HOMELESS FAMILIES RESEARCH BRIEF

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Well-being of Young Children after Experiencing Homelessness

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About the Family Options Study

This research brief takes advantage of data collected for the Family Options Study, sponsored by the U.S. Department of Housing and Urban Development. The study involves 2,282 homeless families with children who entered shelter between late 2010 and early 2012 in one of twelve communities across the country chosen based on willingness to participate and ability to provide a sufficient sample size and range of interventions: Alameda County, CA; Atlanta, GA; Baltimore, MD; Boston, MA; Bridgeport and New Haven, CT; Denver, CO; Honolulu, HI; Kansas City, MO; Louisville, KY; Minneapolis, MN; Phoenix, AZ; and Salt Lake City, UT. At the time they were recruited to participate in the study, each family had spent at least a week in an emergency shelter. The Family Options Study's main purpose is to determine whether the offer of a particular type of housing program—a short-term rent subsidy, a long-term rent subsidy, or a stay in a facility-based transitional program with intensive services—helps a homeless family achieve housing stability and other positive outcomes for family well-being. To provide the strongest possible evidence of the effects of the housing and services interventions, the study uses an experimental research design with random assignment of families to one of the types of housing programs or to a control group of "usual care" families that were left to find their own way out of shelter. For more information, see Gubits et al., 2015 and Gubits et al., 2016.

The study collected data from the families at the time they were recruited in emergency shelters, revealing that these are very poor families with significant levels of housing instability, weak work histories, and disabilities affecting both parents and children. The study followed the families over the next 20 months and surveyed them again, collecting information about the family, the parents, and up to two focal children in each family.

While the Family Options Study sample is not nationally representative, it has broad geographic coverage, and study families are similar in age and gender of parents, number and ages of children, and race and ethnicity to nationally representative samples of sheltered homeless families. Therefore, it is a good sample for studying the experience of families that have an episode of homelessness.

The analysis presented here does not use the experimental design of the Family Options Study but instead is based on non-experimental associations between children's experiences following a stay in an emergency shelter and developmental outcomes. All associations with enrollment or care instability as the outcome control for child age (as of the follow-up survey date), gender, study site, and the following parent characteristics (based on data collected at study entry): age; race/ethnicity; marital status; educational attainment (less than high school, high school degree or GED, more than high school); work history; annual household income (less than or more than $5,000); parental disability that prevents work; number of children with the family; experience of intimate partner violence as an adult; previous homelessness; and psycho-social variables based on widely used questions and standard definitions based on those questions (psychological distress, post-traumatic stress symptomology, drug abuse, and alcohol dependency). Analyses predicting child developmental outcomes included all of the above controls with the exception of four parental characteristics—marital status, annual household income (less than or more than $5,000), parental disability that prevents work, and previous homelessness—that were not statistically significant in any of the associations and were dropped as smaller sample sizes in these analyses permitted fewer control variables.

Highlights:

- Twenty months after staying in an emergency shelter with their families, children scored worse in pre-reading skills and had higher rates of overall behavior problems and early development delays compared to national norms for children their age. However, they displayed only small disadvantages in pre-math skills, and for some types of behavioral challenges their rates were similar to national norms.
- Unstable housing arrangements remained common during the 20 months following a stay in emergency shelter, with 41 percent of families reporting that, during the past six months, they had been in a shelter or a place not suitable for human habitation, had doubled up in someone else's housing unit, or had moved at least once.
- Children who had more stable recent housing situations and more stable child care arrangements displayed fewer behavior problems 20 months after a shelter stay than those who did not.
- Enrollment in early education and center-based care was lower for families who had experienced housing instability in the past six months compared to those who had been stably re-housed. However, housing instability did not appear to be associated with lower enrollment in Head Start programs.
- Children ages three and four who were enrolled in Head Start or other early education and center-based care displayed stronger pre-math and pre-reading skills than those who were only in parental care.

This brief draws on data collected on 925 children ages 18 to 59 months (less than 5 years old) in 819 families. Data were collected 20 months after families had entered the study during a stay in an emergency shelter and include responses by parents to survey questions and direct assessments of child development. Developmental outcomes for children were measured with widely used survey questions and standard definitions. The use of standard questionnaires and tools allows for the comparison of children who had experienced homelessness to a broader population of same-age children. Because we lack information about how children in poverty typically score on these measures, we cannot compare children who experienced homelessness to same-age children in low-income families. Thus, this brief focuses on how young children whose families had recently experienced homelessness compare to national norms for measures based on children in families of all income levels. Different developmentally appropriate measures were used depending on the age of the child. Child development measures used for comparisons in this brief are: the Ages and Stages Questionnaire (ASQ), completed by parents on 473 children ages 18 to 41 months; the Strengths and Difficulties Questionnaire (SDQ), completed by parents on 546 children ages 36 to 59 months; and the Woodcock-Johnson tests of early reading and math skills (WJIII Letter Word and WJIII Applied Problems), completed by 347 children (reading) and 335 children (math) ages 42 to 59 months.

In addition to child development outcomes, the brief uses survey responses by parents to measure continued housing instability following a stay in emergency shelter and child care arrangements used by families during the 20 month period following the shelter stay.

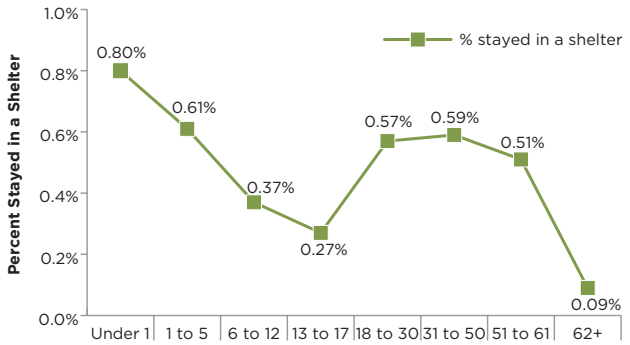
Introduction

The age at which a person in the United States is most likely to stay in a homeless shelter is infancy, and rates of homelessness remain high in the preschool years (Exhibit 1).[1] Past research has shown that young children in families that experience homelessness are exposed to many developmental risks. They often experience deep poverty, family separations, family violence, and school instability. Relative to national norms, they tend to show delays in developing skills linked to early academic success and increased behavioral problems (Bassuk, Richard, & Tsertsvadze, 2015; Fantuzzo, LeBoeuf, Brumley, & Perlman, 2013). Whether they fare differently than young children who are poor but have not been homeless is less clear (Buckner, 2008).

At the same time, children who experience homelessness may also display resilience, achieving developmental progress similar to other children their age despite greater exposure to risks, whether through "bouncing back" after a shelter stay or continuing to progress on a normal trajectory during homelessness (Cutuli & Herbers, 2014; Huntington, Buckner, & Bassuk, 2008; Masten, 2001).

This brief provides new evidence on relationships between homelessness, enrollment in early care and education, and young children's developmental outcomes. Most research has focused on outcomes for children in shelters, but less is known about how young children fare after a stay in a shelter. We compare how children fared in their development 20 months following a shelter stay relative to children their age nationally on developmental delays, school readiness, and behavioral challenges. Because we lack information about how children in poverty typically score on these measures, this brief focuses on how young children whose families had recently experienced homelessness compare to national norms for children in families of all income levels.

EXHIBIT 1: INFANTS ARE THE MOST LIKELY AGE GROUP IN THE UNITED STATES TO HAVE STAYED IN AN EMERGENCY SHELTER IN THE PAST YEAR



Sources: Population by age group calculated by authors from U.S. Census Bureau (2014) Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2010 to July 1, 2013. Numbers experiencing an emergency shelter stay by age are from Homeless Management Information System Estimates for the 2013 Annual Homeless Assessment Report to Congress found at https://www.hudexchange.info/resource/4404/2013-ahar-part-2-estimates-of-homelessness-in-the-us.

High-quality early education and care arrangements have been linked to gains in school readiness for children in low-income families, but less is known about its influence on children who have experienced homelessness. We examine the extent to which children are enrolled in Head Start and other early education and center-based care programs 20 months after a shelter stay, as well as whether continued housing instability after a shelter stay is related to enrollment rates and stability of care arrangements. We then examine whether there is evidence of relationships between Head Start and other early education and center-based care enrollment and children's school readiness and behavioral challenges.

Compared to national norms, young children who have stayed in shelter have higher risk for developmental delays and higher rates of behavioral challenges

Twenty months after staying in an emergency shelter with their families, children between 18 and 41 months were at somewhat higher risk for early developmental delays compared to national norms for children their age. They were at lowest risk for delays in their development of general activity and movement (although still at higher risk than national norms) and at highest risk for fine motor skill delays. Based on national norms, we would expect 84 to 88 percent of children to pass screening in all five domains assessed; however, only 77 percent of children who had been in shelter 20 months earlier passed all five domains.[2]

Similarly, parents of 3- and 4-year-olds who have stayed in emergency shelter with their families reported higher rates of behavioral challenges compared to national norms (Exhibit 2).[3] In a typical national sample of children, about 20 percent of

[1] The Family Options Study and this brief use a definition of homelessness that includes stays in emergency shelters and in places not suitable for human habitation such as abandoned buildings, transportation waiting rooms, and abandoned vehicles. Other forms of housing instability are also considered homelessness for some federal programs. For example, the Department of Education's program that aims to make sure that homeless children are able to attend school and avoid changing schools uses a broader definition of homelessness. See Section 725(2)(B) of Title VII, Subtitle B, of the McKinney Vento Homeless Assistance Act (MVHAA).

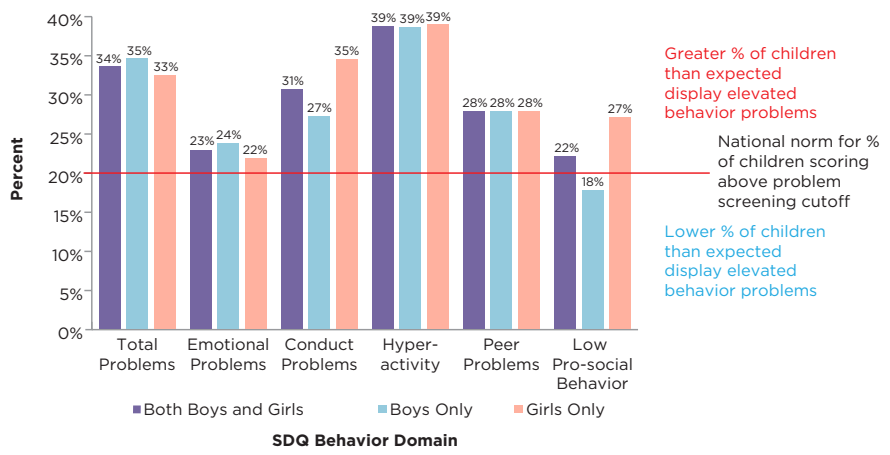
[2] The Ages and Stages (ASQ) questions were administered to parents of study children. The ASQ is used to screen for potential developmental delays. Children are considered to be at risk for a developmental delay in a domain if their score falls two standard deviations or more below the average score for children of the same age, the "age norm." Based on age norms, we would expect 97.7 percent to pass any individual domain. Among study children, 94.7 percent passed gross motor skills, and 88.6 percent passed fine motor skills. Passing rates for personal-social skills (92.6 percent), communication skills (92.4 percent), and problem solving skills (91.0 percent) fell between these two.

[3] These comparisons are based on the Strengths and Difficulties Questionnaire (SDQ) administered to parents of study children age 3 years and older. The SDQ is a validated measure used to screen for behavioral problems and not for clinical diagnosis of behavioral disorders.

children would score above the screening cutoff, so rates above 20 percent indicate that more children were experiencing elevated behavioral problems than expected based on their age and gender.

Rates of hyperactivity, conduct problems, and peer problems were particularly high, as almost twice as many children scored above the screening cutoff for hyperactivity compared to national norms, and an additional 10 and 8 percent of children scored above the cutoffs for conduct problems and peer problems, respectively. However, rates of low pro-social behaviors (for example, sharing, volunteering to help others, or kindness toward others) and of emotional problems were similar to those of their peers nationally. Girls who had experienced homelessness had somewhat higher rates of conduct problems and of low pro-social behavior compared to boys, even after adjusting for differences in national norms between boys and girls.

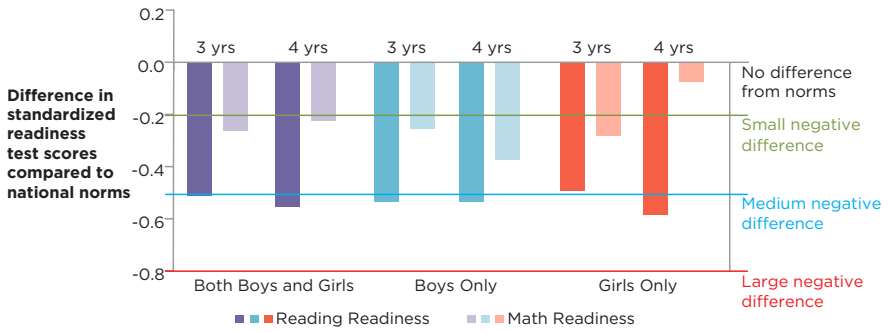
EXHIBIT 2: RATES OF ELEVATED BEHAVIORAL CHALLENGES FOR 3- AND 4-YEAR OLDS 20 MONTHS AFTER A SHELTER STAY COMPARED TO NATIONAL NORMS



Sources: Family Options Study 20-month follow-up survey. U.S. norms for SDQ are from YouthInMind (2014). Notes: SDQ = Strengths and Difficulties Questionnaire. All differences in rates compared to national norms are statistically significant at the .05 level with the exception of emotional problems (both, male, and female) and low pro-social behavior (both and male only).

Compared to national norms, young children who had stayed in a shelter 20 months earlier were moderately disadvantaged in reading readiness and slightly disadvantaged in math readiness

EXHIBIT 3: READING AND MATH READINESS SCORES OF 3- AND 4-YEAR-OLDS 20 MONTHS AFTER STAYING IN A SHELTER COMPARED TO PEERS NATIONALLY



Sources: Family Options Study 20-month focal child assessments, Woodcock-Johnson III test norms.

Though 3- and 4-year-old children usually are not in school yet, they are developing school readiness skills, including cognitive abilities for reading and math. Exhibit 3 shows average reading and math readiness test scores for 3- and 4-year-old children 20 months after an emergency shelter stay compared to their same-age peers. Bars below zero indicate that average readiness scores of children who had experienced homelessness were below those of their peers, and the exhibit shows whether the size of the difference in scores was small, medium, or large.[4]

Differences in math readiness scores were small. Some gender differences in math readiness were evident for four-year-olds, with girls scoring near national averages and boys being at a small to medium disadvantage.[5] Average reading readiness scores were more notably below those of peers nationally, with little difference between boys and girls.

[4] We use the conventions developed by Cohen (1992) for small (0.2 SD), medium (0.5 SD), and large (0.8 SD) effect sizes for standardized mean differences.

[5] All scores were significantly different from zero except math scores for female 4-year-olds (p=.52)

Twenty months after a shelter stay, housing and child care instability were common and may be linked to some behavioral challenges for young children

MANY FAMILIES WITH YOUNG CHILDREN CONTINUED TO EXPERIENCE SOME FORM OF HOUSING INSTABILITY 20 MONTHS AFTER STAYING IN EMERGENCY SHELTER

Although the majority of families (59 percent) were stably housed during the period between 14 and 20 months following a shelter stay, many continued to experience unstable housing situations, including staying in shelters or places not suitable for human habitation,[6] doubling up with friends or relatives because they could not find or afford a place of their own, and frequent moves.[7] Twenty months after a shelter stay, more than one-sixth of families with young children (17 percent of all study families) reported that, during the past six months, they had stayed in a homeless shelter or in a place not suitable for human habitation for one or more nights.[8] Almost one-fourth (23 percent) of the families had been doubled up at least once in the past six months. Over one-third (34 percent) of families had moved at least once in the past six months, and some families (13 percent) were highly mobile, having moved twice or more in the past six months. Overall, two-fifths (41 percent) of families reported homelessness, doubling up, or moving at least once in the past six months.

RESIDENTIAL MOVES WERE ASSOCIATED WITH GREATER BEHAVIORAL CHALLENGES FOR YOUNG CHILDREN

Twenty months after a shelter stay, having been homeless or doubling up in the past six months was not linked to behavior problems or school readiness. However, each additional move during the past six months was associated with higher rates of behavioral problems, particularly hyperactivity and peer problems, and with lower reading readiness scores.[9]

RECENT HOMELESSNESS WAS ASSOCIATED WITH INSTABILITY IN CHILD CARE ARRANGEMENTS

Changes in residence can disrupt existing child care arrangements, so children who experience homelessness and housing instability may also experience instability in care arrangements.[10]

Changes in child care arrangements are not uncommon for young children, but they may disrupt attachments formed with their caregivers, increase the risk of behavior problems, and negatively affect cognitive development (Bratsch-Hines et al., 2015; Loeb et al., 2004; NICHD ECCRN, 2003; Pilarz & Hill, 2014; Tran & Weinraub, 2006).

Of the 41 percent of children ages 18 through 59 months who were in some form of regular child care by someone other than their parent 20 months following a shelter stay, two-fifths had had been in more than one arrangement during that period. Instability in child care was defined as having more than one regular arrangement at least 10 hours a week over this period.[11] Homelessness within the past six months was associated with children having been in two or more care arrangements, but doubling up and the number of moves in the past six months were not.[12]

UNSTABLE CARE ARRANGEMENTS WERE ASSOCIATED WITH SOMEWHAT GREATER BEHAVIORAL PROBLEMS

Children who had been in two or more care arrangements were somewhat more likely to have elevated behavior problems. The strongest relationship was between care instability and increased problems in children's peer relationships, with the predicted rate of peer problems for children who experienced care instability being 16 percentage points higher than for children who were in one care arrangement.[13] Reading and math readiness did not appear to be associated with care instability.

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6 That is, homelessness as defined for the Family Options Study and this brief. See footnote 1.

7 Moving frequently was measured as the number of places a family had lived in the past six months. For some families this measure could be an under-count of the total number of moves if the family moved out of and then back into the same place during the 6 month period. Analyses assessed the relationship between each additional family move and outcomes for children.

8 These estimates are for the families of focal children ages 18 months through 59 months rather than for the entire sample of families in the Family Options Study (some of whom had no focal children in that age range). One of the study's interventions, access to a long-term rental subsidy, reduced the measures of housing instability reported here (Gubits et al., 2015; Gubits et al. 2016). The housing outcomes reported here are for all families with young focal children, whether or not they received that intervention.

9 The associations between number of moves and both behavior problems and lower reading readiness scores were significant at the .10 level. All tests of associations for child developmental outcomes controlled for child and family characteristics (see page 1) that were observed at baseline and study site. Characteristics that were not observed or controlled for could potentially have influenced both housing instability and child well-being outcomes.

10 Child care instability can include changes from one arrangement to another, the number of arrangements used over the course of a day or week, or changes within arrangements (Adams & Rohacek, 2010). In this brief, we focus on the first two types of instability.

11 Being in multiple arrangements simultaneously does not have the same implications as changing arrangements sequentially. The study's survey questions do not permit us to distinguish between these two forms of child care instability. The reference periods for housing instability and child care instability were not the same. Homelessness, doubling up, and number of places lived were measured over the six months before the follow-up survey, while child care stability was measured for the entire time since study enrollment (median of 20 months) and only was assessed for children currently in any type of regular education or care arrangement.

12 All tests of associations where enrollment or care instability were outcomes controlled for child and family characteristics (see page 1) that were observed at baseline and study site.

13 Association with peer problems (odds ratio of 2.4 compared to children in one arrangement) is significant at .05 level. Percentage point difference is based on mean differences in individual predicted probabilities for children who did and did not experience care instability.

Twenty months after a shelter stay, recent housing instability did not appear to disrupt enrollment in Head Start programs but was associated with lower enrollment in other types of care arrangements

TWENTY MONTHS AFTER A SHELTER STAY, FAMILIES' USE OF HEAD START AND OTHER EARLY EDUCATION AND CENTER-BASED CARE WAS SIMILAR TO NATIONAL NORMS FOR FAMILIES IN POVERTY

In the United States, the majority of infants and preschool-aged children receive early education and care from someone other than their parents on a regular basis (Laughlin, 2013; NICHD ECCRN, 2006). Parents commonly select family child care for infants and very young children. As children grow older, the choice shifts toward early education and center-based care (Coley et al., 2014; Mamedova & Redford, 2015). Lower income families are less likely to use early education and center-based care compared to higher income families (Coley et al., 2014).

Twenty months after a shelter stay, children in families that had experienced homelessness were in early education and center-based care for at least 10 hours per week at greater rates than children their age in families below the federal poverty level, based on a national survey of participation in early care and education.[14]

The proportion of study children who were in Head Start or early education and center-based care for at least 10 hours per week increased from slightly more than one-in-ten among 1-year-olds to more than four-in-ten among 4-year-olds. Even at the youngest ages, relatively few children were in family child care.[15] Relatives were rarely listed as a primary source of care.

TWENTY MONTHS AFTER A SHELTER STAY, CHILDREN IN FAMILIES WITH RECENT HOUSING INSTABILITY HAD LOWER OVERALL ENROLLMENT RATES IN EARLY EDUCATION AND CENTER-BASED CARE, BUT ENROLLMENT IN HEAD START PROGRAMS DID NOT VARY

Twenty months after a shelter stay, parents who had been homeless, doubled up, or moved more frequently in the past six months reported similar Head Start enrollment rates to study families who had been more stably housed over the past six months.[16] In contrast, each additional move in the past six months was associated with reduced enrollment in other early education and center-based care.[17]

Enrollment in Head Start and other early education and center-based child care is associated with children's reading and math readiness

ENROLLMENT IN HEAD START AND OTHER EARLY EDUCATION AND CENTER-BASED CHILD CARE HAS BEEN SHOWN TO HELP CHILDREN'S READING AND MATH READINESS

High-quality early care and education can positively contribute to young children's development, depending on the type and stability of care as well as family circumstances (NICHD ECCRN, 2006). High-quality early education and center-based care has been shown to promote early learning and school readiness (i.e., early reading, language, and math skills) for all children, with children in low-income families benefitting even more (Yoshikawa et al., 2013). Evidence of influence on behavior has been less clear (Loeb et al., 2007; Yoshikawa et al., 2013). Early care and education may be an especially important context during episodes of homelessness because it can provide consistency and structure at a time when daily routines are disrupted, sleeping arrangements may change on a daily basis, and families cannot afford books, toys, and other positive developmental experiences (Schteingart et al., 1995).

TWENTY MONTHS AFTER A SHELTER STAY, CHILDREN DISPLAYED STRONGER READING AND MATH READINESS IF THEY WERE ENROLLED IN HEAD START OR OTHER CENTER-BASED EARLY CARE AND EDUCATION

Although the quality of the early education and center-based care programs in which children who had been homeless were enrolled was not measured, those who were in Head Start or other center-based early care and education displayed stronger reading and math readiness than those in parental care only.[18]

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[14] We compared the percent of children in study families who were in a center-based care arrangement for at least 10 hours per week to the weighted percentage of children under age 5 in families under 100% of the federal poverty line who were in center-based care for at least 10 hours per week using the child-level rapid tabulations file from the nationally representative National Survey of Early Care and Education, 2012. See footnote 15 for additional information on study definition of early education and center-based care. Study children were identified as being in an "early education and center-based care" program based on parents indicating their child was currently in a regular care arrangement for at least 10 hours a week and that the arrangement was in "school or center-based care" relative to family-based care, child care in the home, or some other arrangement. If so, parents then were asked whether the program was an Early Head Start, Head Start, or other center-based program. A small percentage of children age 4 (6%) who were reported as being in kindergarten or their first year of school were excluded from the study sample.

[15] Family child care included out-of-home care by a non-relative at least 10 hours per week. Parents did not report whether the caregiver was licensed, and the study did not collect information on any other aspect of the quality of early education and child care.

[16] Based on multinomial logistic regression analyses with standard errors adjusted for clustering of focal children within families, controlling for child and parental characteristics and study site.

[17] The estimate significant at the .05 level, controlling for child and parental characteristics and study site.

[18] Results are based on ordinary least squares regression analyses with robust standard errors for clustering of focal children in families, controlling for child and parental characteristics and study site. Age-normed differences on reading readiness (β=.33 SD) and math readiness (β=.28 SD) between Head Start or

Conclusion

Twenty months after a stay in an emergency shelter, young children were disadvantaged in many, but not all, areas of development compared to same-age peers nationally. It is not known how these children were faring compared to other poor children.

In school readiness, children who had stayed in a shelter were moderately disadvantaged in pre-reading skills compared to peers nationally and slightly disadvantaged in math readiness. Children had higher rates of overall behavioral challenges and early development delays on screening measures compared to national norms, but rates of emotional problems and low pro-social behavior were similar to national norms. Twenty months after a shelter stay, both housing instability in the past six months and having been in multiple care arrangements were associated with higher rates of behavioral challenges. Neither form of instability appeared to be strongly related to school readiness.

Federal policy governing early education programs funded through Head Start has explicitly sought to increase access to early care and education for children experiencing homelessness, including prioritizing enrollment for homeless children. This policy appears to be working: Although unstable housing arrangements were still common 20 months after children had been in a shelter, children in families who were homeless, doubled up, or moved frequently in the past six months were enrolled in Head Start programs at similar rates to those in families who had been stably housed during that time. Housing instability was associated with drops in enrollment in center-based child care and education centers that were not identified as Head Start. The Child Care and Development Fund (CCDF) did not have similar provisions in effect during the time period covered by the brief, though similar requirements were established in the 2014 CCDF reauthorization and accompanying 2016 regulations. However, during the time of the analysis, states receiving funds could have chosen to implement similar policies to promote enrollment in center-based care.

Consistent with findings from early care and education research on children in poverty, enrollment in Head Start and other early education or center-based care programs was associated with greater school readiness among children who had been in emergency shelters with their families. Because children were not randomly assigned to a type of care, it is possible that there are factors not controlled for in our analyses that could have influenced both the type of care selected and school readiness. Children who were enrolled in Head Start programs or other early education and center-based care displayed both stronger early reading and early math skills than those only in parental care. The magnitude of the differences in school readiness observed were also consistent with averages across studies that use experimental or quasi-experimental designs (Duncan & Magnuson, 2013). Though not definitive proof, this first look at these relationships among young children who have experienced homelessness suggests that enrollment in Head Start and other early education and center-based care may help improve school readiness for children who experience homelessness.

other early education and center-based care and parental care were significant at the .01 level. These are comparable to effect sizes in meta-analytic research that indicate an average effect size of .35 SD for center-based care on cognitive and achievement outcomes (Duncan & Magnuson, 2013). This is roughly equivalent to about a third of a year of additional learning among children enrolled in Head Start or other center-based early care and education (see Yoshikawa et al., 2013).

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