional development. Each of the hypotheses was tested as a "snap-shot" analysis for the two time frames separately and as a "motion-picture" for the both time frames simultaneously. This was done in order to test the consistency of the results and the conclusions that can be drawn from the same. The descriptive study, correlation matrix and regression analyses painted the following picture.

The subjects in this research study had different demographics than the general public due to the fact that data were collected from a pre-existing sample of mothers, and not a randomly selected sample of children. The mother's age at the birth of child was much later, 35.05 years, than in the general population (mid 20's). The sample of children

in this study is much more ethnically diverse with 41% of the children being minority. Most of the parent respondents in this research study were highly educated people with much higher annual income than the general population. The poverty rate in this study was below the national average for the age group investigated, thus making this sample not nationally representative and hindering the generalization of the findings.

The correlation matrix showed a statistically significant relationship between variables in the expected direction. Poverty was statistically significantly negatively correlated with parenting, home environment and social and emotional development for each time frame. However, more than one variable needs to be taken into account when exploring the effect of poverty on the dependent variables. In order to take into account and control for the variables that may influence the association, regression analysis was used.

As stated earlier, most of the studies that research the influence of poverty on child's development use a static approach researching the association at only one point in time. Although seen as a shortcoming and criticized by many, this approach prevails. This research study attempted to bridge this gap and tested longitudinal data in connection with the young children's social and emotional development in poverty taking into account several variables that may influence the association. As shown in many "snap-shot" studies and confirmed by this research study, poverty had a statistically significant effect on child's social and emotional development, on parenting practices, and home environment, when only at one point in time was analyzed. From these results, one might establish a connection between poverty and the above mentioned dependent variables.

In order to establish a more firm connection, these findings need to be replicated year after year, and remain stable when the previous years are used as a baseline to measure changes in results. This research study did not establish any association between the main independent variable (poverty status) and the dependent variables (social and emotional development, home environment, and parenting practices) while controlling for several other independent variables (child's age, minority, female, mothers' education and age) when predicting change in the dependent variables. All of the statistically significant levels observed with the "snap-shot" method, disappeared when the "motion-picture" method was applied. There were only few statistically significant levels that remained. For example, the female children and minority children predicted parenting practices in 2000 while controlling for parenting practices in 1998. Out of the four main hypotheses, only one was supported in all three sets of regression analyses. Poverty predicted a negative home environment in 1998 and in 2000 and also predicted a negative change in home environment across the two years. Poverty status is a good predictor of home environments for both years no matter the method of analysis used.

Testing the influence of poverty status on parenting practices 1998, the statistical significance between these variables was observed only when predicting the parenting practice in 1998 separately. This statistical significance did not sustain itself in the following two analyses: to predict parenting practices in 2000, and to predict the change in parenting practices scores from 1998 to 2000. To attribute the change in parenting practices due to poverty in 1998 would be a premature conclusion since this association may have been more influenced by the other independent variables controlled in the study. These variables are: age of child, female and minority, and they have a statistically

significant association with parenting in the subsequent analyses. Age of child had an association with parenting practices in 1998. Child's gender (i.e. female) and race (i.e. minority) have a stronger association with parenting practices in 2000 and when controlling for change in 2000, although minority had an association with parenting practices 1998 as well. Therefore, while the association existed for the analysis of parenting practices in 1998 it is not solely the influence of poverty that caused the association. Age of child had statistically stronger association with parenting practices. For the following analyses, female and minority seemed to have more of a defining effect on parenting practices than poverty status.

The main research question exploring the association between poverty status and the social and emotional development was not supported in any instance when change in 2000 was predicted using 1998 as a predictor. While this association was very strong for the "snap-shot" analysis for 1998, the "motion-picture" analysis did not show any association. There may be several explanations for this. First, the age of the children changes, consequently the instrument gathering data on older child's social and emotional development was different. The reliability of the answers between these two groups is low since they answered completely different questions. Some authors (Baydar, 1995) even go so far to state that it is very difficult or even next to impossible to measure the social and emotional development of children at such a young age. Tests measuring social and emotional development of young children have been widely criticized as unstandardized and with low reliability. Furthermore, besides the resources (i.e. demographic variables) controlled for in the regression equation there may have been other resources available and/or useful to children and parents that helped define

children's social and emotional development as well as parenting practices. Some of those resources may have been interaction with siblings, extended family, etc., and any of them could have had an influence on the family life. Data on these types of resources were not available in the NLSY – CD set.

Concluding, as stated earlier in the literature review, the theorists (Elder & Caspi, 1988) speculated that the time spent in poverty matters in a way that family members become accustomed to poverty conditions. According to them they become more resilient making the detrimental effects of poverty on their development not that visible in the following years. While this would be seen as a justification for the “snap-shot” research on poverty, using longitudinal data to research the issue still presents a much clearer picture on the long term effects of poverty on children's lives.

Theoretical framework

This research study is unique in that it uses social and human capital theory to explain the social and emotional development of children three years of age and under using longitudinal data. This was accomplished by using the parenting practices as social and human capital available to young children at two time frames. By applying this theory, this study not only investigated the relationship between parenting and social and emotional development of children, but also investigated the cumulative effect of parent's resources on their parenting skills, and their indirect impact on children's social and emotional development early in life. Although somewhat useful, the social and human capital theory could only partially explain the effect of poverty on parenting practices and thus indirectly its effect on children's social and emotional development. Other resources

may have a deeper impact on parenting as social capital and may have stronger association with children's social and emotional development early in life.

Strengths of the current study

Most of the strengths of this study spring from the data set used to research the issue, and these are presented earlier in this study. Other strengths that became apparent during the envisioning and completion of this research study are as follows:

1. The theoretical framework of social and human capital that has been applied to research the association between poverty, parenting and other research variables and children's social and emotional development is still at its formation when applied to issues different than economics. The current study adds to the pool of studies in humanitarian disciplines that use a predominantly economic construct to explain the association between social constructs.
2. The chosen data set (NLSY79 and NLSY – CD) used in this research study is a step forward toward the usage of longitudinal data in social and humanitarian sciences.
3. A unique aspect of this study is the age of the research subjects. Children up to age three have rarely been used to research the issue of social and emotional development, especially in connection with issues such as poverty. The novelty of this is multiplied by the fact that this study used more than one point in time to research young children's social and emotional development.

4. And last but not least are the statistical methods applied in this study.

While regression analyses are quite common statistical procedures in social work research the comparison between the “snap shot” regression analyses (i.e. analyses of data for each year separately), and “motion picture” regression analyses (i.e. when one point in time is used as a baseline to control for the starting point), is a fairly new approach. The novelty is enhanced by the fact that no one study used the both approaches at the same time. This allows comparing the results between the two approaches, testing the set hypotheses, and confirming whether the results remain stable when controlling for baseline data. This adds to the much deserved criticism of interpreting results and establishing relationships between variables based on “snap-shots” analyses.

Limitations and weaknesses of the current study

This research study has several limitations that were identified prior to the data analyses and were mentioned in the section of the strengths and weaknesses of the data set. There are several additional weaknesses:

1. The data were collected every two years. More frequent observations (e.g. every six months) would have provided more accurate and complete information especially since children develop quickly early in life.
2. While the attrition rate was relatively low, the reasons for attrition are not provided. As a secondary data analysis, this research study cannot make assumptions regarding the reasons for attrition, or recommend solutions to the attrition problem.

3. Low reliability of the instruments used to measure the constructs of social and emotional development of young children at both time frames.
4. Because of the overwhelming amount of data available to researchers in the NLSY79 data set, and despite the careful data extraction, some variables may have been overlooked as valid predictors of social and emotional development in young children.
5. Stratified random sampling was used in the NLSY79 data set and is nationally representative. However, the subset chosen for this study consists of children born to mothers from the original sample who are at a certain age. Therefore, this subset may constitute a convenient sample with compromised representativeness.
6. Mothers' age is also a limiting factor since older mothers' age may imply higher education, better financial standing, and/or more parenting experience. Since the original survey is closed for new respondents and only the cohort that entered the survey in 1979 continues to be surveyed, in the coming data collection waves there will be fewer new mothers and young children due to the aging cohort. This will limit and/or prevent the research on children in the age group researched in this study. In this study, the mean age of mothers at the birth of child is 35.05 years.
7. Only 148 children were available for analysis in the age group under consideration in this study. A higher number of research subjects would render better generalizability.

Suggested future research

The current study identifies the direction of several improvements needed in the research of social and emotional development of young children. The discussion of the limitations and weaknesses of this study suggest the direction that needs to be taken for an ideal study.

Consequently, improvements are needed to simplify the data gathering as a whole and the data set used in this research. A general suggestion that applies to both is that the survey instruments used to research the issue are in need of improvement. One way of eliminating childhood poverty, is to create targeted measures or policies that will deal only with childhood poverty, and not disrupt the other aspects of their family life (Hill & Sandfort, 1995). Tests measuring the construct must first be improved. Second, tests should closely target the youngest children. This will elicit better data and the creation of better-targeted measures. While some of the data sets, such as NLSY, provide great opportunity for research, most of the studies neglect the important aspects of children's lives. For example, they do not research the social and emotional development of young children, or it is ethnically limited. Due to the young age of the research subjects, these instruments lack the much needed internal consistency, as evidenced in low alpha reliability scores. Therefore, more reliable instruments need to be developed. Second, more longitudinal type of research is necessary. Also, the data collection times need to be closer together as child development, either physical or social and emotional, occurs rapidly in the first years of life. Valuable research information has been lost because of the distance in time between data collection points. Events possibly affecting development may not have been observed. Closer time frames will enable more precise

data collection thus enabling researchers to draw conclusions based on certain life defining events.

Additionally, the method of selecting research subjects and the number of research subjects is of an utmost importance in order to draw conclusions for the general population. A random sampling of subjects and a larger number of subjects (500 to 600) will enable researchers to conduct studies with much more statistical power, enabling them to draw conclusions with greater certainty.

Furthermore, child development needs to be studied for a longer time period. The research needs to continue beyond the age of three, and possibly into the school years, so that more firm conclusions on child development and the impact of early childhood poverty and parenting can be established.

Implications for social work practice and policy

The social and emotional development of children at such a young age has been rarely considered in social work practice and policy. Clearly there is more research needed to help understand the resilience of social and emotional development in young children and the factors that facilitate the same. The research on this development can find a further use in the policy and practice implementations. However, the research in this area is so scarce and limited for use that drawing definite conclusions on the base of it makes its implementation in social work policies and practices impractical. This research study stressed the importance of reliable data over time and added to the consideration of adequate parenting in child development in poverty situation. Based on the limited research available only few suggestions can be made at this point.

On a family level, understanding the causes of impaired social and emotional development in young children may help in creating policies and/or programs that will alleviate them. This would further help family members create parenting skills to better respond to the social and emotional needs of young children.

On an agency level, while there has been some consideration given to the social and emotional development of young children as part of their mental health in the adoption and foster care process, the policies regulating these processes can profit from better research in this area. Understanding the causes of impaired social and emotional development can help in matching adoptive and foster care parents to young children and train them to understand the causes of impaired social and emotional development. Furthermore, understanding these causes will help in tailoring better parenting support system for the adoptive and foster parent after the initial matching. Case workers need to be trained to respond to the social and emotional development issues of children and their foster and/ adoptive families. Social work agencies should try to place children with known social and emotional problems with more experienced foster parents or place them for adoption in families that have previous parenting experience. This will make the foster care and adoption system more effective and the foster/adoptive parents more knowledgeable and successful in dealing with certain social and emotional development issues with young children. Furthermore, it will help children's further social and emotional development if their needs are understood and keep them from having multiple placements and disruptions in their lives.

A general suggestion for implementing the research findings in social work practice is to bridge the gap between the scientific publications and the availability of the

same to the general practitioners. This will enable case workers to be up to date on the latest findings in social work research and adjust the agency practices/policies accordingly.

Finally, to decrease the number of poor children in the U.S., will call for a complete reform of the social welfare system and a redirection of funding toward the mitigation of poverty. The change has to be enforced simultaneously in the government and in the general public if some results are to be seen in the near future. Finally, whatever changes are implemented in the US to alleviate poverty, expectations should be kept realistic, if not modest, due to the limited policy agenda that can be attempted.

Summary

As the number of young children living in poverty continues to climb a better understanding of how poverty affects their social and emotional development is necessary. By exploring the effect of poverty on parenting practices and its effects on child's social and emotional development this study has attempted to add to this understanding. This study has shown that "snap-shot" and "motion-picture" analyses paint a different picture of the same issue even while using the same data. Additionally, it tried to provide an insight into the strengths as well as limitations of using longitudinal data to research young children's development. Clearly, this study is not the final chapter in the research of children's social and emotional development using longitudinal data. Further research may establish firmer relationship between poverty, parenting and young children's social and emotional development.

BIBLIOGRAPHY

- Angell, M. (1993). Privilege and Health - What is the connection? *New England Journal of Medicine*, 329 (p.126-127).
- Augustiniak, Sue, Greg J. Duncan, and Jeffrey K. Liker. (1985). Income dynamics and self-conception: Linking theory and methodology in models of change. In *Life Course Dynamics: Trajectories and Transitions 1968-80*. Edited by G.H. Elder, Jr. Ithaca, NY: Cornell University Press (p.239-66).
- Baker, P. C. & Mott, F. L. (1989). *NLSY Child Handbook 1989*. (Columbus: Ohio State University, Center for Human Resource Research)
- Bane, Mary Jo & David T. Ellwood. (1986). Slipping in and out of poverty: The dynamics of spells. *Journal of Human Resources* Vol. 21 (p.1-23).
- Baron, S., Field, J., & Schuller, T., (2000). *Social Capital: Critical Perspectives*. Oxford: Oxford University Press.
- Baughen, E. & Lamison-White, L. (1996). *Poverty in the United States: 1995*. U.S. Bureau of the census, Current Population Reports, P-60, no. 194. Washington DC: U.S. Government Printing Office.
- Baydar, N., (1995). Reliability and Validity of Temperament scales of the NLSY Child assessments. *Journal of Applied Developmental Psychology* Vol. 16 339-370
- Betson M. David & Michael T. Robert, (1997). Why so many children are poor. *The Future of Children: Children and Poverty* Vol. 7 No. 2 Summer/Fall 1997
- Blau, D.M., (1999), The effect of income on child development. *The review of economics and statistics*. 81(2), 261-276

- Boardman J.D., Powers, D.A. Padilla, Y.C., Hummer, R.A. (May 2002). Low Birth weight, social factors, and developmental outcomes among children in the United States. *Demography*, Vol. 39 p. 353-368.
- Bradley, R. H., (1994). The HOME Inventory: review and reflections. *Advances in Child Development and Behavior*, ed. H.Reese, pp. 241-288.
- Brooks-Gunn, J. & G.J. Duncan(1997) The effects of poverty on children and youth. *The future of children* 7(2), 55-71
- Brooks-Gunn, J., G.J. Duncan, & Maritato, N., (1997). Poor families, poor outcomes: The wellbeing of children and youth. In *Consequences of growing up poor* by Duncan and Brooks-Gunn (1997). Rusell Sage Foundation, New York.
- Castle, E. N., (2002). Social Capital: An Interdisciplinary Concept. *Rural Sociology* 67 (3) pp. 331-349
- Chase-Lansdale, P.L., Brooks-Gunn, J. & Zamsky, E.S. (1994). Young African American multigenerational families in poverty: Quality of mothering and Grand-mothering. *Child Development*, 65 373-393.
- Chase-Lansdale, P.L., Mott, F.L., Brooks-Gunn,J., & Phillips, D.A. (1991). Children of the National Longitudinal Survey of Youth: A unique Research Opportunity. *Developmental Psychology* Vol. 27. No. 6 p. 918 – 931
- Coleman, J., (1988). Social Capital in the creation of human capital. *American Journal of Sociology*, Vol. 94 S.95-120
- Connors, C. K. & Blouin, A. G. (1982/83). Nutritional Effects on Behavior of Children. *Journal of Psychiatric Research* Vol. 17 No. 2 (p. 193-201).

- Corcoran, E. M. & Chaudry, A. (Summer/Fall 1997). The dynamics of childhood poverty. *The Future of Children: children and Poverty*. Vol. 7 No. 2 (p. 40-54).
- Corcoran, M., Gordon, R., Laren, D., & Solon, G. (1992). The association between men's economic status and their family and community origins. *Journal of Human Resources* Vol. 27 No.4 p. 575 - 601
- Cox, E., (1996). Beyond Economics: The building of social capital. *Refractory Girl*, Issue 50
- Devine, J. A., Plunket, M. & Wright, J. D. (1992). The chronicity of poverty: Evidence from the PSID, 1968-1987. *Social Forces* Vol. 70 (p.787-812).
- Duncan, Greg J. (1991). The economic environment of childhood. In Huston, A. (Ed.) *Children in poverty: Child development and public policy*. Cambridge University Press, Cambridge.
- Duncan G. J. & Brooks-Gunn, J. (1997). *Consequences of growing up poor*. New York: Russell Sage Foundation
- Edelman, M.W., (1994). Introduction in *Wasting America's Future: The children's defence fund report on the costs of child poverty* by Sherman, A. Beacon Press, Boston.
- Elder, G.H. (1974). *Children of the great depression*. Chicago: University of Chicago press.
- Elder, G.H. Conger, R.D., Foster, E.M., & Ardel, M. (1992). Families under economic pressure. *Journal of Family Issues*, Vol. 13 (p. 5-37).
- Elder, Glen H. Jr., & Avshalom Caspi. (1988). Human Development and Social Change: An emerging perspective on the life course. In *Persons in Context: Developmental processes*, edited by N. Bolger, A. Caspi, G. Downey, and M. Moorehouse.

- Cambridge England: Cambridge University Press (pp.77-113). Psychological Factors of Poverty (p.185-209).
- Gibbs, J. T. (1986). Assessment of depression in Urban adolescent females: Implications for early intervention strategies. *American Journal of Social Psychiatry*. Vol. 6 p. 50 - 56
- Goldstein, N., (1990). Explaining socioeconomic differences in children cognitive test scores, John F. Kennedy School of Government, Harvard University, January.
- Gunn, J., Klebanov, P.K., & Liaw, F. (1995). The Learning, physical and emotional environment of the home in the context of poverty: The infant health and development program. *Children and Youth Services Review* Vol. 17 Nos. 1/2 pp. 251-276.
- Guo, G. (1998). The timing of the influences of cumulative poverty on children's cognitive ability and achievement. *Social Forces* 77, 257-288.
- Haggerty, R. (1988). Behavioral pediatrics: A time for research. *Pediatrics*, Vol.81
- Harrington, M. (1964). *The Other America*. The Macmillan company, New York.
- Heclo, H. H. (Summer/Fall 1997). Values Underpinning Poverty Programs for Children. *The future of Children: Children and Poverty*. Vol. 7, No. 2 (pp.141-149).
- Hill, M. & Sanford, J. (1995). Effects of childhood poverty on productivity later in life. *Children and Youth Services Review* Vol. 17 (p. 91-126).
- Huston, A. (1991). *Children in poverty: Child development and public policy*. Cambridge University Press, Cambridge.

- Knitzer, J. & Lawrence J. Aber (April 1995). Young Children in Poverty: Facing the facts. *American Journal of Orthopsychiatry* 65 (2).
- Jones, D.Y., Nesheim, M., & Habicht, J. P. (1985). Influences in child growth associated with poverty in the 1970s: An examination of HANESI and HANESII, cross-sectional US national surveys. *The American Journal of Clinical Nutrition*,
- Keefe, T. & McCullagh, J. G. (1995). Child Poverty: A "Fair Deal" for Children". *Social Development Issues* Vol. 17 (1) (p. 87-97).
- Kellam, Sheppard., Margaret Ensminger, & R. Jay Turner. (1977). Family structure and the mental health of children. *Archives of General Psychiatry* Vol: 34(p.1012-22).
- Kessler C. R. (1987). Intervening processes in the relationship between unemployment and health. *Psychological Medicine* Vol. 17 (p.949-61).
- Klerman L. V. (1991). The health of poor children: Problems and programs, pp.136 -157. Huston, A. (Ed.). *Children in poverty: Child development and public policy*. Cambridge University Press, Cambridge.
- Korenman, S., & Miller, J.E. (1997). Effects of long term poverty on the physical health of children in the National Longitudinal Survey of Youth. See Duncan & Brooks-Gunn, 1997 p. 70-99
- Korenman, S., Miller Jane E., & Sjaastad John E., (1995). Long-term poverty and child development in the United States: Results from the NLSY. *Children and Youth Services Review*, Vol.17., Nos 1/2, pp. 127 -155.
- Langner, Thomas S., Joseph Herson, Edward L. Greene, Jean d. Jameson, & Jeanne A. Goff. (1970). *Children of the city: Affluence, Poverty and Mental Health*. In V. Allen (Ed.), *Psychological factors in poverty* (pp.185 -209). Chicago: Markham.

- Makosky, V. P. (1982). Sources of Stress: Events or Conditions?. In *Lives in Stress: Women and Depression*, edited by D. Belle. Beverly Hills, CA: Sage (p.35-53).
- Markides, S. K., & Coreil, J. (1986). The health of Hispanics in the Southwestern United States: An Epidemiologic Paradox. *Public Health Reports*, 101, 253-265.
- Martorell, R., & Ho, T. J., (1984). Malnutrition, morbidity, and mortality. Population and development review. *Child Survival: Strategies for Research* 10(suppl.) p.49-68
- McLeod D. J. & Shanahan J. M., (June 1993). Poverty, Parenting and Children's Mental Health. *American Sociological Review* Vol: 58 (p.351-366).
- McLoyd, V. C. (1990). The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development. *Child Development* Vol. 61 (p.311-46).
- McLoyd, V.C. & Wilson,L. (1991). The strain of living poor: Parenting, social support, and child mental health. In A.C. Huston (Ed.), *Children in Poverty* (p.105 – 135) New York Cambridge
- Mead, L.M., (September 1994). Poverty: How little we know, *Social Service Review*. Vol.72.
- Miller, J.E., & Korenman, S. (1993). Poverty, nutritional status, growth, and cognitive development of children in the United States. Office of Population Research, Princeton, NJ: Princeton University.
- National Center for Children in Poverty. (2001). <http://www.nccp.org>
- National Center for Health Statistics. (1991). Births, marriages, divorces and deaths for 1990. *Monthly Vital Statistics Report*. 39 (12) (DHHS Pub. No. [PHS]91-1120). Hyattsville, MD: Public Health Service.

- Orme, J. G. & Hamilton, M. (1987). Measuring parental knowledge of normative child development. *Social Service Review*, 61, 655-669.
- Padilla, Y.C., Boardman, J.D., Hummer, R.A., & Espitia, M. (March 2002). Is the Mexican American "Epidemiologic Paradox" advantage at Birth maintained through early childhood. *Social Forces*. Vol. 80 (3) p. 1101 – 1123
- Parnes, H.S. (February 1972). Longitudinal Surveys: prospects and problems. *Monthly Labor Review*.
- Parcel, T. L. & Menagham, E. G., (1994b). Parents' job and children's lives. New York: Aldine.
- Pearlin L. I., Morton A. Liberman, E. G. Menaghan, and Mullan, J. T. (1981). The Stress process. *Journal of Health and Social Behavior*. Vol.22 (p.337-56).
- Pearlin, L. I. (1983). Role Strains and Personal Stress. In *Psychological Stress*, edited by H.B. Kaplan. Orlando, FL. Academic Press (p. 3-32).
- Plotnick, R. (1997). Child Poverty can be Reduced. *The Future of Children: Children and Poverty*. (p.72-88).
- Pollitt, E. (1988). Developmental Impact of Nutrition on Pregnancy, Infancy and Childhood: public Health Issues in the United States. In Norman W. Bray (Ed.) *International Review of Research in Mental Retardation*, Academic Press Vol.15 (p.52-58).
- Robinson, J.L., Zahn, Waxler, C., & Emde, R. (1994). Patterns of development in early empathetic behavior: Environmental and child contributinal influences. *Social Development* Vol. 3 pp. 125-145.

- Rutter, M. (1985). Family and School influences on cognitive development. *Journal of Child Psychology and Psychiatry*, 26, 683-704.
- Sameroff, A. J., & McDonough, S. (1984). The role of motor activity in human cognitive and social development. In E. Pollitt & P. Amante (Eds.), *Energy intake and activity* (pp. 331-353). New York: Alan R. Liss.
- Sameroff, A. J., Seifer, R., Barocas, R., Zax, M. & Greenspan, S. (1987). Intelligence quotient scores of 4-year-old children: Social-environmental risk factors. *Pediatrics*, 79, 343-350.
- Sherman, Arloc (1994). *Wasting America's Future: Children's Defense Fund Report on the Costs of Child Poverty*. Boston: Beacon Press
- Sharp, J.S. (2001). Place, social structure, and culture: a review essay on community. *Rural Sociology* Vol. 66 (p. 137 – 142).
- Shonkoff J.P., & Phillips D.A., (2000). *From Neurons to Neighborhoods: The science of early childhood development*. Washington DC. National Academy Press.
- Shore, R. (1997). *Rethinking the brain: New insights into early development*. New York: families and Work Institute.
- Sroufe, L.A. (1995). *Emotional development: The organization of emotional life in early years*. Cambridge, UK: Cambridge University Press.
- Takeuchi, D.T., Williams, D.R., & Adair, R.K. (1991). Economic Stress in the family and children's emotional and behavioral problems. *Journal of Marriage and Family*. Vol. 53 p.1031-1041.

- Thompson, T. (1992). For the sake of our children: Poverty and disabilities. In Saving Children at Risk. Ed. Thompson Travis & Hupp, C. Susan. Sage Publications, Newbury Park, CA.
- U.S. Bureau of the Census. (1999a). Poverty thresholds.
www.census.gov/hhes/poverty/threshld.html (August 2000)
- U.S. Bureau of the Census. (1999b). 1999 Poverty statistics.
www.census.gov/hhes/poverty99/pov99hi.html
- Verhalst, Frank C., Gerard W. Akkerhuis, & Monica Althaus (1985). Mental Health in Dutch Children: A cross-cultural comparison. *Acta Psychiatrica Scandinavica* Vol. 42 (p. 714-724).
- Werner, E. E. (1985). Stress and Protective Factors in Children's Lives. In *Longitudinal Studies of Child Psychology and Psychiatry*, edited by A.R. Nicol. New York: Wiley & Sons. (p. 335-55).
- Williams, L. B. (January 1994). Essay: Reflections on Family Poverty. *Families in Society: The Journal of Contemporary Human Services*.
- Zagorsky, J.L., & Gardecki, R. (1998). What have researchers learned from the national longitudinal surveys? *Journal of Economic and Social Measurement* Vol. 25 p. 35-57

APPENDICES

Appendix A: Tables

Table 1: Descriptive statistics

| | n | Minimum | Maximum | Mean | SD |
|---|----------|----------------|----------------|-------------|-----------|
| Age of child 1998 | 148 | 0 | 15 | 5.64 | 3.379 |
| Age of child 2000 | 148 | 24 | 36 | 31.00 | 3.33 |
| Female | 148 | .00 | 1.00 | .5203 | .50129 |
| Minority | 148 | .00 | 1.00 | .4189 | .49506 |
| Age of mother at childbirth | 148 | 32 | 40 | 35.50 | 1.971 |
| Education 1998 | 148 | 5 | 20 | 13.81 | 2.761 |
| Education 2000 | 148 | 5 | 20 | 13.86 | 2.801 |
| Happily married | 148 | .00 | 1.00 | .8041 | .39827 |
| Father of child live in household 1998 | 148 | 0 | 1 | .89 | .320 |
| Father of child live in household 2000 | 148 | 0 | 1 | .86 | .343 |
| Family size 1998 | 148 | 2 | 11 | 4.47 | 1.588 |
| Family size 2000 | 148 | 2 | 11 | 4.52 | 1.382 |
| Poverty | 148 | .00 | 1.00 | .1757 | .38184 |
| Parenting 1998 | 138 | 13.00 | 36.00 | 29.00 | 4.13930 |
| Parenting 2000 | 123 | 21 | 34 | 29.06 | 2.56217 |
| Home Environment 1998 | 129 | 17.00 | 32.00 | 26.4409 | 2.67785 |
| Home Environment 2000 | 129 | 17.82 | 32.00 | 28.7952 | 2.85193 |
| Social and Emotional 1998 | 133 | 56.00 | 84.00 | 71.5676 | 6.25456 |
| Social and Emotional 2000 | 138 | 56.00 | 98.00 | 81.5147 | 7.83466 |

Table 2: Correlation matrix (n=148)

| | Parenting 1998 | Parenting 2000 | Home environment 1998 | Home environment 2000 | Emotional and Social 1998 | Emotional and social 2000 | Poverty 1998 and 2000 | Age of child | Minority | Female | Happily married | Mother's education |
|---------------------------|----------------|----------------|-----------------------|-----------------------|---------------------------|---------------------------|-----------------------|--------------|-----------|--------|-----------------|--------------------|
| Parenting 1998 | | | | | | | | | | | | |
| Parenting 2000 | .287(**) | | | | | | | | | | | |
| Home environment 1998 | 0.18 | .232(*) | | | | | | | | | | |
| Home environment 2000 | 0.11 | .196(*) | .515(**) | | | | | | | | | |
| Emotional and Social 1998 | 0.10 | 0.18 | .230(*) | 0.18 | | | | | | | | |
| Emotional and Social 2000 | 0.06 | .333(**) | .199(*) | .202(*) | 0.13 | | | | | | | |
| Poverty | -.236(**) | -0.08 | -.346(**) | -.352(**) | -.287(**) | -.169(*) | | | | | | |
| Child's age | .302(**) | -0.04 | 0.06 | -0.07 | 0.00 | 0.06 | 0.00 | | | | | |
| Minority | -.189(*) | -.223(*) | -0.15 | -.239(**) | -.231(**) | -0.09 | .256(**) | 0.13 | | | | |
| Female | -0.01 | .257(**) | -0.08 | -0.14 | -0.07 | 0.06 | 0.05 | -0.09 | 0.08 | | | |
| Happily married | 0.05 | 0.15 | -0.05 | -0.08 | .230(**) | -0.06 | -.309(**) | 0.08 | -.340(**) | -0.03 | | |
| Mother's Education | 0.09 | -0.10 | .210(*) | .185(*) | 0.06 | 0.15 | -.413(**) | 0.00 | -.295(**) | -0.15 | .238(**) | |
| Mother's Age | -0.01 | 0.05 | 0.06 | 0.07 | 0.08 | 0.05 | -0.05 | -0.03 | 0.08 | -0.15 | -0.11 | -0.10 |

(*) $p < .05$; (**) $p < .01$; (***) $p < .001$

Table 3: Regression Analyses predicting social and emotional development at two points in time and change in social and emotional development across time

| | Social and Emotional 1998 (n = 133) | | | | | Social and Emotional 2000 (n = 138) | | | | | Change in Social and Emotional from 1998 to 2000 | | | | |
|---------------|-------------------------------------|------------|-----------|--------|------|-------------------------------------|------------|-----------|--------|------|--|------------|-----------|-------|------|
| | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p |
| | B | Std. Error | | | | B | Std. Error | | | | B | Std. Error | | | |
| constant | 71.974 | 10.981 | | 6.554 | .000 | 62.608 | 14.274 | | 4.386 | .000 | 51.488 | 17.364 | | 2.965 | .004 |
| S&E1998 | n/a | | | | | n/a | | | | | .113 | .119 | .090 | .945 | .347 |
| Age of child | .003 | .166 | .001 | .016 | .987 | .170 | .200 | .073 | .851 | .396 | .121 | .225 | .048 | .538 | .592 |
| Female | -.701 | 1.086 | -.056 | -.646 | .520 | 1.795 | 1.387 | .115 | 1.294 | .198 | 1.806 | 1.500 | .114 | 1.205 | .231 |
| Minority | -2.411 | 1.123 | -.191 | -2.147 | .034 | -.846 | 1.484 | -.053 | -.570 | .569 | -.781 | 1.613 | -.048 | -.484 | .629 |
| Age of mother | .151 | .275 | .047 | .548 | .584 | .370 | .361 | .090 | 1.025 | .307 | .404 | .383 | .097 | 1.053 | .294 |
| Education | -.263 | .219 | -.115 | -1.201 | .232 | .323 | .280 | .113 | 1.156 | .250 | .438 | .307 | .147 | 1.427 | .156 |
| Poverty | -4.391 | 1.487 | -.275 | -2.952 | .004 | -2.345 | 1.899 | 1.116 | -1.234 | .219 | -1.524 | 2.049 | -.075 | -.744 | .458 |

Table 4: Regression Analyses predicting parenting practices at two points in time and change in parenting practices across time

| | Parenting 1998 (n = 138) | | | | | Parenting 2000 (n = 123) | | | | | Change in parenting from 1998 to 2000 | | | | |
|----------------|----------------------------|------------|-----------|--------|------|----------------------------|------------|-----------|--------|------|---------------------------------------|------------|-----------|--------|------|
| | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | P |
| | B | Std. Error | | | | B | Std. Error | | | | B | Std. Error | | | |
| constant | 27.817 | 6.864 | | 4.053 | .000 | 25.386 | 4.646 | | 5.464 | .000 | 21.004 | 5.010 | | 4.192 | .000 |
| Parenting 1998 | n/a | | | | | n/a | | | | | .157 | .057 | .260 | 2.765 | .007 |
| Age of child | .413 | .099 | .337 | 4.185 | .000 | .010 | .072 | .012 | .143 | .886 | -.081 | .079 | -.094 | -1.027 | .307 |
| Female | .534 | .686 | .065 | .779 | .438 | 1.472 | .449 | .288 | 3.275 | .001 | 1.320 | .472 | .255 | 2.797 | .006 |
| Minority | -1.543 | .704 | -.184 | -2.192 | .030 | -1.622 | .492 | -.309 | -3.294 | .001 | -1.326 | .516 | -.247 | -2.571 | .012 |
| Age of mother | -.010 | .172 | -.005 | -.056 | .955 | .162 | .118 | .122 | 1.375 | .172 | .158 | .119 | .118 | 1.332 | .186 |
| Education | -.005 | .141 | -.003 | -.034 | .973 | -.165 | .090 | -.179 | -1.843 | .068 | -.138 | .096 | -.139 | -1.436 | .154 |
| Poverty | -2.243 | .946 | -.206 | -2.371 | .019 | -.562 | .619 | -.086 | -.908 | .366 | -.265 | .641 | -.040 | -.414 | .680 |

Table 5: Regression Analyses predicting home environment at two points in time and change in home environment across time

| | Home environment 1998 (n = 129) | | | | | Home environment 2000 (n = 129) | | | | | Change in home environment from 1998 to 2000 (n = 129) | | | | |
|---------------|---------------------------------|------------|-----------|--------|------|---------------------------------|------------|-----------|--------|------|--|------------|-----------|--------|------|
| | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p |
| | B | Std. Error | | | | B | Std. Error | | | | B | Std. Error | | | |
| constant | 23.470 | 4.702 | | 4.991 | .000 | 27.966 | 4.914 | | 5.691 | .000 | 16.987 | 4.842 | | 3.508 | .001 |
| HE1998 | n/a | | | | | n/a | | | | | .468 | .085 | .439 | 5.507 | .000 |
| Age of child | .040 | .068 | .051 | .594 | .553 | -.061 | .071 | -.073 | -.869 | .387 | -.080 | .063 | -.096 | -1.262 | .209 |
| Female | -.164 | .464 | -.031 | -.353 | .725 | -.551 | .485 | -.097 | -1.136 | .258 | -.475 | .436 | -.083 | -1.089 | .278 |
| Minority | -.336 | .506 | -.060 | -.664 | .508 | -.854 | .529 | -.144 | -1.615 | .109 | -.697 | .476 | -.118 | -1.465 | .146 |
| Age of mother | .066 | .117 | .048 | .563 | .575 | .060 | .123 | .042 | .491 | .624 | .029 | .110 | .020 | .266 | .790 |
| Education | .065 | .091 | .069 | .706 | .482 | -.002 | .096 | -.002 | -.019 | .985 | -.032 | .086 | -.032 | -.372 | .711 |
| Poverty | -2.213 | .711 | -.294 | -3.110 | .002 | -2.506 | .743 | -.313 | -3.371 | .001 | -1.471 | .693 | -.184 | -2.122 | .036 |

Table 6: Regression Analyses predicting social and emotional development at two points in time and change in social and emotional development across time when controlling for parenting

| | Social and Emotional 1998 (n = 133) | | | | | Social and Emotional 2000 (n = 138) | | | | | Change in social and emotional from 1998 to 2000 | | | | |
|----------------|-------------------------------------|------------|-----------|--------|------|-------------------------------------|------------|-----------|--------|------|--|------------|-----------|--------|------|
| | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p | Unstandardized coefficient | | Std. Beta | t | p |
| | B | Std. Error | | | | B | Std. Error | | | | B | Std. Error | | | |
| constant | 71.616 | 11.722 | | 6.109 | .000 | 62.508 | 15.666 | | 3.990 | .000 | 51.860 | 18.154 | | 2.857 | .005 |
| SE1998 | n/a | | | | | n/a | | | | | .134 | .120 | .109 | 1.122 | .264 |
| Parenting 1998 | -.004 | .140 | -.002 | -.025 | .980 | -.014 | .183 | -.008 | -.078 | .938 | -.040 | .189 | -.021 | -.213 | .832 |
| Age of child | .025 | .180 | .012 | .138 | .891 | .163 | .222 | .070 | .732 | .466 | .157 | .245 | .063 | .642 | .522 |
| Female | -.431 | 1.116 | -.034 | -.386 | .700 | 1.680 | 1.466 | .108 | 1.146 | .254 | 1.433 | 1.526 | .091 | .939 | .350 |
| Minority | -2.540 | 1.155 | -.199 | -2.199 | .030 | -.616 | 1.570 | -.038 | -.392 | .696 | -.428 | 1.656 | -.027 | -.258 | .797 |
| Age of mother | .132 | .277 | .041 | .476 | .635 | .349 | .370 | .085 | .943 | .347 | .407 | .382 | .099 | 1.066 | .289 |
| Education | -.202 | .226 | -.086 | -.893 | .374 | .409 | .304 | .134 | 1.346 | .181 | .379 | .314 | .125 | 1.208 | .229 |
| Poverty | -4.420 | 1.537 | -.273 | -2.876 | .005 | -2.508 | 1.983 | -.123 | -1.264 | .208 | -1.827 | 2.089 | -.091 | -0.875 | .384 |

APPENDIX B: Scales

HOME ENVIRONMENT SCALE

1). Does your child ever see his or her father, stepfather, or father-figure?

1 Yes

0 No

2). Child's play environment appears safe

1 Yes

0 No

3). Mom provided toys or interesting activities

1 Yes

0 No

4). About how many children's books does your child have?

1 None

2 1 or 2

3 3 to 9

4 10 or more

5). How many push or pull toys child has?

1 None

2 1 or 2

3 3 to 9

4 10 or more

6). How many cuddly or role-playing toys child has?

1 None

2 1 or 2

3 3 to 9

4 10 or more

7). Frequency Respondent & Husband/Partner calmly discuss

1 Almost Every Day

2 Once or Twice a Week

3 Once or Twice a Month

4 Less Than Once a Month

8). Frequency Respondent & Husband/Partner laugh together *

1 Almost Every Day

2 Once or Twice a Week

3 Once or Twice a Month

4 Less Than Once a Month

9). Frequency Respondent & Husband/Partner tell each other about day *

1 Almost Every Day

2 Once or Twice a Week

3 Once or Twice a Month

4 Less Than Once a Month

10). Frequency Respondent & Husband/Partner argue about chores & responsibilities

- 1 Often
- 2 Sometimes
- 3 Hardly Ever
- 4 Never

11). Frequency Respondent & Husband/Partner argue about children

- 1 Often
- 2 Sometimes
- 3 Hardly Ever
- 4 Never

12). Frequency Respondent & Husband/Partner argue about money

- 1 Often
- 2 Sometimes
- 3 Hardly Ever
- 4 Never

(*) Indicates a reverse coded item

PARENTING PRACTICES SCALE

- 1). Mom slapped or spanked child at least once.
1 Yes
0 No

- 2). Mom kept child in view.
1 Yes
0 No

- 3). How often does your child have a chance to get out of the house (either by himself/herself, or with an older person)?
1 Not at all
2 About once a month or less
3 A few times a month
4 About once a week
5 A few times a week
6 4 or more times a week
7 Every day

- 4). How often do you get a chance to read stories to your child?
1 Never
2 Several times a year
3 Several times a month
4 Once a week
5 About 3 times a week
6 Everyday

- 5). About how often do you take your child to the grocery store? *
1 Twice a week or more
2 Once a week
3 Once a month
4 Hardly ever

- 6). Does your child see the father/father figure on a daily basis?
1 Yes
0 No

- 7). Mother's belief about how child learns the best. *
1 Parents should always spend time teaching their children
2 Parents should usually spend time teaching their children
3 Parents should usually allow their children to learn on their own
4 Parents should always allow their children to learn on their own

- 8). How often does your child eat a meal with both mother and father? *
1 More than once a day
2 Once a day
3 Several times a week
4 About once a week
5 About once a month
6 Never

9). How often do you talk to your child while you are working? *

- 1 Always talk to child when I'm working
- 2 Often talk to child when I'm working
- 3 Sometimes talk to child when I'm working
- 4 Rarely talk to child when I'm working
- 5 Never talk to child when I'm working

10). About how many times, if any, have you had to spank your child in the past week?

SOCIAL AND EMOTIONAL DEVELOPMENT SCALE - Survey Year 1998

- 1). Did interviewer observe child and mother together?
 - 1 Yes
 - 0 No

 - 2). Mom spontaneously spoke to child twice or more.
 - 1 Yes
 - 0 No

 - 3). Mom responded verbally to child's speech.
 - 1 Yes
 - 0 No

 - 4). Mom caressed, kissed, or hugged child at least once.
 - 1 Yes
 - 0 No

 - 5). Mom physically restricted child more than 3 times.
 - 1 Yes
 - 0 No

 - 6). How close does your child feel toward you?*
- 1 Extremely Close
- 2 Quite Close
- 3 Fairly Close
- 4 Not at All Close
-
- 7). How close does your child feel toward his/her biological father?*- 1 Extremely Close
- 2 Quite Close
- 3 Fairly Close
- 4 Not at All Close
-
- 8). During feeding, how often does your infant squirm and kick?*- 1 Almost never
- 2 Less than 1/2 the time
- 3 1/2 the time
- 4 More than 1/2 the time
- 5 Almost always
-
- 9). Some children get sleepy about the same time each evening, give or take 15 minutes. How often does your child do this? *
 - 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always

- 10). Some children get hungry at about the same time each day, give or take 15 minutes. How often does your child do this? *
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 11). When your infant wakes up in the morning, how often is he/she in the same mood?
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 12). When your infant sees a stranger, how often does he/she turn away or cry as if afraid?*
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 13). When your infant sees an unfamiliar dog or cat, how often does he/she turn away or cry as if afraid?*
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 14). When you leave the room and leave your infant alone, how often does he/she become upset?*
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 15). When you take him/her to the doctor, dentist or nurse, how often does he/she turn away or cry as if afraid?*
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 16). When you play with your infant, how often does he/she smile or laugh?
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always

- 17). When your infant plays alone, how often does he/she smile or laugh?
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 18). When your infant is in the bath, how often does he/she smile or laugh?
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 19). When your infant hears an unexpected loud sound (for example, a car back-firing or a vacuum cleaner), how often does he/she cry or become upset? *
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 20). How often do you have trouble soothing or calming your infant when he/she is crying or upset?*
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 21). During the average day, how often does your infant get fussy and irritable?*
- 1 Almost never
 - 2 Less than 1/2 the time
 - 3 1/2 the time
 - 4 More than 1/2 the time
 - 5 Almost always
- 22). In general, compared with most babies, how often does your infant cry and fuss?*
- 1 Almost never
 - 2 Less than average
 - 3 About average
 - 4 More than average
 - 5 Almost always

(*) Indicates a reverse coded item

SOCIAL AND EMOTIONAL DEVELOPMENT SCALE - Survey Year 2000

- 1). Did interviewer observe child and mother together?
 - 1 Yes
 - 0 No

 - 2). Mom spontaneously spoke to child twice or more.
 - 1 Yes
 - 0 No

 - 3). Mom responded verbally to child's speech.
 - 1 Yes
 - 0 No

 - 4). Mom caressed, kissed, or hugged child at least once.
 - 1 Yes
 - 0 No

 - 5). Mom physically restricted child more than 3 times.
 - 1 Yes
 - 0 No

 - 6). How close does your child feel toward you?*
- 1 Extremely Close
- 2 Quite Close
- 3 Fairly Close
- 4 Not at All Close
-
- 7). How close does your child feel toward his/her biological father?*- 1 Extremely Close
- 2 Quite Close
- 3 Fairly Close
- 4 Not at All Close
-
- 8). When it is mealtime, how often does your child eat what you want him/her to eat?
 - 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
-
- 9). When your child doesn't eat what you want him/her to eat and you tell him/her to do so, how often does he/she obey and eat?
 - 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always

- 10). When it is child's bedtime, how often does he/she protest or resist going to bed?*
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 11). When your child does protest and you tell him/her again to go to bed, how often does he/she do so?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 12). When you tell your child to turn off the TV, how often does he/she do so without protest?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 13). When your child does protest and you tell him/her again to turn off the TV, how often does he/she do so?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 14). When your child meets a new child about the same age, how often is he/she shy at first?*
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 15). When your child meets an adult he/she does not know, how often is he/she shy at first?*
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 16). How often does your child cry when he/she hurts him/herself a little bit?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always

- 17). How often does your child laugh and smile easily?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 18). When your child is with other children his/her own age, how often does he/she fight, take toys, hit, etc.? *
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 19). When your child is with other children his/her own age, how often does he/she willingly share toys?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 20). How often do you have trouble soothing or calming your child when he/she is upset?*
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 21). When your child is playing, how often does he/she stay close to you and make sure that he/she can still see you?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 22). How often does your child try to copy what you do or how you act?
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always
- 23). When you leave the room and leave your child alone, how often does he/she get upset?*
- 1 Almost never
 - 2 Less than 1/2 of the times
 - 3 1/2 of the times
 - 4 More than 1/2 of the times
 - 5 Almost always

24). How often is your child demanding and impatient even when you are busy?*

- 1 Almost never
- 2 Less than 1/2 of the times
- 3 1/2 of the times
- 4 More than 1/2 of the times
- 5 Almost always

25). When you get upset about something, how often does your child get worried, or try to help, or make you feel better?

- 1 Almost never
- 2 Less than 1/2 of the times
- 3 1/2 of the times
- 4 More than 1/2 of the times
- 5 Almost always

26). How often does your child want you to help with the things he/she is doing?

- 1 Almost never
- 2 Less than 1/2 of the times
- 3 1/2 of the times
- 4 More than 1/2 of the times
- 5 Almost always

27). During the past year, how often has your child slept through the night?

- 1 Almost never
- 2 Less than 1/2 of the times
- 3 1/2 of the times
- 4 More than 1/2 of the times
- 5 Almost always

(*) Indicates a reverse coded item

VITA

Valentina Bopkova is a native of the Republic of Macedonia. She was born on May 4th, 1970 in Kavadarci, Republic of Macedonia. She finished high school in her native town, and proceeded for a college degree in Social Work and Social Policy at the Faculty of Philosophy, in Skopje, Macedonia. After graduating in September of 1993, she worked for UNICEF and Macedonian Ministry for Labor and Social Policy. In September of 1996 she was accepted as a masters student at the prestigious Central European University (CEU) in Warsaw, Poland. In December 1997, she received the degree of Master in Art in Society and Politics from the joint program at the CEU and the University of Lancaster, United Kingdom. She started the Ph.D. program in Social Work at the University of Tennessee in August 1997. Simultaneously with the Ph.D. degree, she worked on a Masters of Science in Social Work, and received her MSSW degree in May 2000. She received her Doctorate in Philosophy in Social Work from the University of Tennessee in August 2005.