

Summary of the State of Research

on the Relationship Between Homelessness and
Academic Achievement Among School-Aged Children and Youth



National Center for Homeless Education
<http://www.serve.org/nche>

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Section 1: Introduction

The purpose of this publication is to provide an overview of research that studies the relationship between homelessness and academic achievement among school-aged children and youth in the United States. For readers interested in conducting research on the education of homeless children and youth, this publication (1) provides context on child, youth, and family homelessness from the late 1980s to the present; (2) summarizes policies and practices that link homeless children and youth to educational supports and services; (3) provides an overview of selected research studies that examine the relationship between homelessness and academic achievement; (4) describes commonly utilized methodologies and challenges in conducting research on homeless and highly mobile populations; and (5) offers direction for further research.

The authors of this publication identified a set of 16 published articles dating from 1987 to 2011. Studies were selected on the basis of the following criteria: (1) homeless children or youth were the subjects examined; (2) the article described a formal research study with an articulated research question and methodology; (3) the research questions examined the relationship between homelessness and the educational success of homeless children and youth; and (4) the article was published in a peer-reviewed journal or referenced in an article in a peer-reviewed journal. While the selected studies do not constitute a comprehensive literature review, they nevertheless represent some of the most frequently cited studies in the field and provide a snapshot of approaches to examining the relationship between homelessness and academic achievement.

In addition, the authors reviewed four articles that provided overviews of the state of research on homeless children, which cited many of the same studies that were reviewed in this publication (Buckner, 2008; Cunningham, Harwood, & Hall, 2010; Miller, 2011; Samuels, Shinn, & Buckner, 2010). These four articles provided historical perspectives on research on homeless children, including their educational outcomes, as well as summaries of findings in various studies and recommendations for further research.

Homeless education is a relatively new field for research; as such, studies in this area are limited both in number and scope. Responding to the increased awareness of child and family homelessness that occurred in the 1980s, researchers primarily from the field of behavioral science began to conduct studies to describe a heretofore unexamined population – children and youth in homeless families. Studies attempted to describe this population, oftentimes in comparison with similar populations, such as housed children living in impoverished conditions. Studying highly mobile populations posed many challenges, resulting in most studies collecting data on families and children living in homeless shelters in urban areas. Many studies viewed homeless children or youth as a homogeneous population, with only a few recent studies attempting to identify subgroups within a sample of homeless children and youth.

Questions in the research studies included in this review address ways in which homeless students are similar to or different from housed peers; describe relationships among homelessness, cognition, and academic achievement; and identify variables that are associated with adaptability. Conducting successful research on homeless students continues to be a moving target: Homeless children and families are highly mobile; changing economic climates impact the demographics and numbers of

homeless children and families; and ever-evolving laws and policies result in significant changes in services over time. For these reasons, studies are very contextual and difficult to generalize beyond the sample, time, and setting studied.

Section 2: Child and Family Homelessness in the United States Since 1980

In the 1980s, the United States experienced a sharp rise in the incidence and nature of homelessness. In its 1985 review of studies, the U.S. General Accounting Office (GAO) reported that annual rates of homelessness between 1980 and 1983 increased by between an estimated 10% and 38% (p. ii). According to the report, shelter providers reported that the homeless people they served no longer primarily fit the historical profile of alcoholics, drug addicts, or transients, but included people who lost their jobs or public assistance, then lost their residences, and were subsequently unable to find housing. National estimates ranged from a low of 250,000 – 350,000 homeless persons experiencing homelessness on a single night to a high of 2 – 3 million persons experiencing homelessness in a year (GAO, 1985, p. 4). Moreover, shelters reported serving a significant number of families with children. The wide range of estimates is due largely to varying methodologies utilized to conduct homeless counts and different definitions of homelessness used by federal agencies.

The growth in homelessness among families with children continued throughout the 1990s and 2000s. For example, a 1996 survey of homeless service providers from urban, suburban, and rural areas indicated that 34 percent of homeless service users were members of homeless families: 23 percent were minor children and 11 percent were their parents (Burt, 1999, ch. 2). Based on the survey, Burt (2000) estimated at least 2.3 million people experienced homelessness in a year, including nearly 1 million children. In 2010, the Annual Homeless Assessment Report (AHAR) conducted by the U.S. Department of Housing and Urban Development (HUD) reported that more than 1.59 million people spent at least one night in an emergency shelter or transitional housing program during the 2010 AHAR reporting period, a 2.2 percent increase from 2009 (2010, p. ii). Regarding family homelessness, the report stated that the number of homeless persons in families had increased by 20 percent from 2007 to 2010, with families now representing approximately 35 percent of the total sheltered population (p. iii).

The Federal Government Responds

At the beginning of the Reagan administration in the 1980s, most programs addressing homelessness were funded and administered at the state and local levels. Public pressure on the federal government to provide national leadership to address the needs of homeless people increased, leading Congress to pass the Homeless Person's Survival Act in 1986. In 1987, the Urgent Relief for the Homeless Act, legislation containing Title I of the Homeless Persons' Survival Act, was passed, authorizing emergency relief provisions for shelter, food, mobile health care, and transitional housing (Project HOPE-Virginia, n.d.).

After the death of its chief sponsor, Representative Stewart B. McKinney, (R-CT), the Act was renamed the Stewart B. McKinney Homeless Assistance Act and was signed into law by President Reagan on July 22, 1987. In October 2000, President Clinton renamed the legislation the McKinney-Vento Homeless Assistance Act after the death of Representative Bruce Vento (D-MN), a leading supporter of the Act since its original passage in 1987. (HUD, n.d., b).

The McKinney-Vento Act originally authorized and funded a range of services to homeless people,

including the Supportive Housing Program, the Shelter Plus Care Program, the Single Room Occupancy Program, and the Emergency Shelter Grant Program. Also included in the Act were the first steps taken by the federal government to address the educational barriers and challenges faced by children and youth experiencing homelessness (HUD).

Subtitle VII-B of the McKinney-Vento Act established the federal Education for Homeless Children and Youths (EHCY) Program, to be administered by the U.S. Department of Education. The education portion of the McKinney-Vento Act was reauthorized in 1990 and 1994, and was most recently reauthorized in 2001 at the same time as the U.S. Department of Education’s Elementary and Secondary Education Act (ESEA), where it is referenced in Title X, Part C. (Section 3 provides an overview of the education provisions of the McKinney-Vento Act).

Homeless Children and Youth Identified in Schools 2004-2010

Beginning in 2004, the U.S. Department of Education required states to report data on homeless children and youth enrolled in all local educational agencies (school districts) within their state as part of their Consolidated State Performance Report (CSPR). The following table shows the increase in the number of homeless students reported enrolled in schools between the 2004-2005 and the 2009-2010 school years. (Note that these figures are actual counts and not estimates, and reflect the definition of homeless children included in Subtitle VII-B of the McKinney-Vento Act.

Table 1. Number of Homeless Students Reported by States in the CSPR

2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
655,591	906,680*	679,724	794,617	956,914	939,903

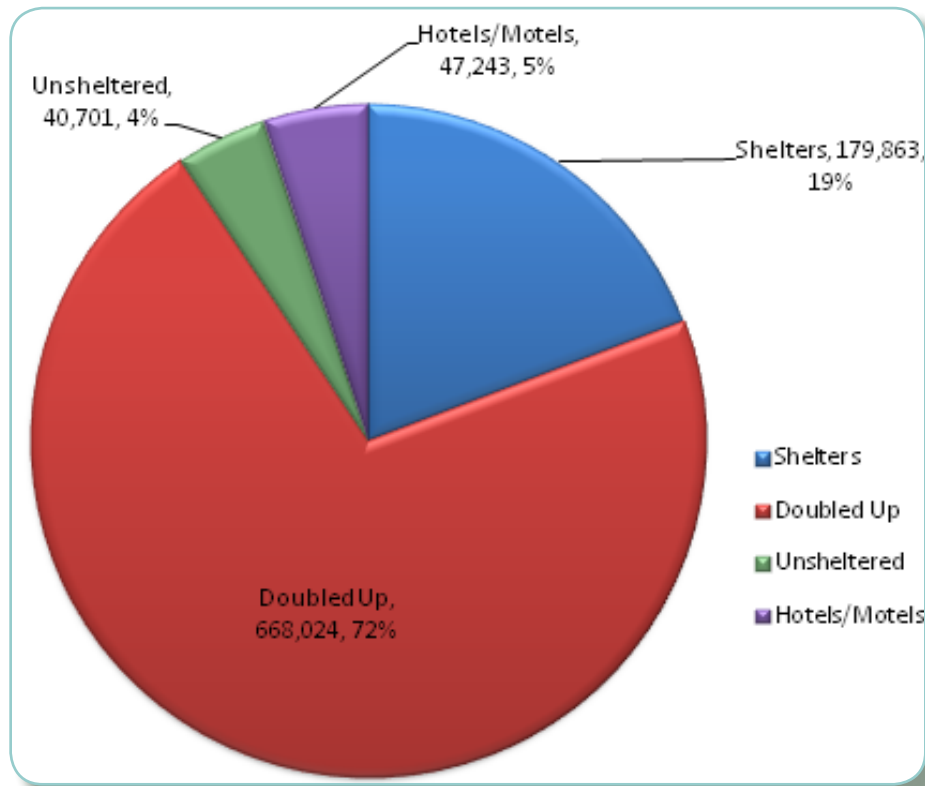
* The significant increase in 2005-2006 reflects the numbers of homeless students displaced by the 2005 Gulf Coast hurricanes.

These figures are summarized in data compilations published by the National Center for Homeless Education (NCHE) (http://center.serve.org/nche/pr/data_comp.php) and may also be viewed on NCHE’s state data pages (<http://nchespp.serve.org/profile/National>).

The CSPR data also captures the primary nighttime residence of homeless students. Figure 1 shows the primary residence of homeless students reported in the 2009-2010 data. Consistent with data reported in previous years, living doubled up¹ is the most frequently reported primary residence for homeless students.

¹ The McKinney-Vento definition of homeless includes “sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason,” which is commonly referred to as doubled up.

Figure 1. Primary Nighttime Residences of Homeless Children and Youth Reported in 2009-2010 CSPR Data*



***Source:** *Education for Homeless Children and Youth Program Data Collection Summary*, National Center for Homeless Education, 2011; available at http://center.serve.org/nche/downloads/data_comp_0708-0910.pdf.

Impact of the Economic Downturn on the Number of Homeless Children

In its 2011 update of a study released in 1999, the National Center on Family Homelessness (NCFH) reported a worsening of the problem of child homelessness. Citing the effects of the economic downturn, including foreclosures, job layoffs, rising food and fuel prices, and inadequate supplies of low-cost housing, NCFH estimated that 1.6 million American children, one in every 45, experience homelessness each year (National Center on Family Homelessness [NCFH], 2011, p. 6).

Specific to the foreclosure crisis, a 2008 voluntary online survey of 1,716 school districts by First Focus and the National Association for the Education of Homeless Children and Youth (NAEHCY) showed that 459 (27 percent) of the reporting school districts experienced a 25 percent or more increase in the numbers of homeless children and youth between the 2006-2007 and 2007-2008 school years (Duffield & Lovell, 2009, p. 1).

This increase is consistent with the CSPR data from the U.S. Department of Education. In a three-year summary of CSPR data from school years 2006-2007 through 2008-2009, the Department reported a 41 percent increase in the number of homeless students enrolled in schools across the nation (National Center for Homeless Education [NCHE], 2010).

Section 3: History and Provisions of the McKinney-Vento Act

In 1987, the McKinney-Vento Act included the first steps taken by the federal government to address the educational barriers and challenges encountered by children and youth experiencing homelessness. Subtitle VII-B of the McKinney-Vento Act established the federal Education for Homeless Children and Youths (EHCY) Program, to be administered by the U.S. Department of Education (ED). This first iteration of the educational provisions of the McKinney-Vento Act required State Educational Agencies (SEAs) to ensure that homeless students had the same access to public school as housed students, including reviewing existing residency requirements and taking steps to revise policies that created enrollment barriers and delays for homeless children (Project HOPE, n.d.). Additionally, Congress allocated funds for states to use to establish an office for the State Coordinator for Homeless Education. The State Coordinator was charged with collecting data on homeless children within the state and establishing a state plan to provide for their education (Project HOPE, n.d.).

In 1990, informed by state data on the obstacles to obtaining a free, appropriate public education experienced by homeless students, Congress strengthened the educational provisions of the McKinney Act, expressing intolerance for any kind of enrollment barrier and challenging states not only to enroll students experiencing homelessness, but to promote their educational success (Project HOPE, n.d.). As a result of the 1990 amendments, states were required to review and revise any and all policies that might create a barrier to the school enrollment, attendance, or success of homeless children and youth. States were also required to take a more hands-on role in ensuring that local educational agencies (LEAs) within the state were reviewing and revising policies that created a barrier and were, for the first time, authorized to provide funding to LEAs for the purpose of delivering direct services to homeless children and youth (Project HOPE, n.d.).

*Brief History of the McKinney-Vento Act**

1987: The Stewart B. McKinney Homeless Assistance Act is signed into law, requiring states to review and revise residency requirements for the enrollment of homeless children and youth.

1990: The McKinney Act is amended, requiring states to eliminate all enrollment barriers, and provide school access and support for academic success for students experiencing homelessness; McKinney funds may now be used to provide direct educational services for eligible students.

1994: The education portion of the McKinney Act is included in the Elementary and Secondary Education Act (ESEA), adding preschool services, greater parental input, and emphasis on interagency collaboration.

2002: The Act is reauthorized as the McKinney-Vento Act (Title X, Part C of ESEA), strengthening legislative requirements and requiring all school districts to appoint a local liaison to ensure the law is implemented effectively at the local level.

***Source:** Education for Homeless Children and Youth (EHCY) Program Summary, National Center for Homeless Education, 2011; http://center.serve.org/nche/downloads/ehcy_profile.pdf.

In 1994, the educational provisions of the McKinney Act were reauthorized as part of the Improving America's Schools Act, which reauthorized the Elementary and Secondary Education Act of 1965. With the 1994 revisions, Congress demonstrated continued support for previous policies, while extending McKinney-Vento's scope to include the provision of services to preschool children experiencing homelessness (Project HOPE, n.d.). The 1994 amendments also required that whenever feasible according to the student's best interest, school districts comply with a parent's or guardian's school selection for his/her child, whether the school of origin or the local school. Additionally, this iteration of the law strengthened requirements for collaboration between SEAs, LEAs, and other agencies serving families experiencing homelessness (Project HOPE, n.d.).

In 2001, Congress amended and reauthorized the McKinney-Vento Act at the same time as the ESEA, which was reauthorized as the No Child Left Behind Act. Responding to statistics about the increasing numbers of children and youth experiencing homelessness each year and the educational risks they faced, Congress incorporated additional supports into the law and authorized more funding for their implementation (Project HOPE, n.d.). Among the changes was the requirement that the office of the State Coordinator for Homeless Education strengthen the support it provides to LEAs within its state, thereby ensuring greater accountability with regards to implementation at the local level. In addition, all LEAs, whether receiving McKinney-Vento funding or not, were required to appoint a local homeless education liaison to be the key homeless education contact within the district. According to a 2005 survey of State Coordinators for Homeless Education (U.S. Department of Education [ED], 2006), this provision is one of the most frequently cited reasons for eliminating barriers to school stability for homeless students.

Basic tenets of the McKinney-Vento Act require school districts to be proactive in identifying homeless students and ensuring their immediate enrollment, even if they lack documents normally required for enrollment). The definition of homeless includes

Who is homeless?

(McKinney-Vento Homeless Assistance Act – Title X, Part C of the Elementary and Secondary Education Act)

The term "homeless children and youth"—

- A. means individuals who lack a fixed, regular, and adequate nighttime residence...; and
- B. includes —
 1. children and youths who are sharing the housing of other persons due to loss of housing, economic hardship, or similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative accommodations; are living in emergency or transitional shelters; are abandoned in hospitals; or are awaiting foster care placement;
 2. children and youths who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings...
 3. children and youths who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings; and
 4. migratory children who qualify as homeless for the purposes of this subtitle because the children are living in circumstances described in clauses (i) through (iii).

children and youth who “lack a fixed, regular, and adequate nighttime residence”. Beyond this guiding phrase, the definition includes several examples of homeless living arrangements (see sidebar on previous page). Eligible students have the option of continuing to attend their school of origin (if feasible) with transportation provided by the school district upon request, even if they move outside their school of origin’s residential zone; or students may transfer to the local attendance area school. These same rights, including the right to immediate enrollment, extend to unaccompanied homeless youth, even if they are unable to provide proof of guardianship.

Under the McKinney-Vento Act, states are required to distribute a certain portion of their state’s homeless education allocation to school districts through a competitive subgrant process. Subgrant funds are awarded to facilitate the school enrollment, attendance, and success of homeless children and youth, and are based on the needs of the LEAs requesting assistance as well as the quality of their applications. School districts that apply for and receive McKinney-Vento subgrants may use the funds to provide tutoring and supplemental instruction, early childhood education, transportation, school supplies, professional development on homeless education issues for school and district staff, and other services that otherwise may not be provided by the public school program.²

² See Section 723(d) of the McKinney-Vento Act for a complete list of authorized activities for which McKinney-Vento subgrant funds may be used.

Section 4: Summary of Research Studies in the Review

In the mid to late 1980s, researchers began looking at the overall impact of homelessness on the newest subgroup of the homeless population – families and children. Huntington, Buckner, and Bassuk (2008) divided this research into “two broad waves” (p. 738) with those in the first wave simply describing the “scope and dimension of the crisis” (Molnar, Rath, and Klein, 1990, p. 118) for homeless children and their families based on studies using data collected in the mid-1980s. Results from these studies showed that homeless children experienced high rates of grade retention and absenteeism (Rafferty & Shinn, 1991), significant behavior and emotional problems (Masten, et al., 1993; Rafferty & Shinn, 1991), and significantly lower scores on standardized tests of reading (Molnar, Rath, & Klein, 1990) and math (Molnar, Rath, & Klein, 1990; Shaffer & Caton, 1984) when compared to all students.

The second wave of research began around 1992 (Buckner, 2008, p. 722) and delved more deeply into the issues homeless students face, seeking to pinpoint the cause of their academic shortcomings with the hope of identifying strategies and resources to help students overcome these barriers (Masten, 1997, p. 27). These studies documented consistently the negative academic effects on all children living in poverty compared to the general population, but with smaller differences between homeless and poor housed children.

Homeless children not only have the adversity of poverty, they also must cope with the additional burden of homelessness. They are exposed to a plethora of risk factors which, in turn, can make them vulnerable to academic difficulties (Buckner, 2008; Masten, 1997; Obradović et al., 2009; Rafferty, Shinn, & Weitzman, 2004; Rubin, et al., 1996). Many studies found that homeless students routinely underperform when compared to the general student population. Samuels, Shinn, & Buckner (2010) reported that eight of nine studies they reviewed found that homeless children fare worse academically than the general population and six of seven studies found that they fare worse than poor housed children. The only study they found showing homeless children scoring on an even par with low-income housed children and the general population was conducted by Buckner, Bassuk, and Weinreb (2001) after the EHCY program was established. Since this program was designed to remove barriers to school enrollment and success for homeless students, Samuels, et al. suggest that the similar performances between the three groups of children found in this study may be attributed to the additional supports for school success provided to homeless children as part of evolving federal educational policy and its implementation in local school districts.

In some studies, vulnerabilities to risk for homeless children are shown to be the same as with other poor children (Buckner et al., 2001; Cunningham, Harwood, & Hall, 2010). For example, Rescorla, Parker, and Stolley (1991) reported that reading scores for a group of children at a Philadelphia shelter were lower but not significantly lower than those of a comparison group of inner-city children with mothers on public assistance. But later in their study of sheltered homeless and low-income housed students, Buckner, Bassuk, and Weinreb (2001) found no significant differences in academic achievement between the two groups. Buckner (2008) insists that inconsistent findings make “broad, generalized statements about the impact of homelessness on children in the United States problematic and, in some cases, misleading” (p. 726), as even the differences that have been

reported are “not as pronounced as might be anticipated” (p. 728).

Several authors suggested viewing risk to children on a continuum, where homeless children suffer the most extreme risk, followed by poor housed children, and then children in the general population (Buckner, et al., 1999; Buckner, 2008; Masten, et al., 1993; Rafferty, Shinn, & Weitzman, 2004; Ziesemer, Marcoux, & Marwell, 1994). They concluded that homelessness should be viewed as one event along a continuum of poverty experiences that, instead of predicting specific needs of all homeless children, actually indicates a potential risk for school success that is a substantial risk for the majority of those children. Many suggest that long-term poverty may be a more appropriate marker of risk than homelessness per se (Buckner, et al., 1999; Masten, et al., 1993; Rafferty, Shinn, & Weitzman, 2004; Ziesemer & Marcoux, 1992).

Huntington, Buckner, and Bassuk (2008) examined the status of homeless children across three dimensions - behavior problems, adaptive functioning, and achievement - to determine if homeless children could be classified into subgroups. Heretofore, little if any attention had been paid to whether there could be subgroups of homeless children with different patterns of functioning. Findings from this study revealed one cluster of higher functioning children doing well across all three domains, despite their many stressors, and a second cluster of lower functioning children doing poorly across all three domains. Many prior studies had considered the harmful effects of homelessness on children as one homogeneous group, but this study underscores that homeless children are not a uniform group; instead, there are quite diverse subgroups, each with their own unique traits and needs. Masten, et al. (1997) found mediating factors affecting children’s school success, such as the quality of parenting, support of other adults, and the children’s own executive functioning and cognitive skills, suggesting that even among those homeless children with high cumulative risk factors, there may be important variations to consider.

Although there are few longitudinal studies measuring the relationship between homelessness and academic achievement, two are particularly relevant for this publication. First, a small study by Rafferty, et al. (2004) examined the academic achievement of homeless students in comparison to that of children whose families received public assistance. The study took place over a period of approximately 8 years, beginning two years prior to when the homeless families entered shelter and concluding well after the homeless families had become rehoused. Both groups scored poorly on standardized tests and the homeless group had short-term academic declines in reading and math (approximately 6 percentile points) during the period of maximum residential disruption. Five years later, however, no long-term associations of homelessness with changes in achievement were found, whether controlling for student’s achievement prior to experiencing homelessness or not.

Second, a longitudinal study conducted by Obradović, Long, Cutuli, Chan, Hinz, Heistad, and Masten (2009) in a large, urban school district is one of the rare experiments that include children whose families are living doubled up with others or in hotels. Overall results showed that homeless and highly mobile (H/HM) students scored significantly lower in reading and math than other low-income students, and both ranked well below the general student population. As early as second grade, achievement levels for H/HM students were below those of low-income students, with both disadvantaged groups performing well below their more socioeconomically advantaged peers. A grade-related decline, as demonstrated by decreasing reading and math trajectory scores in comparison to national means between second and fifth grade, which corresponded to an increase

in cumulative risk, may create wider achievement gaps among older grade cohorts (Obradović, et al., 2009, p. 515). This research reported a wide range of achievement and resilience among students, confirming the findings of Huntington, et al. (2008) on variability among subgroups.

Samuels, Shinn, and Buckner (2010) bemoan the scarcity of research on homeless children in living situations other than a shelter except for counts of enrolled homeless students conducted by school districts. Neither are there many studies on formerly homeless children after they become housed or based on school records from before they became homeless. In addition, nearly all the research was conducted prior to the recent economic recession; as such, children who became homeless as a result of the recession and related employment and housing crises have not been studied.

In spite of these limitations, it is evident that children living in poverty struggle more academically than those in the general population (Masten, et al., 1993; Buckner, et al., 1999). Even though it has not been shown that a particular risk factor (such as a shelter stay) has a negative effect on every homeless child who has that experience, patterns in research findings suggest that such a risk factor certainly can be detrimental to children's academic performance, even though this may not be the case in every instance. For the most part, researchers have ruled out isolating whether the exact cause(s) of academic difficulties for homeless students is related to housing status or to the more general effects of poverty. Instead, some postulate that these inconsistencies in research findings likely are related to a range of potential modifiers and variables that sometimes cloud the effect of homelessness-specific effects to the point that the effects may or may not be detected in the research (Buckner, 2008, p. 734). Although poverty-related risks may explain some of the disparity, researchers note differences in educational outcomes even after controlling for these risks as well as prior academic achievement (Cunningham, et al., 2010, p. 4) and intellectual abilities (Buckner, 2008, p. 725). So even though overall, children's homeless experiences increase their risk for adverse outcomes, researchers have yet to distinguish definitively the effects of poverty from those of homelessness.

Some students are able to bear up under the stressors of homelessness and achieve academic success; but this does not hold true in every instance (Buckner, 2008). And while homelessness is certainly a risk factor for students, there is a broader constellation of risk factors experienced by homeless students and other students living in poverty that some researchers suggest may have a greater effect on student performance (Samuels, et al., 2010). These risk factors include: economic stressors, parental job loss, and parental financial distress; residential mobility; school mobility; crowding; and hunger and poor nutrition (Samuels et al., 2010). Masten and colleagues (1993) also underscore the significance of cumulative risk, pointing out that many of the risk factors listed above often co-occur in the lives of homeless children, making it difficult to isolate the effects of each individual risk factor. Rather, Masten, et al. suggest that counting the number of significant negative life events experienced by a child may provide a more accurate predictor of child outcomes than homelessness, per se. Despite the difficulty in separating the effects of poverty from those of homelessness, and the mixed results of studies comparing homeless and low-income children, it is clear that homeless children are a particularly vulnerable, heterogeneous subgroup of disadvantaged children who face numerous challenges in achieving academic success.

Section 5: Discussion of Methodologies

The studies in this publication are descriptive in nature with the purpose of better understanding the world, behaviors, and stressors of homeless students. Buckner (2008) categorized published studies on homeless children and youth into three types: (1) studies that assess a group of children living in a shelter using instruments that have normative data; (2) studies that involve a comparison of homeless to low-income housed children on instruments that lack normative data; and (3) a comparison of homeless and low-income children using instruments with published norms. He notes that the majority of studies published after 1991 are of this last type.

In addition to these three categories, one more type of study, utilized more in the areas of personality psychology and life course sociology, has recently been applied to researching homeless children: a person-centered approach to data analysis, which examines subgroups of children based on a range of outcome measures. In their study using this method, Huntington, Buckner, and Bassuk (2008) explained that a person-centered analysis “focuses on the configuration of characteristics within persons rather than on how variables relate to each other across persons” (p. 739). (See Appendix 2 for a table that summarizes the methodologies of the studies included in this review.)

As shown in Table 2 below, seven of the studies in this review compared homeless students with housed students identified with similar disadvantages, such as low-income or mobile but housed. In comparison studies such as these, researchers attempted to examine homelessness- specific effects apart from the broader impact of poverty.

Table 2: Studies Featuring Comparison Groups

Study	Homeless Children Group	Comparison Group
Rescorla, Parker, & Stolley (1991)	3-12 year-old children staying in shelters in Philadelphia (PA)	3-12 year-old children living in the inner city and whose mothers were on public assistance; the children were picked randomly in the waiting room of a medical assistance pediatric clinic in Philadelphia (PA)
Ziesemer, Marcoux, & Marwell (1994)	Elementary school students who experienced homelessness between September 1987 and January 1990 and were still enrolled in the Madison Metropolitan School District (WI) in March 1990	Children identified as low income, as indicated by receiving free school lunch, and geographically mobile; matched with homeless group on grade, gender, and race

Study	Homeless Children Group	Comparison Group
Rubin, Erickson, San Agustin, Cleary, Allen, & Cohen, (1996)	Homeless children and their mothers staying in three shelters in New York City (NY)	Housed children and their mothers selected from the homeless children's classrooms; matched with homeless group on gender and ethnicity
Buckner, Bassuk, & Weinreb (2001)	Homeless single-parent families staying in shelters in the Worcester, MA area (mothers and their children ages 4 months to 17 years)	Low income housed single-parent families; these families had never experienced homelessness but were at high economic risk, as indicated by receiving Aid to Families with Dependent Children (AFDC)
Rafferty, Shinn, & Weitzman (2004)	Formerly homeless adolescents in families recruited from shelters in New York City (NY)	Permanently housed adolescents in families drawn randomly from public assistance roles
Shinn, Schteingart, Williams, Carlin-Mathis, Bialo-Karagis, Becker-Klein, & Weitzman (2008)	Formerly homeless children recruited from families who had applied for emergency shelter in New York City (NY); these children were evaluated against the comparison group an average of 55 months after they first requested shelter	Housed children sampled randomly from public assistance roles
Obradovic, Long, J. J., Cutuli, C.C., Hinz, E., Heistad D., & Masten (2009)	Homeless and highly mobile students identified by the Minneapolis Public School district (MN) over the span of three school years: 2003-2004, 2004-2005, 2005-2006	(1) Children identified as low income (qualifying for free or reduced price meals) at any point in the three years; (2) Advantaged children (not homeless and highly mobile and not low-income)

Six of the studies in this review utilized multivariate analysis attempting to control for a range of educational risk factors that have been associated with academic achievement, such as chronic poverty, single-parent families, poor health and health care, mobility, and exposure to stressful events (Zima, 1994; Rubin, 1996; Buckner, 2001; Rafferty, 2004; Shinn, 2008; Obradović, 2010).

Almost all of the studies utilized a combination of qualitative and quantitative data. Qualitative data

were collected from parent, teacher, child, and youth interviews, surveys, and questionnaires. Many of the studies used normed tests, such as the Wechsler Individual Achievement Test or Kaufman Assessment Battery for Children.

The studies conducted prior to 2004 predate the U.S. Department of Education's requirement that all local school districts submit data on homeless students. These early studies were based on small sample sizes, usually selected from a shelter or group of shelters. However, some of the studies were able to draw from databases developed for larger research projects, such as the Worcester Family Research Project (Buckner, 2001), the Family Regeneration Program (Dworsky, 2008), and a longitudinal study of homeless and poor housed families in New York City (Shinn, 2008). The more recent studies, such as Dworsky (2008) and Obradović (2010), draw from a broad sample of students identified as homeless in school district and state education agency databases that include CSPR data submitted to the U.S. Department of Education.

Challenges in conducting research on children and youth experiencing homelessness

The studies represented in this review included descriptions of a number of limitations in conducting research on children and youth experiencing homelessness. Following is a summary of the limitations.

Difficulties in obtaining significant and representative samples

All but one of the studies based their samples on families who were staying in homeless shelters or had formerly stayed in shelters. Geographic areas represented were limited primarily to large urban areas: Philadelphia (PA), New York City (NY), Worcester (MA), Chicago (IL), Los Angeles (CA), Minneapolis (MN). Two studies featured the mid-sized city of Madison (WI). One study, (Obradović, 2009) utilized data collected by the Minneapolis Public School District on students identified as "homeless and highly mobile," which, according to the McKinney-Vento definition of homeless, includes more than students living in shelters.

Because homeless children, youth, and families are highly mobile, researchers have difficulty maintaining a statistically significant sample size for studies that take place over time. Many participants move before a study is completed, which reduces the sample size, and selection bias becomes an issue when the study includes only students who remained available for the duration of the study. As a result, most studies are of short duration, as opposed to longitudinal studies that could build knowledge of the long-term impacts of homelessness.

In addition, most studies include only participants who live in shelters primarily in large urban areas because of the ease of identifying a substantial sample and collecting data. Because Subtitle VII-B of the McKinney-Vento Act's definition of homelessness also includes children and youth who are living doubled up due to loss of housing and who live in other settings like cars and camping grounds, the primary body of research on the impact of homelessness on students focuses on only a small portion of the students considered homeless under the McKinney-Vento Act (see sidebar on page 9). Even though homeless children, youth, and families live in suburban and rural areas, as well as urban areas, the lack of shelters makes it problematic to identify a sample of children and families to study

outside urban areas.

Lack of generalizability of studies

Studies of homeless children and youth are very context specific. There has been great variability in the broader context in which studies have taken place from location to location, as impacted by economic trends, availability of resources, local policies, and demographics. As a result, research findings to date on the relationship between homelessness and academic achievement are inconsistent.

In addition, national policies related to homelessness have changed over time. For example, studies that were conducted before the 2001 reauthorization of Subtitle VII-B of the McKinney-Vento Act took place in a context in which education policies guaranteed very few rights for homeless children, as compared to the rights included in the reauthorized law. Some of the earlier studies included in this review show a greater gap between the achievement of homeless students and housed students living in poverty than more recent studies, which may speak to the impact of the reauthorized law. Still, the level of implementation of the rights and services guaranteed by the McKinney-Vento Act is highly variable across school districts. Consequently, research studies are not generalizable beyond the location, time, and specific population studied.

Variability within the population of homeless children and youth

Most studies treat homeless children, youth, and families as a homogeneous population. However, there is great variability among students experiencing homelessness, including such factors as causes, frequency, and duration of homelessness; mental and physical health; past personal and academic experiences; and quality of parenting. While many studies take a variable-centered approach to data analysis, as Buckner (2008) notes, “In such analyses, little if any attention is paid to whether there could be subgroups of children with quite different patterns of functioning in such realms as mental health, developmental status, and academic achievement” (p. 733).

Most studies indicate that children and youth experiencing homelessness will fare worse academically than their housed peers and will exhibit academic deficits and deviant behaviors. Several studies in this review used depression inventories and behavior checklists, such as the Achenbach Child Behavior Checklist, which are designed to identify only challenges. Ziesemer and Marcoux (1992) pointed this out as a limitation in their study: “Because the Achenbach form is normed to identify clinical populations of children – those in need of psychiatric evaluation and treatment – it describes deviance, not strengths. Therefore, although these data describe needs, they do not reflect the diversity of interests and capabilities of these children” (p. 82).

Masten, et al., found in their 1997 study sample that a number of homeless and highly mobile children were doing well academically, evidenced by scores on the standardized achievement test and lack of reported classroom behavior problems. Obradović, et al., (2009) also identified variability in academic achievement among homeless and highly mobile students, noting that some students performed quite well. Both Masten, et al. (1997) and Obradović, et al. (2009) reinforced the need for research on the processes that may account for academic resilience as well as vulnerability and failure.

Homelessness as a condition or a marker

One of the more fundamental issues in studying the relationship between homelessness and academic achievement resides in the very concept of homelessness itself. No consensus exists as to whether homelessness is a discrete condition that impacts children and youth or whether homelessness is a marker for a constellation of conditions (poverty, lack of stable housing, mobility) that in and of themselves have varying impacts. Masten, et al. (1997) stated, "There is little reason to believe that [homeless students'] problems are unique or largely the result of homelessness per se. Rather, homelessness appears to be a marker of very high cumulative educational risk levels likely to be shared by other children living in poverty" (p. 43). Stronge (1993) suggested that homeless children should be viewed as part of a continuum, calling for educational interventions to address the needs of children according to the severity of their deprivation.

Buckner (2008) notes, "Limitations in methodology of some studies (such as not having adequately measured additional risk factors and/or not using multivariate analyses to control for them) call into question whether homelessness itself is behind the heightened severity of problems that investigators observed" (p. 725-726).

Collecting quality data

A significant challenge in conducting research on homeless students is that of obtaining quality data. Data collected from participants in homeless shelters are impacted by the setting itself. Shelters are usually noisy and chaotic, and these conditions impact children's and parents' ability to concentrate on screenings and interviews. Obradović, et al. (2010) specifically mentioned the noise and disruption in a shelter as limitations, creating a less than optimal assessment setting.

Information collected from surveys and interviews is self-reported and less reliable than information provided by normed tests. Yet, prior to the availability of data on homeless students collected by states and school districts, as mandated by the McKinney-Vento Act, many researchers relied on parents to report on their children's educational achievement and experiences, such as Rafferty and Rollins (1989) and Masten, et al. (1997). Rubin (1996) and Shinn, et al. (2008) specifically cited the reliance on self reports from mothers and children as limitations to their studies.

Federal programs now require state and local programs to collect data on homeless children and families. HUD established its Homeless Management Information System (HMIS) in 2001, and compiles data annually in the Annual Homeless Assessment Report (AHAR). The U.S. Department of Education has required states to report data on homeless children and youth from every school district since the 2003-2004 school year in the CSPR. Based on annual CSPR data, NCHE develops three-year summaries that include such data as number of homeless students enrolled in schools (for all districts), the nature of homeless student's primary nighttime residence (for all districts), and number of homeless students taking and achieving proficiency on state reading and math tests (for school districts receiving McKinney-Vento subgrant funding).

Data sharing between HUD and the U.S. Department of Education remains challenging due to differences in the definition of homeless used by the two agencies. Moreover, significant differences exist in methods for collecting data, whether data is based on an intake interview for annual reporting or a point-in-time method to identify numbers of homeless people on a particular date.

Section 6: Conclusion

Potential for More Robust Studies

Although the challenges in conducting research studies on homeless children and youth are abundant, a good foundation for further inquiry has been developed by the studies conducted to date. In the studies included in this review, researchers utilized strong methodologies and multiple data sources to glean as much information as possible despite study limitations. The authors of this review agree with Masten, et al. (1997) who state, “Our experience with varying strategies of assessment (e.g., in shelters and in schools, during and after homelessness, utilizing different measures) have convinced us that meaningful research is feasible with mobile, high-risk children (p. 42)”

Great potential for broader and stronger studies on the academic achievement of homeless students exists for several reasons:

- 1. Increased Visibility and Awareness**

With the foreclosure crisis that erupted in the first decade of the 21st century, the issue of family homelessness has attained heightened visibility. As a result, the general public, federal agencies, and foundations are more aware of the challenges specific to homeless families and children. Also, the 2001 reauthorization of the McKinney-Vento Act strengthened provisions for serving homeless children and youth by requiring that every school district identify and provide services to homeless students. As programs and foundations consider how best to target resources to support the educational needs of homeless children and youth, interest in creating a body of empirical knowledge of these children has increased, as well.

- 2. Improvement in Data Quality**

State and local education agency data systems are improving, as is proficiency in data analysis. The U.S. Department of Education’s CSPR data enable researchers to study larger samples with the potential to encompass multiple districts, states, and types of primary nighttime residences of homeless children). As state and local education agency databases become more robust, including tracking every student with a unique student identifier, researchers will be able to conduct longitudinal studies of homeless students and formerly homeless students because they will be able to track their mobility. In several states, the groundwork for research is already being laid by data analysts in educational agencies who are analyzing the CSPR data and other data that exceeds the federal requirements.

- 3. Increased Collaboration in Data Collection**

As federal agencies and programs move toward greater collaboration, the potential for coordinating data across programs is growing, as well. The United States Interagency Council on Homelessness (USICH) is a collaboration of nineteen federal agencies that, among other tasks, have conducted discussions on better coordination of data across agencies, including the coordination of HUD’s HMIS data and the U.S. Department of Education’s CSPR data.

While definitions of homelessness vary among agencies, a report released by the USICH in June 2011 discusses the movement toward a common vocabulary that would facilitate the coordination of data collection and sharing. The report, entitled *USICH Report to Congress: Community Forum to Discuss GAO Recommendation to Develop a Common Federal Vocabulary on Housing Status*, may be downloaded at http://www.usich.gov/resources/uploads/asset_library/USICH_Report_-_Common_Housing_Status_Vocabulary.pdf.

4. **More Nuanced Research Questions**

Even though studies to date are not generalizable beyond the time and context in which they were developed, some common themes have emerged that are generating research questions that are more nuanced in their recognition of the diversity that exists among homeless families, children, and youth. These questions are leading researchers to explore the differences among subgroups of homeless children and youth, including why some homeless students display high levels of academic functioning while others do not. In turn, researchers seem eager to apply knowledge about these differences among student subgroups to researching issues of student resiliency and the design of effective interventions.

Goals of and Directions for Future Research

As educators and advocates pursue improved policies and interventions to serve homeless students, the demand for effective practice and high quality and impact studies is increasing, as well. However, a thorough understanding of the population served must precede the development of educational theory and interventions.

Research to date has established the complex dynamics that affect the lives of homeless children and youth, and new directions have emerged to define the array of relationships among these variables. Buckner (2008) reinforces the need to understand more fully the contextual and moderating influences in the lives of homeless children that have led to inconsistent results across studies. Ideally a large multi-site study would provide a more comprehensive understanding of factors that impact the lives of homeless children and youth. Moreover, Buckner suggests conducting research that would lead to a better understanding of homelessness in the context of other adversities that homeless children face.

Molnar (1990) recommends a more well-rounded focus on child functioning. Most studies to date have focused on indicators of suffering and deprivation. However, many homeless children demonstrate great strength and resilience in spite of the challenges they face. Further study of what facilitates coping and adaptability will provide a more comprehensive picture of homeless children.

As a greater canon of knowledge on homeless children and youth is created through descriptive studies, researchers can be more systematic in gathering and applying evidence to examine the efficacy of policies and interventions. It is hoped that this review of key research studies of the relationship between homelessness and the academic achievement of homeless students will contribute to a national conversation among researchers, educators, and policy makers to better understand homeless children and youth and ways to increase their success in school.

References

- Bassuk, E. & Rubin, L. (1987). Homeless children: A neglected population. *American Journal of Orthopsychiatry*, 57(2), 279-286.
- Buckner, J. (2008). Understanding the impact of homelessness on children. *American Behavioral Scientist*, 51(6), 721-736.
- Buckner, J., Bassuk, E., & Weinreb, L. (2001). Predictors of academic achievement among homeless and low-income housed children. *Journal of School Psychology*, 39(1), 45-69.
- Burt, M. (1999). *Homelessness: Programs and the people they serve*. The Urban Institute: Washington, DC. Retrieved June 25, 2011, from the U.S. Department of Housing and Urban Development Web site: <http://www.huduser.org/portal/publications/homeless/homelessness/contents.html>
- Burt, M. (2000). *A new look at homelessness in America*. Retrieved June 25, 2011, from The Urban Institute Web site: <http://www.urban.org/publications/900366.html>
- Cunningham, M., Harwood, R., & Hall, S. (2010, May). *Residential instability and the McKinney-Vento Homeless Children and Education Program*. Retrieved June 25, 2011, from The Urban Institute Web site: <http://www.urban.org/uploadedpdf/412115-mckinney-vento-program.pdf>
- Duffield, B. & Lovell, P. (2008). *The economic crisis hits home: The unfolding increase in child and youth homelessness*. Retrieved June 25, 2011, from the National Association for the Education of Homeless Children and Youth Web site: <http://www.naehcy.org/dl/TheEconomicCrisisHitsHome.pdf>
- Dworsky, A. (2008). *Educating homeless children in Chicago: A case study of children in the Family Regeneration Program*. Chicago. Retrieved March 1, 2011, from the Chapin Hall at the University of Chicago Web site: <http://www.chapinhall.org/sites/default/files/ChapinHallDocument%282%29.pdf>
- Huntington, N., Buckner, J., & Bassuk, E. (2008). Adaptation in Homeless Children: An Empirical Examination Using Cluster Analysis. *American Behavioral Scientist*, 51(6), 737-755.
- Larson, A. & Meehan, D. (2009). *Homeless and highly mobile students: A description of the status of homeless students from three school districts in Minnesota*. (Minn-Link Special Topic Report No. 7.) Retrieved March 1, 2011, from the Center for Advanced Studies in Child Welfare Web site: <http://www.cehd.umn.edu/ssw/cascw/attributes/pdf/minnlink/reportno7.pdf>
- Masten, A., Sesma, A., Si-Asar, R., Lawrence, C., Miliotis, D., & Dionne, J. (1997). Educational risks for children experiencing homelessness. *Journal of School Psychology*, 35(1), 27-46.
- Miller, P. (2011). A critical analysis of the research on student homelessness. *Review of Educational Research*, 81(3), 308-337.
- National Association for the Education of Homeless Children and Youth. (n.d.) *Reauthorization of the*

Elementary and Secondary Education Act. Retrieved June 6, 2011, from <http://www.naehcy.org/reauth.html>

National Center for Homeless Education. (n.d.). *McKinney-Vento definition of homeless*. Retrieved June 8, 2011, from the National Association for the Education of Homeless Children and Youth Web site: <http://center.serve.org/nche/definition.php>

National Center for Homeless Education. (2010). *Education for Homeless Children and Youths Program: Analysis of 2008-2009 federal data collection and three-year comparison*. Retrieved June 25, 2011, from the National Center for Homeless Education Web site: http://center.serve.org/nche/pr/data_comp.php

National Center for Homeless Education. (2011, June). *Education for Homeless Children and Youths Program: Analysis of 2009-2010 Federal Data Collection and Three-Year Comparison*. Retrieved June 24, 2011, from the National Center for Homeless Education Web site: http://center.serve.org/nche/pr/data_comp.php

National Center on Family Homelessness. (2009). *Working to end family homelessness: Annual report*. Retrieved March 1, 2011, from the National Center on Family Homelessness Web site: <http://www.familyhomelessness.org/media/88.pdf>

National Center on Family Homelessness. (2011). *America's youngest outcasts 2010*. Retrieved January 24, 2012, from the National Center on Family Homelessness Web site: http://www.homelesschildrenamerica.org/media/NCFH_AmericaOutcast2010_web.pdf

Obradović, J., Long, J., Cutuli, C., Hinz, E., Heistad D., & Masten, A. (2009). Academic achievement of homeless and highly mobile children in an urban school district: Longitudinal evidence on risk, growth, and resilience. *Development and Psychopathology, 21*, 493–518.

Obradović, J. (2010). Effortful control and adaptive functioning of homeless children: Variable-focused and person-focused analyses. *Journal of Applied Developmental Psychology, 31*, 109-117.

Project HOPE. (n.d.) *History of the McKinney-Vento Act*. Retrieved June 3, 2011, from the Project HOPE Web site: <http://education.wm.edu/centers/hope/resources/mckinneyact/index.php>

Rafferty, Y., Shinn, M., & Weitzman, B. (2004). Academic achievement among formerly homeless adolescents and their continuously housed peers. *Journal of School Psychology, 42*, 179-199.

Rafferty, Y. & Rollins, N. (1989). *Learning in limbo: The educational deprivation of homeless children*. (ERIC Document Reproduction Service No. 312363). Retrieved March 1, 2011, from the Education Resources Information Center Web site: <http://eric.ed.gov/PDFS/ED312363.pdf>

Rescorla, L., Parker R., & Stolley, P. (1991). Ability, achievement, and adjustment in homeless children. *American Journal of Orthopsychiatry, 62*, 210-220.

Rubin, D., Erickson, C., San Agustin, M., Cleary, S., Allen, J., & Cohen, P. (1996). Cognitive and academic

functioning of homeless children compared with housed poor children. *Pediatrics*, 97(3), 289-294.

Samuels, J., Shinn, M., & Buckner, J.C. (2010, May). *Homeless children: Update on research, policy, programs, and opportunities*. Retrieved March 22, 2012, from the U.S. Department of Health and Human Services Web site: <http://aspe.hhs.gov/hsp/10/HomelessChildrenRoundtable/index.shtml>

Shinn, M., Schteingart, J., Chioke Williams, N., Carlin-Mathis, J., Bialo-Karagis, N., Becker-Klein, R., et al. (2008). Long-term associations of homelessness with children's well-being. *American Behavioral Scientist*, 51(6), 789-809.

Stronge, J. (1993). From access to success: Public policy for educating urban homeless students. *Education and Urban Society*, 25, 340-360.

U.S. Department of Education (ED). (2006). *Report to the President and Congress on the implementation of the Education for Homeless Children and Youth Program under the McKinney-Vento Homeless Assistance Act*. Retrieved January 24, 2012, from the U.S. Department of Education Web site: <http://www2.ed.gov/programs/homeless/rpt2006.doc>

U.S. Department of Housing and Urban Development (HUD). (2010). *2009 Annual homeless assessment report*. Retrieved June 25, 2011, from the U.S. Department of Housing and Urban Development Web site: <http://www.hudhre.info/documents/5thHomelessAssessmentReport.pdf>

U.S. Department of Housing and Urban Development (HUD). (2011). *2010 annual homeless assessment report to Congress*. Retrieved June 24, 2011, from the U.S. Department of Housing and Urban Development Web site: <http://www.hudhre.info/documents/2010HomelessAssessmentReport.pdf>

U.S. Department of Housing and Urban Development (HUD). (n.d., a) *Federal definition of homeless*. Retrieved June 8, 2011, from the U.S. Department of Housing and Urban Development Web site: <http://portal.hud.gov/hudportal/HUD?src=/topics/homelessness/definition>

U.S. Department of Housing and Urban Development (HUD). (n.d., b). *McKinney-Vento Act history*. Retrieved June 25, 2011, from the U.S. Department of Housing and Urban Development Web site: http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/homeless/lawsandregs/mckv

U.S. Government Accountability Office (GAO). (1985). *Homelessness: A complex problem and the federal response*. Retrieved June 25, 2011, from the U.S. Government Accountability Office Web site: <http://archive.gao.gov/f0102/126760.pdf>

Ziesemer, C. & Marcoux, L. (1992). Academic and emotional needs of homeless students. *Social Work in Education*, 14, 77-85.

Ziesemer, C., Marcoux, L., & Marwell, B. (1994). Homeless children: Are they different from other low-

income children? *Social Work*, 39, 658-668.

Zima, B., Wells, K., & Freeman, H. (1994). Emotional and behavioral problems and severe academic delays among sheltered homeless children in Los Angeles County. *American Journal of Public Health*, 84(2), 260-264.

Appendix 1: Chronological List of Studies

Bassuk, E. & Rubin, L. (1987). Homeless children: A neglected population. *American Journal of Orthopsychiatry*, 57(2), 279-286.

Rafferty, Y. & Rollins, N. (1989). *Learning in limbo: The educational deprivation of homeless children*. <http://eric.ed.gov/PDFS/ED312363.pdf>

Rescorla, L., Parker R., & Stolley, P. (1991). Ability, achievement, and adjustment in homeless children. *American Journal of Orthopsychiatry*, 62, 210-220.

Ziesemer, C. & Marcoux, L. (1992). Academic and emotional needs of homeless students. *Social Work in Education*, 14, 77-85.

Ziesemer, C., Marcoux, L., & Marwell, B. (1994). Homeless children: Are they different from other low-income children? *Social Work*, 39, 658-668.

Zima, B., Wells, K., Freeman, H. (1994). Emotional and behavioral problems and severe academic delays among sheltered homeless children in Los Angeles County. *American Journal of Public Health*, 84(2): 260–264.

Rubin, D., Erickson, C., San Agustin, M., Cleary, S., Allen, J., & Cohen, P. (1996). Cognitive and academic functioning of homeless children compared with housed poor children. *Pediatrics*. 97(3), 289-294.

Masten, A., Sesma, A., Si-Asar, R., Lawrence, C., Miliotis, D., & Dionne, J. (1997). Educational risks for children experiencing homelessness. *Journal of School Psychology*. 35(1). 27-46.

Buckner, J., Bassuk, E., & Weinreb, L. (2001). Predictors of academic achievement among homeless and low-income housed children. *Journal of School Psychology*. 39(1). 45-69.

Rafferty, Y., Shinn, M., & Weitzman, B. (2004). Academic achievement among formerly homeless adolescents and their continuously housed peers. *Journal of School Psychology*, 42, 179-199.

Dworsky, A. (2008). *Educating homeless children in Chicago: A case study of children in the Family Regeneration Program*. Chicago: Chapin Hall at the University of Chicago. <http://www.chapinhall.org/sites/default/files/ChapinHallDocument%282%29.pdf>

Huntington, N., Buckner, J., and Bassuk, E. (2008). Adaptation in homeless children: An empirical examination using cluster analysis. *American Behavioral Scientist*. 51(6). 737–755.

Shinn, M., Schteingart, J., Chioke Williams, N., Carlin-Mathis, J., Bialo-Karagis, N., Becker-Klein, R., & Weitzman, B. (2008). Long-term associations of homelessness with children's well-being. *American Behavioral Scientist*. 51(6). 789-809.

Larson, A. & Meehan, D. (2009). *Homeless and highly mobile students: A description of the status of homeless students from three school districts in Minnesota*. Center for Advanced Studies in Child

Welfare – Minn-LInK Child Welfare Special Topic Report No. 7. <http://www.cehd.umn.edu/ssw/cascw/attributes/PDF/minnlink/ReportNo7.pdf>

Obradović, J., Long, J., Cutuli, J., Chan, C., Hinz, E., Heistad, D., & Masten, S. 2009. Academic Achievement of homeless and highly mobile children in an urban school district: Longitudinal evidence on risk, growth, and resilience." *Development and Psychopathology*, 21, 493–518.

Obradović, J. (2010). Effortful control and adaptive functioning of homeless children: Variable-focused and person-focused analyses. *Journal of Applied Developmental Psychology*, 31, 109-117.

Appendix 2 Summary of Methodologies of Studies under Review

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Bassuk & Rubin (1987)	82 families with 156 children staying in shelters in Massachusetts	Compilation and analysis of data		Interviews conducted at family shelters; parents completed questionnaire, Achenbach Child Behavior Checklist; interviewers completed questionnaire of clinical observations	Denver Developmental Screening Test (children under 5), Children's Manifest Anxiety Scale, Children's Depression Inventory
Rafferty & Rollins (1989)	277 families residing in shelters in New York City; 429 children between age 6-9 years old living with parent(s)	Compilation and analysis of statistical and interview data	Statistical data from the New York City Board of Education on school attendance, academic performance, and other indices of school success of children in temporary housing	Field-based interviews with families residing in temporary facilities in New York City; survey instrument on demographics, prior living arrangements, events leading to the request for emergency shelter, experiences with the shelter system, physical health, educational experiences of children ages 6-9	

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Rescorla, Parker, & Stolley (1991)	83 3-12 year-old children staying in shelters in Philadelphia (PA); a comparative sample of 45 3-12 year-old children living in the inner city and whose mothers were on public assistance; the children were picked randomly in the waiting room of a medical assistance pediatric clinic in Philadelphia (PA)	Compilation and analysis of statistical and interview data; comparison of data between two groups	School data	Mothers interviewed	Draw-a-Person, Three Wishes, Achenbach Child Behavior Checklist; ages 6-12 – WISC-R vocabulary subtest from Revised Wechsler intelligence Scale for Children, WISC-R Block Design subtest, WRAT-R Reading subtest from the Wide Range Achievement Test-Revised, Stanford-Binet IV Vocabulary subtest, Peabody Picture Vocabulary Test Revised, Beery Developmental Test of Visual-Motor Integration (VMI), Cubes Test
Ziesemer & Marcoux (1992)	88 elementary school-aged students staying in shelters in Madison, WI, and enrolled in Madison schools during the 1987-1988 and 1988-1989 academic years	Compilation and analysis of statistical and interview data	School district data on enrollment, ethnicity, mobility, special education	Teachers completed Achenbach Teacher Report Form	

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Zieseimer, Marcoux, & Marwell (1994)	145 elementary school students who experienced homelessness between September 1987 and January 1990 and were still enrolled in the Madison Metropolitan School District (WI) in March 1990; a comparative sample of 142 children identified as low income, as indicated by receiving free school lunch, and geographically mobile; matched with homeless group on grade, gender, and race	Compilation and analysis of statistical and interview data; comparison of data between two groups	Health data provided by school nurses; school district data on grade, ethnicity, school attended, number of schools attended (mobility), enrollment in Chapter I or special education, health	Teachers completed Achenbach Teacher Report Form; children completed Harter Self-Perception Profile for Children	
Zima, Wells, & Freeman (1994)	118 families and 169 children staying in shelters in Los Angeles County, CA	Bivariate analysis used to examine whether a child's homeless history variables and demographic factors were associated with mental health problems and whether child mental health problems were associated with service use, controlling for other factors		Parents interviewed on sociodemographic characteristics, homeless history, awareness of child's emotional or learning problems, use of health services; parents completed Child Behavior Checklist	Children evaluated using Children's Depression Inventory; receptive vocabulary measured by Peabody Picture Vocabulary Test; three reading skills tested by Woodcock-Johnson Language Proficiency Battery

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Rubin, Erickson, San Agustin, Cleary, Allen, & Cohen (1996)	102 homeless children and their mothers staying in three shelters in New York City (NY); a comparative sample of 178 housed children and their mothers selected from the homeless children's classrooms between 1990 and 1992; matched with homeless group on gender and ethnicity	Multivariate analysis controlling for a child's age, sex, race, social class, family status, verbal intelligence, and nonverbal intelligence		Mothers and children interviewed at the child's school; mothers assessed regarding demographic variables and housing history; mothers asked about attendance and behavioral problems; mothers completed depression inventory and anxiety inventory ; children completed depression inventory and anxiety inventory	Children completed assessments for cognitive functioning and vocabulary; Wide Range Achievement Test used to assess academic functioning
Masten, Sesma, Si-Asar, Lawrence, Miliotis, & Dionne (1997)	73 children ages 6-11 from homeless families staying in a Minneapolis (MN) homeless shelter in 1993	Compilation and analysis of statistical and interview data; intercorrelations of behavior and achievement scores determined	Cumulative school records	Teachers completed Achenbach Teacher's Report Form, which included reporting on academic progress and behavior; parents interviewed on family history and their perceptions of their children's school progress and experience; children completed a "warm-up" questionnaire	Wechsler Individual Achievement Test Screener (WIAT-S) used to estimate academic achievement; Raven Coloured Progressive Matrices and Vocabulary subtest of the WISC-III used to estimate intellectual functioning

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Buckner, Bassuk, & Weinreb (2001)	220 homeless single-parent families staying in shelters in the Worcester, MA area (mothers and their children ages 4 months to 17 years); a comparative sample of 216 low-income housed single-parent families; these families had never experienced homelessness but were at high economic risk, as indicated by receiving Aid to Families with Dependent Children (AFDC)	Compilation and analysis of statistical and interview data; multivariate analysis (hierarchical approach to order entry of predictors to determine which variables made independent contribution to explanation of variance in academic achievement)	Data from the Worcester Family Research Project (1992-1995)	Mothers interviewed regarding development and learning of their children, including questions about school attendance, numbers of schools attended, and school related problems; completed Life Events Questionnaire to identify negative life events and stressors; completed index to assess mental health; children completed "My Family and Friends" assessment for social supports	Wechsler Individual Achievement Test Screener (WIAT-S) used to estimate academic achievement; Kaufman Brief Intelligence Test used to measure cognitive abilities
Rafferty, Shinn, & Weitzman (2004)	46 adolescents in families who experienced homelessness and 87 permanently housed adolescents whose families received public assistance 1992-1993 in New York City	Compilation and analysis of statistical and interview data; compared groups using t-tests and chi-square analyses for all outcomes; used multiple regressions to examine associations of academic achievement with homelessness; controlled for age and race in all regressions	School academic records and scores on Degrees of Power Reading Test and Metropolitan Achievement Test (MAT)	Interviews conducted with both mothers and adolescents	Adolescents administered Wechsler Intelligence Scale for Children – Revised (WISC-R)

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Dworsky (2008)	444 families with a total of 1,325 children in the Family Regeneration Program in Chicago from November 2002-August 2006; Chicago Public Schools (CPS) records for 1,022 of the 1,325 children	Compilation and analysis of statistical and interview data	Administrative data from Inner Voice-Family Regeneration Program and Chicago Public Schools	Qualitative interviews with advocates and service providers	
Huntington, Bucker, & Bassuk (2008)	220 homeless and 216 low-income housed (never homeless) single-parent families (mothers and children ages 4 months to 17 years) in Worcester, MA	Person-centered approach using cluster analysis to examine data for subgroups (higher functioning and lower functioning)	Data from the Worcester Family Research Project (1992-1995)	Interviews with mothers and children; Child Behavior Checklist, adaptive functioning survey; Masten Life Events Questionnaire to determine exposure to negative events; screened for mother's behavioral health and traumatic experiences	School-aged children administered WIAT-S; preschool-aged administered Kaufman Assessment Battery for Children to assess intelligence
Shinn, Schteingart, Chioke Williams, Carlin-Mathis, Bialo-Karagis, Becker-Klein, et al. (2008)	388 formerly homeless children recruited from families who had applied for emergency shelter in New York City (NY); a comparative sample of 382 housed children sampled randomly from public assistance roles; comparison occurred an average of 55 months after the homeless children first requested shelter	Compilation and analysis of statistical and interview data; comparison of data between two groups; controlled for certain variables on each measure	Data from Wave 2 of longitudinal study of homeless and poor housed families conducted in New York City; New York City Board of Education records	Interviews with mothers and children; mothers completed Achenbach Child Behavior Checklist to measure behavior problems; adolescents reported on mental health problems; children ages 11-17 completed a scale to measure community involvement	Children ages 4-6 administered Stanford Binet Intelligence Scale to measure cognitive development; children ages 7-17 completed Similarities subtest from WISC-R

Study	Sample	Methodology	Existing Data Utilized	Interview/Survey	External Assessments Administered
Larson & Meehan (2009)	3,776 homeless/highly mobile students identified by school administration staff and enrolled in three school districts in MN in 2006		Data from Minnesota Departments of Health Services, Health, and Education		
Obradovic, Long, Cutuli, Chan, Hinz, Heistad, & Masten. (2009)	14,754 homeless and highly mobile students (H/HM) identified by the Minneapolis Public School district (MN) over the span of three school years: 2003-2004, 2004-2005, 2005-2006; a comparative sample of children identified as low-income (qualifying for free or reduced price meals) at any point in the three years; a comparative sample of advantaged children (not H/HM and not low-income)	Linear mixed models to examine the relationship between risk exposure and academic achievement over time and development of growth curves for each cohort	Data from Minneapolis Public School district (2003-2003, 2004-2005, 2005-2006) – demographic data, ELL status, poverty status,, attendance		Northwest Achievement Levels Test
Obradovic (2010)	58 children ages 5-6 in a homeless shelter in upper Midwest during their transition to school	Bivariate correlations among variables in the study; linear regression analyses; person focused analyses; logistic regression analysis		Parents interviewed and administered questionnaires; teachers completed questionnaires about the child's adaptive functioning	Children completed standardized intelligence tests and battery of effortful control tasks

About NCHE



National Center for Homeless Education

Funded by the U.S. Department of Education, the National Center for Homeless Education (NCHE) serves as an information clearinghouse for people seeking to remove or overcome educational barriers and to improve educational opportunities and outcomes for children and youth experiencing homelessness. The Center also supports educators and service providers through producing training and awareness materials and providing training at regional and national conferences and events.

NCHE is part of the larger organization of the SERVE Center at the University of North Carolina at Greensboro.

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