THE SHIFT STUDY: FINAL REPORT



Service and Housing Interventions for Families in Transition

Prepared by: Maureen A. Hayes, Ph.D Megan Zonneville Ellen Bassuk, M.D.



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I. INTRODUCTION

The Service and Housing Interventions for Families in Transition (SHIFT) Longitudinal Study examines the effectiveness of different housing and service models in helping families who are experiencing homelessness establish and maintain residential stability and self-sufficiency. Research has documented the importance of housing vouchers, sometimes in combination with case management, in increasing residential stability and other positive outcomes. However, studies of the impact of specific types of housing programs on families are far more limited (Bassuk & Geller, 2006). The SHIFT study contributes to our knowledge of the needs and characteristics of homeless families and children and the corresponding supports and services necessary to ensure residential stability among various subgroups of families.

The SHIFT study is timely given the recent shift in national policies regarding homelessness. During the previous ten years, the federal government primarily addressed the chronic homeless population, the majority of whom are individuals with physical health, mental health and substance use issues who have been homeless for long periods (CDC, 2010; Williams & Hall, 2009). With the change in administration in 2008, policy has shifted to include other homeless subgroups including homeless families and children. In June, 2010, the United States Interagency Council on Homelessness (USICH) released a report, *Opening Doors: Federal Strategic Plan to Prevent and End Homelessness* (2010). One of its major goals is to end child and family homelessness in ten years. To accomplish this, policies must be informed by accurate data about the most effective strategies to help homeless families achieve and maintain residential stability and self-sufficiency.

The overall goals of the SHIFT study were to document the needs of women and their children who are homeless, and to understand which housing programs are most effective. The study compared the characteristics and outcomes of families residing in three different types of housing programs: emergency shelter (ES); transitional housing (TH); and permanent supportive housing (PS). Families from each type of housing program were recruited in Buffalo, Rochester, Syracuse and the Albany area in upstate New York to participate in the study. Mothers provided information about housing, employment, income, health, experiences of trauma, mental health, substance use, services received, and the needs and characteristics of their children. Baseline interviews were completed at entry into a housing program; follow-up interviews were conducted at 15-months and 30-months after the baseline interviews.

This report summarizes and discusses the SHIFT study and its findings. The characteristics, experiences, and challenges of the families are presented, followed by the outcomes including housing stability, economic independence, maternal mental health, maternal substance abuse, and child functioning. Characteristics of successful family members as well as those who met challenges in establishing and maintaining residential stability are also explored. The findings will help to inform policies that address housing stability and self-sufficiency among families.

II. BACKGROUND

Numerous studies have been conducted describing the needs and characteristics of families who are homeless and in emergency shelters but few have specifically focused on the effectiveness of transitional housing or permanent supportive housing for families (Bassuk et al, 1996; Rog, McCombs-Thornton, Gilbert-Mongelli, Brito, & Holupka, 1995; Shinn et al., 1998; Bassuk & Geller, 2006; Rog & Buckner, 2007; Samuels, 2010). No studies have compared the effectiveness of different housing models for families who are homeless and at-risk that are located in multiple locations. Instead, research studies have generally been cross-sectional and have focused on the effectiveness of single programs (Bassuk & Geller, 2006).

Much of the research regarding families who are homeless focuses on their characteristics and needs, risk factors associated with homelessness, and program evaluation. Researchers have consistently reported that mothers who are homeless are more likely to have more significant histories of traumatic stress, interpersonal violence, mental health issues, and substance use problems when compared to their housed counterparts (Browne & Bassuk, 1997; Stainbrook, 2006; Weitzman, Knickman & Shinn, 1992; Zugazaga, 2004; Williams & Hall, 2009; Shinn, Knickman, & Weitzman, 1991; Weinreb, Buckner, Williams, & Nicholson, 2006). However, a comparison of women living in emergency shelters and women living in domestic violence shelters found that they had similar rates of mental health and substance use problems as well as lifetime rates of trauma and victimization (Stainbrook, 2006).

Previous studies have documented that homeless women have experienced high rates of interpersonal and random violence as well as other forms of traumatic stress (Browne, 1993; Stainbrook, 2006). Given the high rates of trauma among homeless and extremely poor mothers, it is not surprising that many struggle with mental health and substance use issues. Bassuk and colleagues (1998) found high rates of major depression and posttraumatic stress disorder (PTSD) among women who were homeless: 45% of women who were homeless had a lifetime history of depression and 36% of women who were homeless had a lifetime history of PTSD. In a follow-up study of women who were formerly homeless, Weinreb et al (2006) found that 43% had PTSD, 52% had current major depression and 85% had a lifetime history of depression.

The health and well-being of a child is inextricably linked to the health and well-being of his/her parent (Guarino & Bassuk, 2010). In addition, children experiencing homelessness often live in unsafe and chaotic environments and are exposed to various traumatic stressors. Many have witnessed or experienced violence in their families and in their communities and have difficulty forming trusting, supportive relationships with peers and adults. More than one-third of children who are homeless have been involved in a child protection investigation (The National Center on Family Homelessness, 1999; Guarino & Bassuk, 2010). Many children who are homeless have health issues, developmental delays, mental health and behavioral difficulties, and academic problems (Bassuk, Paquette & Gillis, 2009; Bassuk, 2010; Rog & Buckner, 2007).

Family disruption is common among families who are homeless, especially if they are sheltered for long periods. For example, a study of mothers who were homeless compared to those who had low-incomes found that 44% of mothers had been separated from at least one child, as compared to only 8% of mothers with low-incomes (Cowal, Shinn, Weitzman, Stojanovic & Labay, 2002). Although drug abuse, domestic violence, and institutionalization (i.e.,psychiatric hospitalization, substance use treatment, incarceration) predicted these mother-child separations, homelessness was the overriding factor (Stojanovic & Labay, 2002).

The literature on the effectiveness of housing programs is not as extensive as the research on the characteristics of homeless families (Bassuk & Geller, 2006). Burt (2006) found that most families in transitional housing programs had been homeless prior to entering their housing programs. Mental health and substance use problems were common: about a quarter of parents were taking psychiatric medication for mental health problems, and another quarter were affected by drug use. Approximately 75% of families completed the transitional housing program and then entered stable housing (Burt, 2006).

The Sound Families Initiative (SFI) in Washington State investigated a transitional housing model. Families in SFI had varied backgrounds including poor rental histories, domestic violence, substance abuse, CPS involvement, behavioral barriers or experienced long-term homeless. SFI found that after completing the program most families maintained permanent housing and that income, employment, social supports and reports of quality of life improvements and self-efficacy all increased. Additionally, children had increased school stability (University of Washington School of Social Work, 2008). The Sound Families Initiative had several noteworthy components to support families in achieving stability. SFI programs provided intensive case management and had a maximum stay of two-years. In addition, families who completed the program were provided with Section 8 vouchers and had the option of using them to stay in the unit they were in, or move to other affordable housing. Those who stayed could be reintegrated into the services program without having to move if they needed additional services.

The Minnesota Supportive Housing and Managed Care Pilot provided subsidized housing and services to single adults and families with histories of repeated homelessness exacerbated by other difficulties, such as mental illness, substance use, or physical health problems (NCFH, 2009). Despite their complex problems, after 18 months, women achieved significant improvements in housing stability, as well as reduced mental health and substance use symptoms. The Family Permanent Supportive Housing Initiative, which similarly serves families with multiple homeless episodes, also found that families maintained residential stability over time (Nolan, ten Broeke, Magee & Burt, 2005). Both initiatives provided a combination of housing and services. Although all these evaluations documented greater housing stability, there remains a critical gap in understanding the intensity of housing and services needed by various subgroups of families to achieve stability.

III. METHODOLOGY

This study used a repeated measures longitudinal research design to examine the effectiveness of three housing conditions at three time points; baseline, 15-month followup and 30-month follow-up. Overall goals of the SHIFT study were: (1) to document both the needs and characteristics of women who are homeless; and (2) to understand the effectiveness of different housing programs and related services in addressing housing stability and family self-sufficiency. The following research questions guided the project:

- 1. What are the needs and characteristics of various subgroups of homeless families, mothers, and children who reside in various housing programs?
- 2. How effective are three different housing programs (i.e., emergency shelter, transitional housing and permanent supportive housing) in increasing residential stability, employment, income, and health, and decreasing stress, mental health issues, and substance use among mothers who are homeless?
- 3. How effective are these different housing programs in increasing the well-being of children who are homeless?
- 4. How did homeless mothers and their dependent children's experiences change over the 30 months of the study?

STUDY SAMPLE

The study sample consisted of single parent families headed by a woman 18 years or older, pregnant, or had a child/children living with her. For each family, a target child was selected to gather more detailed information about that child's overall functioning and well-being. The target child was the mother's youngest child older than 2 years, 9 months. If she did not have a child this age, the oldest child was selected. Additionally, the child had to live with the mother so that she would have enough information about the child's functioning to answer the questions accurately. Finally, the family had to be entering an emergency shelter, transitional housing program, or permanent housing program during the recruitment period. There were various differences among the housing programs in each category (e.g., nature and intensity of services; length of stay). The three housing conditions had the following characteristics:

- *Emergency shelters* (ES) primarily provide temporary shelter for homeless families and are intended to be a short-term housing solution (e.g., one night to three months). Case management is usually provided and focuses on addressing the family's immediate and pressing needs (e.g., applying for public benefits, ensuring children are enrolled in school).
- *Transitional housing* (TH) provides housing and support services to facilitate movement to independent living within 24 months. Case management is required, and is targeted at developing individual service plans to help the family establish residential and economic stability and prepare for independent living at program departure.

• *Permanent supportive housing* (PS) provides long-term, community-based housing combined with supportive services for families with intense needs (e.g., mental health or physical disabilities, substance use issues). Supportive services may be provided directly or provided by other public or private service agencies.

PROGRAMS AND SAMPLE RECRUITMENT

The study was conducted in four cities in upstate New York: Rochester, Buffalo, Syracuse, and the larger Albany area. This region was chosen because it enabled the research to generate findings generalizable to other mid-sized cities across the country. The specific cities were selected because they have similar numbers of homeless families and homeless service systems. Comparing the outcomes of families across the selected cities allowed the researchers to minimize variations in a system-level context (e.g., TANF eligibility) thereby minimizing the potential for confounded study results.

The first phase of the study involved identifying and recruiting ES, TH, and PS programs in the target cities listed above. These efforts included meeting with Continuum of Care organizations in each city to gain their support for the study and to identify programs that might participate. The Continuum of Care organizations then contacted programs to inform them of the study and to tell them they would be contacted by The National Center on Family Homelessness (The National Center) about participating. Research staff called, wrote, and visited approximately 125 programs to discuss the SHIFT study and to learn about the housing programs (e.g., eligibility criteria, characteristics of residents, number of units for families, resident turnover rates). When programs agreed to participate in the study, The National Center then established collaborative relationships with program contacts. Overall, 50 programs agreed to participate (see Table 1). These programs provided a representative sample of the range of programs in the four locales.

| | Emergency | Transitional | Permanent | |
|-----------------------|-----------|--------------|------------|-------|
| | Shelter | Housing | Supportive | Total |
| Capital Region | 5 | 3 | 7 | 15 |
| Rochester | 5 | 6 | 7 | 18 |
| Syracuse | 2 | 5 | 1 | 8 |
| Buffalo | 2 | 4 | 3 | 9 |
| Total | 14 | 18 | 18 | 50 |

Table 1. Number of Programs and Type of Housing by Region

Many of the programs were small; thus, the study required the enrollment of many different facilities in each city. Programs that participated in the study agreed to the following responsibilities:

- Provide a letter of support indicating willingness to participate in the study.
- Identify eligible families when they enter their program.
- Help locate participating families for follow-up interviews.

• Participate in periodic telephone interviews and site visits to provide information on program operations and the population served.

To reach the sample size necessary to compare the three housing programs, more agencies needed to be included in the study than had originally been planned. For example, the geographic area was extended to Troy and Schenectady because there were too few programs in the Albany area alone. Overall, far fewer PS programs were available than ES or TH programs. Thus, the sample of PS residents was smaller than the samples of ES and TH. Each program had a primary point of contact who notified researchers when new families entered their programs, gave new residents a recruitment flyer that explained the study and asked the family to provide contact information if they were interested in learning more. Researchers visited the sites, collected the contact forms and approached families in person or via telephone to further explain the study. They determined the family's eligibility and interest in participating, explained the purpose of the study with the mothers and for those who agreed to participate an informed consent was signed. The interview was scheduled and followed all HIPAA and IRB protocols.

The first follow-up interview was conducted 15-months later and the second interview was conducted 30-months after the baseline interview. In an effort to minimize attrition rates, follow-up interviews were conducted within 3 months before or after the specific date the interview was due, thereby providing flexibility to accommodate the transient nature of this population. Table 2 presents the distribution of women by city and type of housing.

| | Emergency Shelter (N/%) | Transitional Housing (N/%) | Permanent Supportive (N/%) | Total (N/%) |
|-----------------------|-------------------------------|----------------------------------|----------------------------------|----------------|
| Capital Region | 30 (23%) | 37 (31%) | 24 (56%) | 91 (31%) |
| Rochester | 59 (46%) | 49 (41%) | 13 (30%) | 121 (42%) |
| Syracuse | 18 (13%) | 14 (12%) | 2 (5%) | 34 (11%) |
| Buffalo | 22 (17.%) | 20 (17%) | 4 (9%) | 46 (16%) |
| Total | 129 (100%) | 120 (100%) | 43 (100%) | 292 (100%) |

Table 2. Number of Families by Region and Type of Housing

The original sample consisted of 294 families: 131 families living in ES (45%), 120 in TH (41%), and 43 in PS (14%). Two families in the ES sample were eliminated from the study because they were not proficient in English leaving a total sample of 292. Attrition occurred at each follow-up. For the 15-month follow-up interviews, the sample was 200. Of those no longer in the study, 26 were deemed ineligible (e.g., moved out of state, incarcerated, deceased), while 8 no longer wanted to participate and 58 were lost to follow-up. At 30-month follow-up, the sample was 184, with 30 ineligible, 12 study dropouts and 66 lost to follow-up. The final attrition rate was 29%. This was below the anticipated rate of 35%, which would have been typical given the transient nature of homeless and at-risk families. As mentioned above, the characteristics of women who completed the study and women who did not were not significantly different. Therefore,

women who left the program did not introduce bias in the analyses. Appendix 1 presents a full summary of the characteristics of the women.

The number of children comprising the sample changed over the course of the study. At baseline there were 704 children (313 in ES 44%, 276 in TH 40%, and 115 in PS 16%). At 15-months there were 443 children (172 in ES 39%, 180 in TH 40%, and 91 in PS 21%). At 30-months there were 577 children (224 in ES 39%, 268 in TH 46%, and 85 in PS 15%). Similarly, the sample of target children changed. At baseline there were 264 target children (117 in ES 44%, 107 in TH 40%, and 40 in PS 16%). At 15-months there were 163 target children (63 in ES 39%, 72 in TH 44%, and 28 in PS 17%). At 30-months there were 184 target children (77 in ES 42%, 79 in TH 43%, and 28 in PS 15%).

DATA COLLECTION AND PROCEDURES

Semi-structured interviews were conducted with the mothers who were asked questions about herself and her child/children. The interviews lasted approximately two hours and most often were held in a private space in the participant's residence. It consisted of objective standardized measures as well as open-ended questions, gathering information in the following domains:

- Demographics
- Education
- Employment
- Public Benefits
- Residential Moves
- Homelessness

- Maternal Childhood History
- Maternal Trauma History
- Maternal Mental Health
- Maternal Substance Use
- Family Separations
- Children (Target Child)

The participants were compensated \$25 for their time and willingness to share their personal experiences in the baseline interviews, \$30 for the 15-month follow-up interview, and \$35 for the 30-month follow-up interview. The interview itself was identical at baseline, 15-months, and at 30-months with the exception of demographic variables that were collected at baseline.

MEASURES

The interview included questions about demographics as well as standardized measures in other domains:

- **Demographics:** Age, education, employment and other demographic information were collected at the beginning of each interview.
- **Residential Instability:** We assessed how stable the family was from baseline to 15-month follow-up, and then to 30-month follow-up. This was calculated by asking about the number of residential moves between each of these time periods.
- **General Health**: The SF-8TM Health Survey is an 8-item version of the SF-36[®] that yields a comparable 8-dimension health profile and comparable estimates of summary scores for the physical and mental components of health (Turner-Bowker, Bayliss, Ware & Kosinski, 2003). Recently the measure was evaluated and determined that one item, please rate your overall health, adequately represented the eight item scale. By relying on a single item to

measure each of the eight domains of health in the SF-36® Health Survey, the SF-8TM represents the first single-item scaled health measure. The SF-8TM summary measures are scored on the same norm-based metrics as the SF-36® scales and summary measures. The instrument is a valid and reliable measure of health (Turner-Bowker, et. al., 2003).

- **Brief Symptom Inventory (BSI):** The BSI provides person-reported data to help support clinical decision-making and requires only 8-10 minutes to complete. It consists of 53 items covering nine symptom dimensions: Somatization, Obsession-compulsion, Interpersonal sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism, and three global indices of distress: Global Severity Index, Positive Symptom Distress Index, and Positive Symptom Total. The global indices measure current or past level of symptomatology, intensity of symptoms, and number of reported symptoms, respectively. The instrument provides an overview of a patient's symptoms and their intensity at a specific point in time. The BSI is reliable and valid (Derogatis, 1975; Derogatis & Cleary, 1977).
- **Posttraumatic Stress Disorder (PTSD) Symptom Scale:** The PTSD scale is a structured instrument used for assessing core and associated symptoms of posttraumatic stress disorder (PTSD). It assesses the frequency and intensity of each symptom using standard prompt questions and explicit, behaviorally-anchored rating scales. The measure can be tallied to create a total severity score called 'symptom severity' that reflects the level of reported stress. It yields both continuous and dichotomous scores for current and lifetime PTSD symptoms. This score results in two variables, an overall severity score and a cut-off point that determines whether or not a woman meets criteria for PTSD diagnosis. We analyzed both of these variables, symptom severity and met criteria for PTSD. In addition, women are asked at baseline if they had ever been diagnosed with PTSD. This additional variable, self-report of PTSD, amounts to three different ways we examined trauma. Data from a large scale psychometric study have provided impressive evidence of its reliability and validity as a PTSD measure (Blake, et. al., 1995).
- Other Mental Health Problems: Questions about whether or not a woman ever had a formal diagnosis from a physician or psychiatrist of other mental health problems were collected. Mental health issues included anxiety, phobias, bipolar disorder, and psychotic disorders.
- Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): The ASSIST screens for alcohol and drug problems. The measure was developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect and manage substance use and related problems in primary and general medical care settings (Garwood, 2010; WHO, 2006; WHO, 2008). The tool has solid psychometric properties and is commonly used to assess substance use.
- **Rosenberg Self-Esteem Scale**: The Rosenberg Self-Esteem Scale is a widely used ten item self-report instrument used for evaluating self-esteem. Answers range from strongly agree to strongly disagree. The measure is a valid and reliable tool that measures a single common factor. A factor analysis model confirmed the one factor dimension of self-esteem (Gray-Little & Williams, 1997; Robins & Hendin, 2001).
- **Parenting Practice Scale (PPS):** The PSS is a 34-item self-report instrument on parents' patterns of interaction with their preschool children. Questions are targeted in the clinical practice of parent training. The instrument had good internal consistency and 6-month stability. It was significantly associated with measures of parents' psychological and social health, with concurrent measures of parents' behavior with their children, and with child behavior variables, especially those related to oppositional behavior and attention deficit (Strayhorn & Weidman, 1988).

• Strengths and Difficulties Questionnaire (SDQ): The SDQ is a brief measure of the prosocial behavior and psychopathology of 3–16 year-olds that can be completed by parents, teachers, or youths. The five-factor structure (emotional, conduct, hyperactivity-inattention, peer, prosocial) is valid and reliable. In addition to the five factor scores, a total difficulties score is calculated. Internal consistency is high (mean Cronbach α : .73) and retest stability was consistent after 4 to 6 months (mean: 0.62) (Goodman; 1997; Goodman, 2001; Warnick, Bracken, & Stanislave, 2008).

DATA ANALYSES

All data were entered, managed and analyzed using SPSS 18.0. Descriptive statistics provided percentages, means and standard deviations for demographic data such as age, education, and employment. Inferential statistics included independent-samples *t* tests, ANOVA's, ANCOVAs (to control for highly correlated variables in the regression analyses), logistic regression, and general linear regression analyses. Significant levels of p < .05 and p < .01 were used. To determine differences among the three housing groups over the three periods of data collection, multinomial logistic regressions were conducted. To investigate any bias introduced by the women who did not respond at follow-up, we compared those who responded at 15-months and 30-months with those that did not respond. There were no differences across demographic variables that would indicate a bias in the data due to attrition. However, participant's city of residence was a contributing factor to some outcomes; therefore, we used the variable 'city' as a covariate in the ANCOVA's and a controlled variable in the regression analyses.

IV. FINDINGS

DEMOGRAPHICS

Age and Ethnicity

The age range of women at baseline was 18-57 years, with an average age of 29. Women in ES or TH were significantly younger compared to women in PS (p < .01). The average age of women in ES was 28, in TH was 27 and in PS was 35 years. The majority of women in the sample, 62% (n=180) were African-American, while 24% (n=70) were Caucasian and 14% (n=41) were either Latina or other. Women identified as Latina may have also identified an additional ethnicity. There were no statistically significant differences in ethnicity between the three housing groups.

Marital Status and Number of Children

At baseline, 63% (n=210) of women had never married, 12% (n=34) were married, 13% (n=37) were separated or divorced, 4% (n=10) were living with a partner and 4% were widowed or other; there were no significant differences between the housing group's marital status. The number of children ranged from 0 (pregnant) to 11, with an average of 2.4 children. Women in ES averaged 2.4 children, women in TH averaged 2.1, and those in PS averaged 3; none of these differences were statistically significant.

Education

At baseline, many of the women did not have a high school degree 36% (n=104): 43% of women in ES, 31% of women in TH, and 27% of women in PS did not graduate from high school. Thirty-two percent of women in ES had either a high school degree or GED, as did 35% of the women in TH women and 39% of the women in PS. Figure 1 summarizes education at baseline. Overall, the women in PS were slightly more educated than the women in TH or ES, but this finding was not statistically significant.



Figure 1. Mothers' Education

Employment

The vast majority of the sample was unemployed at the time of the baseline interview: 84% (n=236). Twenty-nine percent (n=75) reported having worked at some point in the previous 18

months, and 44% (n=114) reported having worked in the past, while 28% (n=72) reported having never worked. Employment rates increased for all groups across the study. At 30-month follow-up, the employment rate increased 23% (to 40%) for ES, 20% (to 41%) for women in TH, and 16% (to 32%) for women in PS. Figure 2 illustrates these shifts in unemployment. The rates of unemployment are still high, but improvements are evident for all three housing groups.



Figure 2. Unemployment: Emergency Shelter (ES), Transitional Housing (TH), Permanent Supportive (PS)

We used logistic regression to examine the predictors of unemployment (employed/unemployed) at 15-month and 30-month follow-ups. We hypothesized that, age, education, number of children, rating of physical health, trauma, depression, and self-esteem would predict employment. The only significant variable related to employment was PTSD symptom severity (p < .01); women who were unemployed at 15 and 30-month follow-up reported higher levels of trauma symptoms.

Receipt of Public Benefits

At baseline, the most common public benefit received by participants was food stamps: 88% of the sample received this benefit (83%, 91%, and 93% among ES, TH, and PS). These rates increased at the 15-month follow-up for ES and TH (92% and 94%, respectively) but decreased to 79% among PS. At the 30-month follow-up, the rates remained high for all housing groups: 87%, 84% and 100% for ES, TH, and PS, respectively.

Forty-five percent of the sample at baseline received Temporary Assistance for Needy Families (TANF), or welfare, with varied rates across residential groups: 36% of women in ES

received TANF, as compared to 48% of women in TH and 71% of women in PS. Women in PS were significantly more likely to receive TANF as compared to women in ES and women in TH (p <

.01). At the 15-month follow-up, the rate increased to 46% for ES, remained at 47% for TH, and dropped to 39% of PS. At the 30-month follow-up, the ES rate increased to 52%, while TH dropped to 35% and PS to 36%. Since these decreases do not mirror changes in employment rates, they likely reflect the time limits applied to receiving TANF. Most likely many of those in PS and TH were receiving case management services when they first became homeless and prior to entering the baseline housing program, and were already receiving TANF at the beginning of the study.

Residential Stability

In the 18-month period prior to moving into their baseline programs, the families in all housing groups experienced significant residential instability, with the vast majority having moved multiple times. Figure 3 presents the numbers of moves for families in the 18-month period prior to entering their baseline programs, Figure 4 presents the number of moves at 15 months, and Figure 5 presents the number of moves at 30 months. Prior to entering the study, the families in PS moved less often compared to the other two groups.



Figure 3. Number of Moves 18 Months Prior to Baseline



Figure 4. Number of Moves from Baseline to 15-month Follow-Up



Figure 5. Number of Moves During the 15-month to 30-month Follow Up Period

For this study, we used a conservative definition of residential instability that considered not only whether or not a family moved, but also if they had a rental subsidy. Previous research indicates that the most powerful predictor of residential stability for homeless and low-income families is vouchers or housing subsidies. To be conservative in our assessment of residential instability, we did not consider families who moved once and had some type of rental subsidy as residentially

unstable, recognizing that such a move may indicate a step towards stable housing. Even with this conservative definition, instability rates were high across the course of the study for all three groups.

While PS programs have been associated with housing stability rates of 64-90% (Bassuk & Geller, 2006), Shinn, Rog & Culhane (2005) found that among homeless and at-risk families in Housing First programs, 85% were able to maintain residential stability for two years. Similarly, Pearson, Montgomery and Locke (2009) found that among a sample of chronically mentally ill individuals, 84% were stably housed in a Housing First model after one year. We therefore considered a rate of 85% for residential stability as a benchmark for comparison. The rates of residential stability in our study, however, fell well below this mark for all housing groups: for the total sample, 63% and 49% were residentially unstable at the 15 and 30-month follow ups, respectively (Figure 6).



Figure 6. Rates of Housing Instability at 15 and 30 Months

Below are brief descriptions of the residential histories for the families in each housing group.

Emergency Shelter

At the 15-month follow up, none of the ES families had remained at their baseline residence. This was not a surprising finding since most ES programs have a three-month maximum stay policy, and so it was expected all of these families would move during the first follow up period. However, the vast majority (86%, n =54) did not have stable housing, and 75% (n = 47) moved multiple times. At the 30 month follow up, residential stability improved, with slightly more than half of ES families stably housed (53%, n = 41); 34% (n = 26) moved multiple times. It appears, then, that although it was expected that these families would move during the first 15 months, the vast majority were not stably housed and most moved multiple times. Furthermore, although rates of stable housing improved, at 30 months residential instability was experienced by many families.

Transitional Housing

Among TH families, more than half of the families (57%, n = 41) were not residentially stable at the 15-month follow-up, and half (51%, n = 37) moved multiple times. Residential instability was slightly less for TH families at the 30 month follow up (56%, n = 44), and many families moved multiple times (43%, n = 34). Throughout the study many TH families experienced significant housing mobility.

Permanent Supportive

PS families had the highest rate of residential stability at baseline. At the 15-month follow-up 71% (n = 21) were stably housed and 52% (n = 15) were still residing in their PS program. Twenty-four percent (n = 7) moved multiple times. At the 30 month follow-up, 36% (n = 10) were still living in PS and 64% (n = 18) were stably housed. The rates of multiple moves was slightly higher (29%, n = 8) than at 15 months. It is interesting to note that while PS had the highest rates of residential stability among the housing groups, a considerable amount of that stability was attributed to rental subsidies rather than maintaining the housing program residence.

Types of Residences

Participants also provided information about the type of residences they moved to. The most common type of residence after leaving the baseline program was renting independently (e.g., not TH or PS). Thirty-eight percent (n = 60) were in this type of residence. Doubled up homelessness was the second most common residential situation. Doubling up refers to living temporarily in the homes of family or friends because the individual/family has no other place to live. At the 15-month follow-up, 17% (n = 27) of the total sample had moved to a doubled up arrangement. For those who moved a second time during the first follow up period, doubled up homelessness was the most common outcome. Twenty-two percent (n = 34) of the total sample; 31% (n = 20) of ES, (n = 13) of TH, and (n = 2) of PS families were doubled up. Renting independently was the second most common type of residence: 17% (n = 26) of the total sample, 23% (n = 15) for ES, 15% (n = 10) for TH, and one PS family. It should also be noted that 6% of families experienced literal homelessness (e.g., staying in a shelter, motel) during the 15-month follow-up period. Very few families moved into other housing programs. At the 15-month follow-up, only 3% of the sample moved into a TH program (ES = 2, TH = 1, PS = 1), and 9% moved into a PS program (ES = 1, TH = 5, PS = 5).

Predictors of Residential Instability

Residential instability was explored using general linear regression. The dependent variable was number of moves since follow-up. Being unemployed, lower education, poor health, and lower self-esteem predicted residential instability at the 15-month follow-up interview (p<.05). At the 30-month follow-up, low self-esteem and a high PTSD symptom severity score predicted residential instability. Similar to the 15-month follow-up, unemployment and lower education were associated with residential instability but were not statistically significant.

MOTHERS' CHARACTERISTICS

Characteristics and experiences of participants are discussed below including: trauma experiences, childhood adversities, mental health problems and treatment, and substance use.

Maternal Trauma

Participating women were asked if they had experienced 14 different types of traumatic experiences (see Appendix 4). Histories of traumatic stress were common among the mothers in all housing groups at baseline. In summary:

- 93% had a history of trauma.
- 81% experienced multiple traumatic events.
- 79% had experienced trauma in childhood.
- 56% had multiple childhood traumas.
- 82% experienced trauma in adulthood.
- 64% experienced multiple traumas in adulthood.

The average number of childhood traumas was 3.2. The total number of lifetime traumatic experiences ranged from 0 to 8; women in ES reported an average of 3 lifetime traumas, while women in TH and PS each reported an average of 3.5 lifetime traumatic events. The most common type of traumatic event was interpersonal violence. Physical assaults were most common, with 70% of the women reporting at least one physical assault in their lifetime. Figure 7 presents the rates of childhood, adulthood, and lifetime physical assault by a family member or known assailant. The number of lifetime traumas was not statistically significant among the three housing groups.



Figure 7. Physical Assault by Family or Known Assailant

Sexual assaults were also common, and most often occurred in childhood. Half of the sample reported sexual assault by a family member or known perpetrator, with PS having the highest lifetime rate at 67% (Figure 8). The differences among housing groups were not significant.



Figure 8. Sexual Assault by Family or Known Assailant

Rates of lifetime occurrence of interpersonal violence (physical or sexual) are presented in Figure 9. At 15-month and 30-month follow-up, women reported very few additional traumas.



9. Lifetime Occurrence of Physical and Sexual Assaults by Family or Known Assailant

As mentioned above, PTSD was examined in three ways: the overall severity score; a cut-off point that determines whether or not a woman meets criteria for PTSD diagnosis; and asking women at baseline if they had ever been diagnosed with PTSD. Below results from each of these trauma variables is discussed.

Self-Report of PTSD and Met Criteria for PTSD

At baseline, 48% met the criteria for PTSD. Although the rates of PTSD were not statistically different between the groups, the rates of self-reported PTSD were: 14% of the ES sample, 19% of the TH sample and 40% of the PS sample reported having PTSD. Women in PS were more likely to report this diagnosis as compared to women in ES (p < .01) and TH (p < .01). At 15- months, 24% met the criteria for PTSD and at 30-months, 25% met the criteria. Additionally, despite the high rates of women meeting criteria for PTSD, only 5% of the sample reported receiving treatment for PTSD: 1.6% of women in ES, 4% of women in TH, and 16% of women in PS (see Figure 10).



Figure 10. PTSD diagnosis and Self-Report of PTSD

Symptom Severity

The rate of PTSD symptoms, or what we called symptom severity, decreased over time across housing groups. At baseline, the women in ES had the highest mean score of 104. Women in TH had a mean of 89 and women in PS had a mean of 96. At the 15-month follow-up, symptom severity in women in ES decreased considerably to a mean of 50, women in TH decreased to 47 and women in PS decreased to 72. At the 30-month follow-up, women in ES continued to decrease to a mean of 48, women in TH increased slightly to 49 and women in PS continued to decrease to 57. We used repeated measures ANOVA to determine if the differences across time were significant. Although the women in ES appear to have large decreases in trauma related levels of stress, the differences between groups were not significant. The higher rates for ES at baseline and subsequent decrease over time suggest that becoming homeless itself is a traumatic event, but that the trauma symptoms ease as the family shifts from shelter life to other types of

residences. Stable housing likely helps to reduce stress, which is reflected in both Self- report and Met Criteria for PTSD measures.

Maternal Childhood Experiences

Twenty percent of the women reported experiencing homelessness as a child. Thirty-three percent reported living with a mother who had a substance use problem and 39% reported living with a father with a substance use problem. Women in PS were significantly more likely to have a father with a substance abuse problem than women in TH (p < .05). Overall, 24% of women reported having been in foster care as a child; 15% were placed with non-relatives and 7% were placed with relatives. A larger portion of women in PS (19%) were placed in foster care arrangements, while only 6% and 8% of women in ES and TH were placed in foster care arrangements. For more details, see Appendix 4.

Symptoms of Maternal Depression

Depressive symptoms were the most common mental health problem reported. We examined depressive symptoms with two variables, self-report and the BSI. At baseline, 60% of the sample reported depressive symptoms, and 20% reported taking medication for depression. Figure 11 presents the distribution of self-reported depression and receiving medication. Women in PS had the highest rate of depression (83%). Women in PS had significantly higher rates of depressive symptoms when compared to women in ES (p < .01) and women in TH (p < .01).

On the BSI, for all women, there was a statistically significant decrease in depressive symptoms from baseline to the 15-month follow-up and the 30-month follow-up, but no difference between 15- months and 30-months. Participation in a housing program may be one reason for the decrease in depression from baseline to the 15-month follow-up. We used regression analysis to further investigate depression at 15 and 30-month follow-ups. We hypothesized that education, employment, age, self-esteem, trauma (symptom severity), mental health treatment, number of children, and rating of physical health would predict depression. At the 15-month follow-up, the overall model was statistically significant. Significant predictors included low self-esteem, high symptom severity (trauma), poor health and receiving mental health treatment (p < .01). At 30- months, significant predictors included low self-esteem and high symptom severity (trauma) (p < .01). The levels of self-esteem, or the manner in which women regard themselves, as well as their level of stress are related to depressive symptoms at both follow-ups.



Figure 11. Depression and Associated Medication Self Report: Housing Group at Baseline

Other Maternal Mental Health Issues

At baseline, more than a quarter of the sample reported an anxiety disorder. Phobias were reported by 14% of the sample, obsessive compulsive disorder (OCD) by 10%, and psychotic disorders by 5%. Women living in PH were more likely than women living in ES to report OCD (p < .05) and anxiety (p < .05), and more likely than women in TH to report OCD (p < .01). Seventeen percent of the sample reported having bipolar disorder: 12% of the ES sample (5% receiving medication), 18% of the TH sample (6% receiving medication), and 33% of the PS sample (21% receiving medication). Rates of these mental health issues remained consistent at the 15 and 30-month follow-up.

Maternal Mental Health Treatment

In addition to asking questions regarding mental health problems, we inquired about mental health treatment (Appendix 5). At baseline, women in PS consistently reported higher rates of all forms of mental health treatment compared to the women in ES or TH. At baseline:

- Forty-nine percent of the women in PS reported an inpatient mental health hospitalization, as compared to 12% and 21% of women in ES (p < .01) and TH (p < .01).
- Among women in PS with psychiatric hospitalizations, 70% met the diagnostic criteria for PTSD and 25% were receiving psychiatric medication for their PTSD.
- Sixty-three percent of women living in PS had mental health medication evaluations, but only 24% and 40% of the women in ES and TH received evaluations.
- Sixty-three percent of women living in PS received outpatient mental health treatment, as compared to 28% of the women in ES and 45% of the women in TH.
- Women in PS reported significantly higher rates of attending a mental health day treatment program as compared to women in ES (p < .05) and higher rates of mental health intensive case management as compared to the women in TH (p < .05).

The disproportionate number of women in PS who received some form of mental health treatment prompted further investigation of the intensity of these women's needs. We documented the following:

- The rates of bipolar disorder among PS women who had previously been hospitalized were high. While the lifetime prevalence of bipolar disorder among the U.S. population is 3.9% (Kessler et al., 2005); among women in PS with psychiatric hospitalizations it was 45%.
- The histories of sexual abuse among PS women who had previously been hospitalized were high. Seventy-eight percent had been sexually abused as children; as compared to 41% of PS women without psychiatric hospitalizations and 100% had a lifetime experience of physical assault by a family member or known perpetrator.
- The histories of physical abuse among PS women who had previously been hospitalized were high. Seventy percent had been physical assaulted as compared to 51% of PS women without psychiatric hospitalization.

Maternal Substance Use

Substance use issues were assessed using the Alcohol, Smoking, and Substance Involvement Test (ASSIST) (World Health Organization, 2006), which categorizes the respondent's use of each substance as low risk (unlikely to have a diagnosis of SUD), moderate risk (potential substance problems, a possible diagnosis), or high risk (high probability of a diagnosed SUD). The ASSIST is not a diagnostic measure but provides an assessment of risk for potential problems. For all substances, the majority of the sample was at low risk for substance use problems at all data collection points. The most frequently used drug at baseline was cannabis: 31% of the sample was at moderate risk at baseline. The risk increased 14% at the 15-month follow-up to 45%. At 15-month, 50% of the women were at moderate or high risk for SUD. However, the risk dropped to 18% at the 30-month follow-up (Figure 12). Despite the varying rates of risk, there were no statistically significant differences in marijuana use over time.



Figure 12. Marijuana Use: Over Time

Self-reports of alcohol use were low at each point in time (Figure 13). Reported rates were lower than the national average reported by the CDC (2010) and the American Psychiatric Association (1994). Both sources indicate 8% of women in the U.S. meet the established criteria for alcohol dependence at some point in their lives.



Figure 13. Alcohol Use

Eighty-two percent of the sample was at low risk for cocaine use at baseline (Figure 14). The baseline rate for moderate risk was 16% and remained consistent through the follow-up periods. At 15-months, 30% fell into the moderate and high risk categories. ANOVA between housing groups was not significant at any point in time.



Figure 14. Cocaine Use

The majority of the sample was at low risk for opioid use (93%). The vast majority of the sample was at low risk for amphetamines (95%), inhalants (99%), sedatives (95%), hallucinogens (97%) or other drugs (99%). Again, similar to marijuana and cocaine, no significant differences were found between the groups at follow-ups using ANOVA.

Alcoholics Anonymous/Narcotics Anonymous

Findings regarding substance use should be interpreted cautiously due to a likelihood of underreporting. In addition to the shame associated with substance use problems, regardless of the substance (e.g., alcohol, cocaine), these women would have the added concern that such a problem would lead to a violation of housing program rules and result in loss of housing. Additionally, most inpatient substance use treatment programs do not allow women to have their children stay with them, so they have the additional fear of having their substance use discovered and being mandated to attend treatment, thereby being separated from their children.

To address the under-reporting we include attending AA as a proxy variable. The rates of women attending AA/NA did not mirror the self-reports of substance use and were in fact, much higher than would be expected. At baseline, 26% reported attending AA/NA (ES = 15%, TH = 28%, PS = 48%), at the 15-month follow-up, the rate increased slightly to 29% and by 30-months, 35% reported attending AA/NA (Figure 15). It should be noted that these rates only indicate the women who are actively attempting to maintain sobriety and may miss those women who have not yet addressed their substance use problems. These rates of AA/NA attendance suggest that substance use is indeed a significant issue among these mothers.



Figure 15. AA/NA Attendance

Maternal Co-Occurring Disorders

To determine the frequency and significance of co-occurring disorders, we examined three common mental health problems among women: substance use, PTSD and depression. We evaluated the prevalence and the significance of the occurrence of the following combinations using crosstabs and chi-square tests:

- Substance use and PTSD
- Substance use and depression
- PTSD and depression

As explained previously, attending AA/NA meetings was a proxy for *potential* substance use problems. Over the course of the study, the proportion of women with SUD and depression versus those with just depression or just SUD was statistically significant at all times. At baseline, the proportion of women with both was 85% versus those with substance issues (15%) and those with self-reported depression (54%) (p < .01). At the 15-month follow-up, the proportion of women with both was 83% versus those with substance use issues (17%) and those with self-reported depression (49%) (p < .01). At the 30-month follow-up, the proportion of women with both was 75% versus those with substance issues (25%) and those with self- reported depression (50%) (p < .01).

Over the course of the study, the proportion of women with co-occurring SUD and PTSD versus those with PTSD or SUD alone was statistically significant at baseline but not at 15-month or 30- month follow-ups. At baseline, the proportion of women with both PTSD and SUD was 63% versus those with substance issues (37%) and those with PTSD (46%) (p < .01). At the 15-month follow-up, the proportion of women with both was 54% versus those with SUD (46%) and those with PTSD (41%). And at the 30-month follow-up, the proportion of women with both was 49% versus those with substance issues (50%) and those with PTSD (35%) (p < .01).

At each point in time, the proportion of women who met the criteria for a PTSD diagnosis and had depression was statistically significantly higher than the proportion of women with just depression or just PTSD. At baseline, 79% of the women met the criteria for PTSD and had depression, while 43% had depression and 22% had PTSD (p < .01). At the 15-month follow-up, 80% of the women who met the criteria for PTSD had depression, whereas 39% of the women had depression and 20% had PTSD (p < .01). At the 30-month follow-up, 77% of the women who met the criteria for PTSD had depression, compared to 48% who had depression and 22% had PTSD (p < .01).

These significant differences highlight the importance of understanding and acknowledging the prevalence of co-occurring nature of mental health issues and SUD. Noteworthy is the high rate of substance use and depression; 85%, at baseline 83% at 15-months and 75% at 30-months.

Maternal Overall Health Ratings

Figure 16 illustrates baseline, 15-month and 30-month ratings of overall health. "Very good" and "good" were collapsed into one category, as were "poor" and "very poor."



Figure 16. Ratings of Overall Health: Entire Sample

At baseline, 67% (n = 194) of the total sample reported their health as excellent, very good or good. Twenty-one percent (n = 62) reported their health as fair and 12% (n = 36) reported it as poor or very poor. At the 15-month follow up, 69% (n = 112) reported their health as excellent, very good, or good. Twenty percent (n = 33) reported it as fair and 12% (n = 18) reported their health as poor or very poor. At the 30-month follow up, 72% (n = 132) reported their health as excellent, very good, or good. Nineteen percent (n=34) reported their health as fair and 9% (n = 18) reported it as poor or very poor. Overall, the majority of mothers reported relatively good health over the course of the study. There were no significant differences between the groups.

FAMILY SEPARATION

At baseline, 55% percent of the women reported that at least one of their children had lived apart from them at some point in time: 56% of women in ES, 48% of women in TH, and 73% of women in PS. Women in PS were more likely than women in TH to have had a child live apart from them (p < .05). The percentages from the follow-up interviews should not be compared directly to the baseline percentages because they were measuring different variables: at baseline, women were reporting *lifetime* rates of mother-child separation, whereas the follow-ups were only reporting episodes within the previous 15-months. At the 15-month follow-up, 41% reported they had a child live apart from them since the baseline interview (ES = 44%, TH = 39%, PS = 19%). At the 30-month follow-up, 36% reported a child had lived apart from them since the 15-month follow-up, with an increase among women in PS of 31% (ES = 36%, TH = 32%, PS = 50%) (Figure 17). Involvement with Child Protective Services (CPS) is frequently related to subsequent mother- child separations, and therefore Figure 18 presents CPS involvement at each follow up.



Figure 17. Children Living Apart from Mother at 15 Month and 30 Month Follow Ups



Figure 18. CPS Involvement During Follow Up Periods

Due to empirical evidence supporting the transactional nature of mother-child relationships (Sameroff, 2000), we hypothesized that mother's overall functioning and well-being would predict child separation. We entered the following predictors in a regression model: depression, trauma, employment, education, age, receiving mental health treatment, number of children, self- esteem, attending AA/NA, residential instability and rating of physical health. At 15-months, mother-child separation was predicted by residential instability, more children, receiving mental health treatment, and younger mothers. Similarly, at 30-months more children, younger mothers and receiving mental health treatment predicted mother-child separation, with the addition of unemployment and attending AA/NA. As prior research indicates maternal mental health and how well a mother is functioning has a direct relationship on the physical proximity of a mother and her child (Guarino & Bassuk, 2010; Sameroff, 2000).

CHILDREN'S CHARACTERISTICS

During the interviews, mothers answered questions regarding family functioning. A portion of the interview focused on the emotional and behavioral health of one child, referred to as the target child. The target child was the mother's youngest child older than 2 years, 9 months and living with her. If she did not have a child over this age, her oldest child was selected.

Ninety-five percent of the sample reported their child was in excellent or good health, and 82% reported they worried only a bit or not at all about their child's health in the previous month. These rates were similar in the follow-up interviews (95% and 92% had excellent or good health at 15-month and 30-month, respectively, and 89% and 88% worried about child's health only a little bit or not at all at the 15-month and 30-month, respectively. The vast majority of children had a pediatrician (92%) and was current with their immunizations (98%). However, at baseline,

33% of the women reported worrying about their child's emotional well-being or behavior in the previous month. These rates did not change significantly over the course of the study (32% at 15 months and 28% at 30 months).

Many mothers reported that the target child had medical and physical conditions that limited the child's activities (Figure 19). At baseline, 25% of women reported that their child had a medical condition or physical disability that affected his/her ability to participate in usual childhood activities: 18% of women in ES, 31% of women in TH, and 22% of women in PS. A chi-square test was calculated and a significant difference was found between women in TH and women in ES (p<.05). Women in TH were more likely to have a child with such a condition as compared to women in ES. At both follow-ups, the rates were slightly higher: at 15-months, 28% reported having a child with a medical condition or physical disability and at 30-months the rate decreased to 25%. At 15- months, the rates increased for women in ES and PS but decreased for women in TH (ES = 30%, TH = 22%, PS = 36%). At 30-months, the rates decreased from the 15-month follow-up for women in ES and PS but increased for women in TH (ES = 26%, TH = 26%, PS = 17%).



Figure 19. Children with Medical Conditions that Limited Activity

Given the high rates of physical, learning and emotional problems, it is not surprising that many children received special education services. At baseline, 30% reported their child received special education services (ES=26%, TH=26%, PS=42%). These rates decreased in the follow-up interviews. At 15-months and 30-months, 13% and 16%, respectively, reported their child received special education services. The children in the PS group received more special education services when compared to the other two groups, but there were no statistical differences between the groups or over time.

Children's Difficulties

The mothers completed the Strengths and Difficulties Questionnaire (SDQ) for their target child. Scores were categorized as normal, borderline and abnormal. The abnormal category is interpreted as indicating a likely case for a mental health disorder. Following are the outcomes for the domains of Total Difficulties, Emotional Symptoms, Conduct Problems, Hyperactivity and Peer Problems.

- Total Difficulties (see Figure 20)
 - At baseline, 26% of the children scored in the abnormal range and 16% scored in the borderline range for total difficulties.
 - At the 15-month follow-up, the rates did not change greatly with 23% scoring in the abnormal range and 17% scoring in the borderline range.
 - At the 30-month follow-up, children scoring in the abnormal range decreased to 20%. TH and PS had the largest drops (16% and 8%, respectively), while ES rates actually increased to 27%. The rate of children scoring in the borderline range was 17%.



Figure 20. Target Child SDQ: Total Difficulties by Housing Group and Time

- Emotional Symptoms Category (see Figure 21)
 - At baseline, 14% of children scored in the abnormal range and 13% scored in the borderline range of the Emotional Symptoms Category.
 - At the 15-month follow-up, children with scores in the abnormal range jumped to 39% while the number with borderline scores decreased to 4%. It appears as though many children who originally scored in the borderline range at baseline devolved to the abnormal range.

At the 30-month follow-up, the rates of abnormal emotional symptoms among children decreased to 16%, which was similar to baseline rates. Women in ES had the highest rates of children with emotional symptoms at 24%. After peaking at 15-months, children's symptoms decreased again to rates lower than baseline. Yet, 24% of mothers in ES had a child struggling with emotional problems.



Figure 21. Target Child SDQ: Emotional Symptoms by Housing Group and Time

- Conduct Problems (see Figure 22)
 - At baseline, 36% of the target children scored in the abnormal range for conduct problems, while 14% scored in the borderline range.
 - At the 15-month follow-up, 31% scored abnormal for conduct problems, with the largest decrease seen in children living in PS at 17%.
 - At the 30-month follow-up, 34% scored in the abnormal range for conduct problems, with PS rates increasing again. Borderline scores increased slightly to 16.9%.



Figure 22. Target Child SDQ: Conduct Problems by Housing Group and Time

- Hyperactivity (see Figure 23)
 - At baseline, of target children scored in the abnormal range for hyperactivity with another 8% scoring in the borderline range.
 - At the 15-month follow-up, 29% scored in the abnormal range for hyperactivity and 14% scored in the borderline range.
 - At the 30-month follow-up, 27% scored in the abnormal range for hyperactivity and 10% scored in the borderline range.



Figure 23. Target Child SDQ: Hyperactivity by Housing Group and Time

- Peer Problems (see Figure 24)
 - At baseline, 24% of target children scored in the abnormal range and 17% scored in the borderline range.
 - At the 15-month follow-up, 23% scored in the abnormal range and 21% scored in the borderline range.
 - At the 30-month follow-up, 21% scored in the abnormal range and 15% scored in the borderline range.



Figure 24. Target Child SDQ: Peer Problems by Housing Group and Time

After completing analyses on the five domains included in the SDQ, the relationship between a mother's functioning and her child's difficulties was evaluated. At the 15-month follow-up, higher scores that indicate more difficulties were associated with mothers receiving mental health treatment and poor parenting. At the 30-month follow-up, higher SDQ scores were related to living in Buffalo or Syracuse (rather than Albany or Rochester), poor maternal health, receiving mental health treatment and poor parenting. There were no significant differences among the housing groups for any of these variables. The association between target child difficulties and the health of the mother-child relationship/interaction were reflected in the two variables most significant at both the 15-month and 30-month follow-up: parenting practices and mothers mental health treatment.

School Difficulties

Many of the target children were not yet of school age (56%); reflecting the typical homeless family with children aged five and younger (Burt, 1996). Therefore, the information regarding education should be interpreted cautiously as the sample size for these particular questions is small (N=130). At baseline 26% reported their child repeated a grade: 22% of ES, 18% of TH, and 43% of PS women. These rates of grade repetition were similar in the follow-up interviews, with the exception of mothers living in PS who reported an initial decrease to 11% at 15-months and a subsequent increase to 18% at 30-months. Thirty percent reported their child received special education services. Furthermore, 22% of mothers reported their child had received services from a school counselor for academic and/or other problems during the

previous 18 months. At both 15-months and 30-months, 15% reported their child had received services from a school counselor.

PS and Academic Challenges

There were striking differences at baseline between the PS children compared to the ES and TH children regarding special education services and repeating a grade: 43% of PS children repeated a grade and 42% received special education services. The characteristics of the families of these children were examined more closely to include maternal PTSD, behavioral problems, and CPS involvement.

Among those children in PS with grade repetition, the rates of maternal PTSD (56%) were only slightly higher as compared to the mothers of PS children without grade repetition (48%) and to the mothers of the total sample of children without grade repetition (40%). The PS children who had repeated a grade did, however, have higher rates of behavioral problems. Forty-four percent had hyperactivity as compared to 25% of PS children without grade repetition and 34% of the total sample of children who had not repeated a grade. In addition, forty-four percent of the PS children with grade repetition had peer problems, as compared to 25% of PS children without grade repetition. The PS children without grade repetition and 24% of the total sample of children who had not repeated a grade. These differences are presented in figure 25.



Figure 25. PS Grade Retention: Maternal PTSD, Hyperactivity, and Peer Problems

We also examined characteristics of the families of children in PS receiving special education services. Those children in PS receiving special education services had higher rates of maternal PTSD, hyperactivity and peer problems as compared to children in PS who were not receiving special education services, and as compared to children in the total sample who did not receive special education services (Figure 26).



Figure 26. CPS Involvement: Maternal PTSD, Hyperactivity and Peer Problems

CASE STUDY

The interview process provided the participants with an opportunity to describe their personal histories. Each woman had a unique story to share, highlighting how her childhood history, struggles, challenges and successes resulted in homelessness. As noted above, many of the women struggled with depressive symptoms, PTSD and substance use. Although we believe substance use was often under-reported on the ASSIST due to the fear of losing housing, it is clear from the interviews that substance use problems were a challenge for many women, in particular those living in PS. It is likely that many participants would meet the DSM-IV criteria for a current substance use disorder (SUD). Below is a case presentation of a 38-year-old white woman living in PS. Her story illustrates the challenges, failures, and ultimate successes of many homeless women with a substance use disorder. The Alcoholics Anonymous Big Book (2012) states that the disease is cunning, baffling, and powerful. While Susan (fictional name) outwardly appeared to be functioning well and gaining her life back, she ultimately relapsed. However, through the support she received from her PS program, family and friends, she succeeded in getting her life back on track.

At the baseline interview, Susan reported a childhood filled with trauma and frequent moves. Her biological mother and father were treated for mental health problems, the most severe being her mother's chronic depression. As soon as she turned 18 years old, she moved out of her house and became pregnant. Prior to entering permanent supportive housing she lived on the streets of Rochester, in abandoned buildings and hotels for four years. She also reported that she had recently been tied up in an abandoned house and abused by a man for four days. At baseline, she reported that her ex-husband had custody of her two older children and that her two younger children were living with her. Her past substance use, primarily crack cocaine, created an extremely chaotic life.

In 2005 she became pregnant again and entered a detoxification and rehabilitation facility. After completing these programs, she entered a residential drug treatment program, which eventually led to her placement in permanent supportive housing. At the time of the baseline interview, she was living in a lovely refurbished duplex home on the shores of Lake Ontario. Susan appeared to be on the road to recovery, successfully balancing work, school and parenting. She attended 12-step meetings regularly and was very committed to not using drugs. She stated her goals as "wanting to keep [her] grade point average up, be a good parent and stay where she was." Her support network was small but strong and she commented that she is amazed to be alive.

At 15-months, she continued to live in the same PS program. She was still not in contact with her two older children and believed their father had "poisoned their minds against her because of her previous involvement with drugs, prostitution and life on the street." Her two youngest children remained with her and she hoped their stable home life would positively impact them. Susan continued her schooling and by all accounts appeared to be functioning well. She reported maintaining her sobriety – but had only attended one 12-step meeting in the past three months. Although busy with her job, the kids and school she said this phase of her life was "the most peaceful year since her childhood." When asked about goals for herself and her children she stated she wanted to "continue to provide a safe, happy, healthy, home for myself and kids." Prior to the 30-month interview, she was maintaining her residence through the PS, completing her college work (BSW) and was one semester into a MSW program.

Unfortunately, after 5 years of sobriety she relapsed, using alcohol and crack cocaine up until the week before her 30-month follow-up interview. She said that the responsibilities of work, school and the children together became too stressful and she felt pulled in different directions, ultimately leading to her relapse. Her relapse lasted about six months and resulted in the loss of her job, she dropped out school, and spent all of her savings. Fortunately, she did not lose her PS housing and she entered an outpatient treatment program. With the help of friends, family and professionals, she is recovering from the relapse. She asserts that her PS is "a blessing, I am very pleased and grateful for the program; I wouldn't be where I am without them. I am thankful I am still in the program since the relapse."

V. Discussion

Not since the Great Depression have significant numbers of families and children been homeless. During the 1980's, families were a small segment of the homeless population, but in the last few decades their numbers have steadily climbed and now comprise approximately 38% of the overall homeless population. With the recent economic recession, the dramatic increase in housing foreclosures, and high rates of unemployment, family homelessness is expected to continue to increase. Despite this alarming picture, little is known about the needs and characteristics of homeless families served by different housing programs, and the impact these programs have on residential stability and other desirable outcomes.

The SHIFT study investigated the needs and outcomes over 30 months of homeless families and their dependent children living in different types of residential programs that provided housing and services in four locations in upstate New York. The mothers in the different housing programs had similar characteristics to each other and to those described in the literature on demographics, educational, job histories, and experience of homelessness (Bassuk et al, 1996; Bassuk, 2010). Our sample consisted primarily of never-married, African-American and Caucasian mothers, many of whom were in their late teens and twenties, with one to three children. Most participants, regardless of their housing situation, faced significant challenges in establishing economic independence. Most were unemployed and 43% had not graduated from high school or earned a GED. Their educational level placed them at a significant disadvantage in the job market, making reliance on public benefits likely and contributing to their continuing risk for residential instability. Over the course of the study, mothers' employment status improved across all housing groups, although 61% remained unemployed, a percentage far above the national average.

The research goal of the SHIFT Study was to better understand the role of various housing/service approaches for stabilizing different subgroups of families. Housing/service programs included emergency shelters (ES), transitional housing (TH), and permanent supportive housing (PS). Study results indicate that each housing program—ES, TH and PS—served subgroups with different levels of need, but with varied effectiveness. The discussion below is organized around four areas of study findings: (1) trauma histories and maternal mental health; (2) residential stability; (3) status of the children; and (4) family separation. We also discuss important program and policy implications that arise from the study findings.

Trauma Histories and Maternal Mental Health

Trauma and PTSD

The mothers' histories of trauma were striking: 93% of mothers had experienced at least one trauma; 81% had experienced multiple traumas; and 79% were traumatized as children. The most common traumatic events involved interpersonal violence, including physical assaults and sexual abuse. More than two-thirds had been physically assaulted in adulthood, and half had been sexually abused as children. Additionally, half of the mothers met DSM-IV diagnostic criteria for PTSD at baseline. At 30 months, this rate decreased to 40%.

It is important to note how PTSD presents for survivors of interpersonal violence. Its presentation is complex and often includes challenges in primary attachments. PTSD among

survivors of interpersonal violence impacts all aspects of functioning – cognitive, affective, relational – and can result in severe impairment and loss of resources including: an inability to establish safety, residential instability and employment difficulties, compromised ability to be responsive to children's developmental needs, and use of negative parenting practices.

While the prevalence of trauma among homeless mothers has been documented for many years (e.g., Bassuk et al, 1996; Weinreb et al., 2006), researchers have primarily focused on its impact on the mother rather than its influence on the entire family unit, their functioning and cohesiveness as well as on their ability to maintain housing .Because the SHIFT Study followed families for 30 months – which is a much longer period of time than most longitudinal studies – new insights about the impact of trauma histories on family functioning and outcomes have emerged

Trauma is linked to depression, substance use disorder (SUD), and often co-occurs with these disorders. Trauma symptom severity was predictive of depression: at 15 months, depressive symptoms were predicted by low self-esteem, severe trauma symptoms, poor health, and mental health treatment; at 30 months, the only predictors of depression were low self-esteem and trauma symptom severity. Additionally, PTSD most often co-occurred with depression. At baseline, 79% of those with PTSD also had depression; at 15 months, 80% with PTSD also had depression; at 30 months, 77% with PTSD also had depression. PTSD also commonly co-occurred with SUD: at baseline, 63% with PTSD had SUD. At 15 months, the 54% of women with PTSD also had SUD (compared to 41% with just PTSD and 46% with just SUD). At 30 months, the proportion of mothers with both PTSD and SUD was 49% (compared to 35% with just PTSD and 50% with just SUD).

The rates of co-occurring PTSD and depression and co-occurring PTSD and substance use are striking, and highlight the complexity of trauma histories on mothers' functioning. Prior studies have reported that compared to the overall female population, homeless mothers have three times the rate of PTSD, at least four times the rate of major depressive disorders, and twice the rate of SUD (Bassuk et al, 1998, Bassuk, 1996, Guarino & Bassuk, 2010). Study findings indicate that trauma, depression, and substance abuse can co-occur for homeless mothers in different combinations at different points in time. These disorders compromise their ability to form safe and trusting relationships, work consistently and parent effectively (Guarino & Bassuk, 2010).

It is not only important that these mothers are assessed appropriately for trauma, but that the coexistence of both PTSD and depression resulting from the trauma is recognized and addressed appropriately. Additionally, the substance use that co-occurs with PTSD likely reflects that these mothers are self-medicating to cope with their trauma symptoms. A framework the incorporates an understanding of the role of trauma in substance use is essential to effectively address the problems these women are struggling to manage and overcome.

In additional to these mental health outcomes, trauma symptom severity was also linked to residential instability. Trauma symptom severity predicted residential instability. At 15 months, residential instability was predicted by low level of education, unemployment, poor health, and low self-esteem; the *only* predictor of unemployment was trauma symptom severity But at 30 months, the only predictors of residential instability were low self-esteem and trauma

symptom severity. This is the first study to document that trauma symptom severity predicts long-term residential instability.

The results of this study indicate that it is critical that these mothers are provided appropriate services and supports to identify and address trauma, depression, and SUD as part of any housing program. If these women are not given supports to address their trauma symptoms, their likelihood of achieving residential stability may be seriously compromised. The common understanding that the economic barriers – unemployment, poor education – are the only factors that prevent homeless families from achieving residential stability is short-sighted. The results of this study indicate that, over time, the impact of those economic factors wanes, and instead it is the mother's trauma symptom severity that predicts whether a family will experience ongoing residential instability. Any type of housing program needs to address the mother's trauma for families to stabilize and achieve lasting self-sufficiency. In addition, the impact of maternal trauma on family and child outcomes is critical for housing programs to understand, and is further explored in the section below on residential instability.

Maternal mental health: Depression

A majority of mothers in all three housing conditions reported depressive symptoms, which are commonly associated with exposure to trauma and PTSD, and to the condition of homelessness. This finding is consistent with high rates reported in other studies (Bassuk, 1998; Weinreb, et. al, 2006). Maternal depression predicted child educational and emotional problems. Similar to PTSD, depressive symptoms in our study decreased slightly at 15 months and then remained steady through the 30-month follow up. Women in TH and PS were more depressed at the 15-month follow up when controlling for demographics, health, baseline depression, and trauma symptoms. Living in PS also predicted high rates of depressive symptoms. Weinreb, et. al., (2006) reported that lifetime rates of major depressive disorder in homeless mothers may exceed 85%, at least four times that of the overall female population and approximately twice that of low income women.

When overlooked, depression can be devastating to both the mother and her children (Weinreb et al, 2006; Weissman & Olfson, 1995; Bassuk et al, 2010). Untreated depression poses unrecognized risks to children's healthy development and school readiness, and may be associated with poor socio-emotional outcomes and cognitive deficits in children (IOM, 2000). Depression was not merely a characteristic of the mothers in this study, but a predictor of poor child outcomes: maternal depression was predictive of child educational and emotional problems, illustrating the risk it poses to a child's well-being.

Maternal depression is also associated with negative parenting behaviors. Mother's with depression have a reduced ability to be responsive to the needs of their children. They play with their children less often, use negative discipline, and are sometimes verbally abusive (Lovejoy et al, 2000, McLearn, et al 2006, Sameroff, 2000; Shaw et al, 2006). Mothers are often unable to provide the necessary attention, nurturing, and care their children need to thrive and develop. For example, Bagner et. al., (2010) found that maternal depression during a child's first year of life was associated with both internalizing and externalizing problems. Tomham et. al., (2010) also found that maternal depression, moderated by low socioeconomic status, was associated with a permissive parenting style and childhood obesity. High rates of maternal depression have

implications for the functioning and well-being of the mothers, and the long-term emotional and physical well-being of their children (Guarino & Bassuk, 2010).

While depression has serious and long lasting effects on parenting and child outcomes, it is a treatable disorder that is responsive to intervention (Knitzer et al, 2008). In considering the high rates of depression and the corresponding poor child outcomes in this sample, identifying and addressing depression in homeless mothers is necessary. There are evidence-based-practices for the treatment of depression that are time-limited and relatively low-cost. Therefore, housing programs have the opportunity to respond to this problem effectively, providing targeted, time-limited and inexpensive assistance that simultaneously produces a significant, positive and lasting impact on the parenting and child outcomes for homeless families.

Maternal mental health: Substance Use/Abuse

The study finding that a significant percentage of women who were in the moderate and high risk categories for cannabis and cocaine use is noteworthy. Research indicates that many people who use substances self-medicate to relieve their feelings of distress (Khantzian, 1997). Comorbid rates of mental health diagnoses and substance use are well documented. The self-medication hypothesis purports that some people are more vulnerable to SUD because they either feel emotionally overwhelmed or numb, and come to rely on substances as a way to regulate their emotional state (Khantzian, 1997). Consistent with the literature, results of this study also found high rates of comorbidity. Many women with PTSD also had SUD. Additionally, among women with depression, 85% also had SUD at baseline, 83% at 15 months, and 75% at 30 months.

When directly questioned about their use of substances during interviews with standardized assessment tools, mothers in this study tended to deny use. Fear of losing their housing, being separated from their children, and the shame associated with using drugs and alcohol are strong motivators for denying substance use (Anda, 2002). To further examine possible substance use, we asked mothers about their attendance at AA/NA meetings. At 30-month follow up, 33% of the women reported attending AA/NA. Even these rates likely underestimate the number of mothers struggling with substance use problems since attendance only includes those who have acknowledged they have a problem and are seeking support. There may well be other women who are silently struggling with substance use issues. AA/NA attendance in our study was associated with factors that lead to residential and family instability, including younger mothers, greater number of children, unemployment, mother and child separations, and receiving mental health treatment. Two-thirds of the mothers in AA/NA at 30 months were not stably housed and most had moved multiple times.

These findings regarding lower self-reporting of substance abuse by homeless mothers have important implications for programs. While there is significant stigma attached to substance use – particularly for mothers – it should not be surprising that many of these women resort to drugs and alcohol to self-medicate and manage severe trauma symptoms. Many view substance abuse treatment as punitive rather than supportive, and the fear of losing housing and their children is powerful. Programs need to be aware of the many incentives that homeless mothers have to hide any substance use, and develop assessment protocols to best identify this potentially hidden problem, and provide access to substance abuse treatment.

Permanent Supportive Housing and Serious Mental Illness

Among mothers' mental health issues, the SHIFT study documented a striking new finding. Almost half of mothers in PS programs reported an inpatient mental hospitalization. Although we do not have specific information about the factors leading up to the hospitalizations or associated diagnoses at the time of admission, it is likely that most of these women were hospitalized for major mental illness. Since admission to mental hospitals is often associated with safety issues (e.g., suicidal behavior), we can speculate that many of these women had compromised functioning and possible safety issues. In addition to hospitalization, this PS subgroup had significantly higher rates of mental health day treatment, outpatient treatment, and medication evaluations compared to mothers in ES and TH programs.

Women with psychiatric hospitalizations described serious affective disorders, with all the mothers suffering from depression and 45% with bipolar disorders. It also should be noted that unlike homeless adult individuals, these mothers were not suffering from schizophrenia. The rates of bipolar disorder in mothers in PH programs are twice as high as those in TH programs, four times as high as those in ES programs, and ten times the rate of those in the general population. The rates of depression in mothers in PH programs were also disproportionately high compared to the other subgroups. In addition, almost half of the women in PS programs were attending AA/NA groups.

The women who were psychiatrically hospitalized not only had disproportionately high rates of affective disorders, they also had dramatically high rates of interpersonal violence, CPS involvement, and separations from their children. Seventy-five percent had been sexually abused as children, as compared to 42% and 41% of the total sample and PS program participants without psychiatric hospitalizations, respectively. Additionally, 70% had been physically assaulted in adulthood by a family member or someone they knew, compared to half of the total sample and PS program participants without hospitalizations. Many more women residing in PS programs than in the other settings reported a diagnosis of PTSD. Frequent episodes of victimization and PTSD render these women more vulnerable to difficulty functioning, parenting effectively, and forming supportive relationships as adults. Although residents of PS programs are selected because they have more intense needs, we know of no studies to date documenting the presence of psychiatric inpatient hospitalization and severe mental illness (SMI) among these mothers.

RESIDENTIAL STABILITY: THE IMPACT OF TRAUMA

Despite their tenure in various housing/service programs over the 30-month study period, SHIFT study participants continued to experience ongoing residential instability. A majority of families in the study (62%) were unable to maintain stable housing after 15 months and nearly half (49%) remained unstable at the end of the study period.¹ This high level of housing instability was observed regardless of the type of housing and services families received.

¹ To be conservative in our calculation of housing instability, residential instability was defined as having moved multiple times or moving once or more without having housing vouchers/subsidies. Those who moved only once and also received housing vouchers/subsidies were not included in our calculation of housing instability because research indicates that vouchers/subsidies are associated with greater residential stability.

The extremely high rates of mobility prior to entering a housing program indicate that family homelessness is embedded within a longer pattern of residential instability. Well before entering a housing program, these families have already endured significant instability with multiple moves. It is therefore imperative that they are stabilized as quickly as possible and that the cycle of residential instability is halted. Unfortunately, that was not the case for many of the families in the SHIFT Study. Instead, the pattern of residential instability continued.

In the 18-months prior to entering their baseline housing programs, all of the families had been residentially unstable, and 87% had moved multiple times—a finding supported by other research (Bassuk, 1996,1997; Rog, McCombs-Thornton, Gilbert-Mongelli, et al, 1995). Over time, SHIFT participants did not fare as well as others in previous studies (Bassuk & Geller, 2006). Families in ES programs continued their patterns of instability, with the vast majority (86%) still unstably housed at the 15-month follow-up, and 75% moving multiple times. At the 30-month follow-up, nearly half of ES families still experienced residential instability. Among families in TH programs, more than half were not residentially stable at both the 15 month and 30 month follow ups, with many families moving multiple times (51% at 15 months, and 43% at 30 months). PS families were the most stably housed across the course of the study. Seventy percent were stable at 15 months; this rate dropped slightly to 64% at the 30 month follow up. It is important to note, however, nearly half of the PS families (41%) did not maintain their residence at the PS program across the course of the study; instead their residential stability is attributable to receiving rental subsidies.

The SHIFT findings regarding residential instability over time in various housing programs are particularly significant given the scant literature describing the longitudinal impact of housing programs on homeless families. Research that examines residential stability of homeless families who entered shelters found that families were more likely to stabilize if they obtained subsidized housing (Wong, Culhane, Kuhn, 1997; Shin et al, 1998). Shinn et. al. (2005) reported that only 38% of sheltered families without subsidies were in their own apartments and only 18% were stable. The rates of residential stability in our study (49% after 30 months) fell well below rates among Housing First programs in the research. Shinn, et. al., (2005) found that among homeless and at-risk families in Housing First programs, 85% were able to maintain residential stability for two years. Similarly, Pearson, Montgomery and Locke (2009) found that among a sample of chronically mentally ill individuals, 84% were stably housed in Housing First programs after one year. We therefore considered a rate of 85% for residential stability as a benchmark for comparison.

An examination of predictors of residential instability over time revealed a new – and critical – finding: trauma symptom severity predicted residential instability. At 15-months, factors negatively impacting one's ability to achieve economic independence predicted residential instability: unemployment, lower level of education, poor health, and low self-esteem. However, at 30-months, the impact of these factors waned, and instead the only predictors of residential instability were related to emotional well-being: self-esteem and PTSD symptom severity. While previous studies have documented trauma histories and PTSD among mothers in homeless families (Bassuk et al, 1996), this is the first study to find that trauma impacts a family's ability to maintain residential stability.

STATUS OF THE CHILDREN

Research studies have consistently documented a poverty-related effect on children's health, mental health, behavior and school performance that operates through various mediating and moderating variables (Samuels et al, 2010; Bassuk 2010). Low-income children, whether homeless or housed, fared worse than children in the general population (Rog & Buckner, 2007). However, results documenting significant differences between homeless and housed low-income children have been more inconsistent. Masten et al., (1993) emphasized that it is difficult to isolate individual variables leading to specific negative outcomes since these children are most often exposed to multiple adverse events and traumatic stressors. To address this problem, Huntington et al., (2008), used cluster analyses to document that homeless children are not a homogeneous group and identified a subgroup that seemed to function well despite significant adversity. In their sample, childhood physical and sexual abuse, and maternal emotional distress seemed to distinguish higher and lower functioning children.

This study reported on the status of all the children in the study (N=704) and the status of the target children (N=264). We found that many of the children had significant problems that adversely affected their functioning. Frequently, these problems did not improve across the course of the study. When looking at the entire sample of children, approximately 25% of the mothers reported having a child with a medical or physical disability that interfered with the child's functioning. Additionally, 30% reported their child had a learning or emotional problem. These findings did not change significantly over the course of the study, and did not vary by housing group.

The details revealed by the assessment of the mother's reporting on their target child provided the most vivid picture of how these children fared across the study. For total difficulties, as assessed by the SDQ, approximately 25% of the children scored abnormally at baseline. Another 16% scored in the borderline range—for a total of 41%. However, at 30 months, children in TH and PS programs had fewer difficulties, while the number of children in ES programs who scored abnormally increased to 27%. The pattern of conduct problems and hyperactivity was also high, with about 35% of the target children scoring abnormally on the SDQ and another 30% in the borderline range for a total of 65%. The percentages decreased only slightly by 30 months. Fewer children had peer problems (25% abnormal and 17% borderline), but the percent remained about the same over time. Fewer children (14%) scored in the abnormal range at baseline when assessed for emotional symptoms, but this almost tripled at 15 months to 39%, and returned to the baseline percent by 30 months. Children in ES programs seemed to struggle the most with emotional problems at each data point. Prior research (Huntington, 2008; Bassuk, 2010) associates children's problems with some of the mother's challenges, including poor health, mental health treatment, and compromised parenting practices.

The school-aged children (44%) appear to have significant academic challenges. One-quarter of the target children had repeated a grade. Grade retention was particularly prevalent among PS program participants: 43% of these targeted children repeated a grade compared to 22% of ES program and 18% of TH program target children. Forty-two percent of PS program children received special education services—a rate much higher than children in ES and TH programs. In addition, PS children who repeated a grade had higher rates of behavioral problems,

hyperactivity, and peer problems. Nationally, only 10% of 16-19 year olds have been retained in a grade (U.S. Department of Education, 2010). Previous studies cite grade retention among homeless children to be between 20% and 40% (Masten, 1990; Wood et. al., 1990, Rubin et. al., 1996; Bassuk & Rosenberg, 1990; Buckner et. al., 2001), although Rafferty et. al., (2004) found that 50% of formerly homeless adolescents had been retained in a grade. Grade retention is associated with negative outcomes for youth. Repeating a grade is the most powerful predictor of dropping out of high school (Jimmerson et. al., 2002). Youths who have been retained are less likely to receive a high school diploma by age 20, receive poorer educational competence ratings, have lower educational and employment status, and are paid less per hour at age 20 than those who never repeated a grade (Jimerson, 1999). The high rates of grade retention among this sample suggest that the future of these children may be compromised.

FAMILY SEPARATION

Mother-child separations were common among the SHIFT families, with more than half reporting having lived apart from their children—a rate higher than previously reported in the literature. Prior studies of separations in homeless families range from 18% to 44% (Shinn et. al., 2005). PS program mothers reported the highest rate at baseline (73%)—a percentage reflecting their prior histories. At 15-months, 41% of mothers reported that a child was living apart from them, with mothers in PS reporting the lowest rate of 19%--perhaps reflecting the initial support of the program. However, at 30 months, the rate among PS program families increased to half of the mothers, far higher than the one-third of those in ES and TH programs.

At 15 months, we found the following factors to be predictive of mother-child separations:

- Residential instability
- Younger mothers
- Having more children
- Maternal mental health treatment

At 30 months, family separations were predicted by the factors above as well as by unemployment and attending AA/NA groups. The identification of these risk factors provides the opportunity to design programs and services to prevent the damaging effects of family separation. The high rates of family separation in our study suggest the importance of conducting additional research to better understand the connections between homelessness and family separation.

POLICY AND PROGRAM IMPLICATIONS

Data from the SHIFT study were collected from 48 housing programs selected from a larger sample of 125 programs serving homeless families and children in four locales in upstate New York. The participating programs provided housing and services as usual and were not part of demonstration programs that prescribed service strategies. We had the unique opportunity to collect data about housing and services that were organized according to a continuum of care from emergency shelter to transitional housing and permanent supportive housing. Our program sample was representative of programs in the four locales in the study and likely similar to

programs in small to mid-sized cities. Thus, the study provides critical information about the impact of local and perhaps typical programs serving homeless families.

We found that about half of families across the three housing/service program models remained residentially unstable over time. With regards to the mothers, the most salutary effect was an improvement in mothers' employment status although it still remained very low. Many of the children across all housing/service models continued to have significant health, emotional, and behavioral difficulties over the 30-month study period as well as continued struggles with their schooling.

Historically, policy and program design for people who are homeless was based on moving families and individuals along a continuum of care in which consumers were supported to become increasingly ready to be housed through interventions that improved their health care, behavioral health, access to public benefits, and education and job training. Many housing programs required readiness before a person could be housed. Current national policy aimed at ending family and child homelessness in ten years (USICH, 2010) now supports implementation of a Housing First or Rapid Re-Housing model in which families are rapidly re-housed, with varied eligibility requirements to qualify for housing.

Our findings support the necessity of implementing a housing model that stabilizes families in long-term housing as quickly as possible. Regardless of the housing model that is used, the results of this study indicate that housing – including Rapid Re-Housing – must be aligned and linked with tailored services and supports to ensure residential stability over time. While previous studies helped us to understand trauma as a characteristic of mothers in homeless families, the current study indicates that trauma is not merely a characteristic, but in fact is a key factor predicting long-term residential instability. This new data necessarily requires policy makers and providers reconsider how housing and services are provided.

The cornerstone to any approach addressing family homelessness must address the impact of trauma and maternal mental health on these mothers and their families. This includes implementing trauma-informed care (TIC) in all family housing programs. TIC is a costeffective strategy to provide an appropriate environment to support these mothers and families on the path toward residential stability. Additionally, a workforce trained in TIC is less likely to engage in harsh disciplinary practices and prevent the inadvertent triggering of trauma symptoms in families that can often lead to disruptive patterns of behavior. Incorporated into programs and across the housing and homeless system, trauma-informed care can ensure that all families, over 90% of which have a trauma history, will receive a basic level of appropriate care. For many this may be enough to support them on their road to recovery. For others with more complex symptoms, more intensive, trauma-specific clinical interventions may be required. While the vast majority of homeless mothers have endured trauma, it is the mothers experiencing severe trauma symptoms that are at the greatest risk for residential instability. Programs that incorporate comprehensive assessments that ask about trauma and associated mental health challenges (PTSD, depression and SUD) will be more able to allocate resources effectively, identify those mothers who need treatment, and better target their services to improve outcomes.

As noted above, Housing First has shown significantly higher rates of residential stability than any of the models in our study. A majority of mothers had a range of needs related to education and employment, traumatic stress, mental health and substance use, and would greatly benefit from supports and services responsive to their needs. Children's urgent needs included health and behavioral health care, and support for their schooling. While TH may be a viable model for those in crisis or for those with defined special needs, the data from this study suggest that this model does not help to ensure residential stability—the most essential goal of housing programs. Permanent supportive housing also fell short of this goal in our study, which is particularly troubling given that its basic premise is housing permanency. Within a Housing First or Rapid Re-housing framework, PS programs are targeted to families who need high levels of ongoing supports and services. However, to be effective, these programs will have to address the needs of a subset of mothers in PS programs who have serious mental illness (SMI). Housing alone is insufficient to ensure long term housing stability.

Our finding of SMI in some mothers should become part of routine provider training. To ensure that families' needs are met, case managers must be well-trained in assisting mothers with SMI and in understanding the impact of these issues on their children. Additionally, programs should either have clinicians on staff or partnerships with community-based mental health agencies. Furthermore, eligibility criteria for PS programs should be well-defined and consistent. In addition to learning about SMI, specific affective disorders (e.g., major depression, bipolar disorder), service providers must have the knowledge and skills to deal with the high rates of traumatic stress experienced by these families. Given the high rates of interpersonal and random violence experienced by these mothers, all services must be provided through the lens of trauma. Trauma-informed care must be implemented at all family housing programs, and trauma-specific services must be widely available.

Housing programs must also tailor their services so that substance use screening and treatment is available, and that housing opportunities are not jeopardized by substance use so that mothers can access the help they need without fear of losing their housing. Given the trauma histories, mental health problems, and stress of housing instability, some mothers are susceptible to substance use and often self-medicate. Furthermore, these mothers will be reluctant to be forthcoming about their substance use. This was observed in our use of a self-report assessment, which revealed very low rates of substance use, when in fact the rates of attending AA/NA meeting indicated much higher rates of use. To best support these families, substance use must be understood within the framework of the entire family. Whenever possible, treatment should preserve family unity. Families and children should not be separated unless the health and well-being of the children are at immediate risk.

Finally, the findings of this study also highlight the importance of assessing and responding to the unique needs of the children in these families. Children are often overlooked, especially in service settings with limited resources. Programs should be well trained in how to assess the needs of children and provide trauma informed, developmentally appropriate care that is based on knowledge of childhood attachment and behavioral disorders (Moses 2009; Bassuk, 2010). Parenting supports should be integrated into every program. In addition, children's services should be child-specific, child-friendly and developmentally appropriate. Assessment of

children's needs is critical, as is ensuring children have access to an education, including special education supports if needed, so they can succeed in school.

STUDY LIMITATIONS

Similar to most community based field studies there are various limitations to this study. The three housing groups contained selected families; selection is not randomized. Thus, differences in key variables such as housing history and chronicity of mental health issues may differentiate the groups at baseline. However, we found no statistical difference between the groups at the beginning of the study. A second limitation is the variation among the service programs within each housing group. For example, among the 18 TH programs that participated, the services may be quite different and therefore the effectiveness of TH may be weakened. Third, as mentioned, under-reporting of substance use is highly likely. We used AA/NA attendance as a proxy and are confident in our estimate of the prevalence of women who have SUD, although this was not a clinical diagnosis. Lastly, the sample size at 15 and 30-month follow-up may be too small to detect statistically significant results when they were warranted.

CONCLUSIONS

This study confirms the high prevalence of trauma and interpersonal violence in the lives of homeless families that complicates their chances of achieving housing stability. Our study also uncovered a subset of mothers with SMI that needs to be addressed in future programming. Residential instability remained high for all participants over 30 months. Although we found a significant reduction in severity of PTSD in mothers and improvement in their employment status, many of the mothers and children did not improve in other key health and behavioral factors necessary for housing stability. In conclusion, housing and shelter programs, including rapid rehousing for families, needs to be enhanced by a tailored mix of supports and services. Guided by comprehensive assessments, services must include a focus on trauma informed care and services that address maternal mental health, specifically maternal depression and PTSD. In addition, all programs must support parenting and address the needs of the children to ensure their healthy development and long-term success.

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| | Minimum | Maximum | Mean | SD | |
|------------------------------------|---------|---------|-------|------|--|
| Age | | | | | |
| Emergency Shelter† | 18 | 57 | 28.15 | 8.80 | |
| Transitional Housing† | 17 | 49 | 26.98 | 7.73 | |
| Permanent Supportive Housing | 18 | 56 | 34.68 | 9.25 | |
| Total | 17 | 57 | 28.57 | 8.77 | |
| # of Children | | | | | |
| Emergency Shelter‡ | 0 | 10 | 2.37 | 1.81 | |
| Transitional Housing+ | 0 | 11 | 2.10 | 1.66 | |
| Permanent Supportive | 1 | 7 | 2.98 | 1.72 | |
| Total | 0 | 11 | 2.35 | 1.75 | |

Appendix 1. Sample Characteristics

| | Emergenc y Shelter | | Transitio nal Housing | | Permanen t Supportiv e Housing | | Total | | | |
|-----------------|-----------------------|-----|-----------------------------|--------|---|---|---------|---|--|--|
| | N = | 131 | N = 120 | | N = 42 | | N = 292 | | | |
| | n | % | п | % | п | % | п | % | | |
| Ethnicity | | | | | | | | | | |
| African- | 8 | 6 | 7 | 5 | 2 | 5 | 1 | 6 | | |
| American | 4 | 6 | 1 | 9 | 5 | 9 | 8 | 2 | | |
| | | | | | | | 0 | | | |
| | | 1 | | 2 | | 5 | | 3 | | |
| White | 2 | 3 | 3 | 4 | 1 | 2 | 7 | 2 | | |
| | 5 | 5 | 3 | 7 | 2 | 8 | 0 | 4 | | |
| | | • | | • | | | | • | | |
| | | 7 | | 1 | | 6 | | 2 | | |
| Other | 1 | 1 | 1 | 3 | 5 | 1 | 3 | 1 | | |
| | 8 | 4 | 6 | • | | 1 | 9 | 3 | | |
| | | • | | 3 | | | | • | | |
| | | 2 | | | | 9 | | 5 | | |
| Hispanic/Latino | | | | | | | | | | |
| Yes | 1 | 1 | 2 | 1 | 0 | 0 | 3 | 1 | | |
| | 5 | 1 | 1 | 7 | Ť | | 6 | 2 | | |
| | | • | | | | | | | | |
| | | ð | | 5 † | | | | 3 | | |

| Education Level | | | | | | | | | |
|--------------------------------|---|--------|--------|----------|---|---------|------------|--------|--|
| No H.S | 5 | 4 | 3 | 3 | 1 | 2 | 10 | 3 | |
| Degree | 4 | 2 | 7 | 1 | 1 | 6 | 2 | 5 | |
| | | | | | | | | | |
| U.C. Decree | 2 | 5 | 2 | 1 | 1 | 8 | F F | 5 | |
| H.S. Degree | 2 | | 2 1 | 17 | 1 | 2 | 55 | 1 | |
| | 4 | 0 | 1 | 1 | 0 | 4 | | 9 | |
| | | 9 | | 6 | | 2 | | 2 | |
| GFD | 1 | 1 | 2 | 1 | 6 | 1 | 43 | 1 | |
| | 6 | 2 | 1 | 7 | 0 | 4 | -15 | 5 | |
| | 0 | - | 1 | , | | | | | |
| | | 6 | | 6 | | 6 | | 0 | |
| Vocation/Trade/ | 0 | 0 | 7 | 5 | 0 | 0 | 7 | 2 | |
| Business | | | | | | | | • | |
| School | | | | 9 | | | | 4 | |
| Some College or | 3 | 2 | 3 | 2 | 1 | 3 | 75 | 2 | |
| 2 Year Degree | 1 | 4 | 0 | 5 | 4 | 4 | | 6 | |
| | | • | | • | | | | | |
| ~ " | | 4 | - | 2 | | 1 | | 1 | |
| College | 1 | | 3 | 2 | 0 | 0 | 4 | 1 | |
| Degree | | 8 | | <u>.</u> | | | | ; | |
| or Higher | | | | 5 | | | | 4 | |
| Marital Status | | | | | | | | | |
| Never Married | 9 | 7 | 9 | 7 | 2 | 6 | 2 | 7 | |
| | 1 | 1 | 2 | 6 | 6 | 1 | 0 | 2 | |
| | | | | | | | 9 | | |
| | | 7 | | 7 | | 9 | | 3 | |
| Married | 1 | 1 | 1 | 9 | 7 | 1 | 3 | 1 | |
| | 6 | 2 | 1 | | | 6 | 4 | 1 | |
| | | | | 2 | | | | | |
| | | 6 | | | | 7 | | 8 | |
| Separated or | 1 | 1 | 1 | 1 | 8 | 1 | 3 | 1 | |
| Divorced | 6 | 2 | 2 | 0 | | 9 | 6 | 2 | |
| | | | | • | | | | | |
| W <i>T</i> ' 1 1 | 4 | 6 | F | 0 | 1 | 0 | 1 | 5 | |
| Widowed or Other | 4 | 3 | 5 | 4 | 1 | 2 | 1 | 3 | |
| Other | | 1 | | ว | | • 1 | U | 5 | |
| Living with | 1 | 1 7 | Ο | | 2 | + ∕I | 12 | 5 Д | |
| Dortnor | 0 | 1 | 0 | 0 | 4 | + | 1 4 | + | |
| r al ulei | v | Q | | | | 9 | | . 2 | |
| | | , | | | | , | | - | |

| | Emergency | Transitional | Permanen | t Total |
|------------------------|-----------|--------------|------------|----------|
| | Shelter | Housing | Supportive | e Sample |
| | % | % | Housing | % |
| | Γ | | % | |
| Literally | 100 | 75 | 84 | 87 |
| Homeless | | | | |
| | 22 | 70 | 70 | 77 |
| Doublea-up | 02 | 12 | 19 | 11 |
| Homeless | | | | |
| Childhood | 21 | 27 | 22 | 22 |
| Literal | | | | |
| Homelessness | | | | |
| | Minimum | Maximum | | Mean |
| Age at 1 st | 0 | 57 | | 23.5 |
| Homeless | | | | |
| Episode | | | | |
| Emergency | 9 | 57 | | 24 |
| Shelter | | | | |
| | | | | |
| Transitional | 0 | 46 | | 23 |
| Housing | | | | |
| D | 10 | 50 | | 24 |
| Permanent | 10 | 53 | | 26 |
| Supportive | | | | |
| Housing | | | | |
| # of | 0 | 20 | | 2.2 |
| # UI Homoloss | 0 | 20 | | 2.2 |
| Fnisodes | | | | |
| Emergency | 1 | 7 | | 2 |
| Shelter | 1 | , | | 2 |
| ~~~~~ | | | | |
| Transitional | 0 | 10 | | 2 |
| Housing | | | | |
| 0 | | | | |
| Permanent | 0 | 20 | | 3.2 |
| Supportive | | | | |
| Housing | | | | |

Appendix 2. Homelessness History

| | Emer y She | genc elter | Trans a Hou N – | sition l sing | Perm Supp Hou | anent ortive 1sing - 41 | Tot | al | |
|----------------|---------------|---------------|--------------------------|---------------------|---------------------|----------------------------------|---------------|--------|--|
| | IN — | 131 | IN — | 120 | IN - | - 41 | 1N - 2 | 292 | |
| Serious | n 2 | % 2 | N 3 | % 2 | N 7 | % 16. | <i>п</i> б | % 2 | |
| Disaster | - 7 | 1 | 1 | 5 | , | 7 | 5 | 2 | |
| | | • | | | | | | | |
| | | 1 | | 8 | | | | 4 | |
| Life- | 2 | 1 | 2 | 2 | 1 | 33. | 6 | 2 | |
| Threatening | 4 | 8 | 8 | 3 | 4 | 3 | 6 | 2 | |
| Accident | | | | | | | | | |
| | | 8 | | 3 | | | | 8 | |
| Immediate | 6 | 5 | 7 | 5 | 1 | 45. | 1 | 5 | |
| Family | 6 | 1 | 1 | 9 | 9 | 2 | 5 | 3 | |
| Member Die | | | | | | | 6 | 0 | |
| Unexpectedly | | 0 | | 2 | | | | ð | |
| Death of Child | 7 | 5 | 7 | 5 | 4 | 9.5 | 1 | 6 | |
| | | | | | | | 8 | | |
| | | 5 | | 8 | | | | 2 | |
| Witnessed | 2 | 2 | 2 | 1 | 5 | 9.8 | 5 | 1 | |
| Death | 6 | 0 | 0 | 6 | | | 1 | 7 | |
| | | | | | | | | • | |
| | | 3 | | 8 | | | | 6 | |
| Witnessed | 5 | 4 | 4 | 4 | 1 | 46. | 1 | | |
| Serious Injury | 4 | 2 | 8 | 0 | 9 | 3 | 2 | 4 | |
| | | | | | | | 1 | 2 | |
| | | 2 | | 3 | | | | | |
| | | | | | | | | 0 | |
| Witness | 1 | 7 | 9 | 7 | 5 | 12. | 2 | 8 | |
| Sexual Assault | 0 | • | | • | | 2 | 4 | • • | |
| | | 8 | | 6 | | | | 3 | |
| Physically | 8 | 6 | 9 | 7 | 2 | 61. | 2 | 6 | |
| Assaulted by | 4 | 5 | 2 | 7 | 6 | 9 | 0 | 9 | |
| Family or | | • | | | | | 2 | | |
| known | | 6 | | 3 | | | | 9 | |
| Perpetrator | | | | | | | | | |
| Physically | 2 | 1 | 2 | 2 | 1 | 35. | 6 | 2 | |
| Assaulted by | 3 | 8 | 6 | 1 | 5 | 7 | 4 | 2 | |
| Stranger | | • | | • | | | | | |
| | | 1 | | 8 | | | | 2 | |

Appendix 3. Trauma Experiences

| Sexually | 5 | 4 | 6 | 5 | 2 | 66. | 1 | 4 |
|---------------|-------|-----|------|-----|---|------|----|----|
| Assaulted by | 2 | 0 | 1 | 0 | 8 | 7 | 4 | 8 |
| Family or | | • | | • | | | 1 | • |
| known | | 9 | | 8 | | | | 8 |
| Perpetrator | | | | | | | | |
| Sexually | 1 | 1 | 2 | 2 | 1 | 23. | 5 | 1 |
| Assaulted by | 7 | 3 | 7 | 2 | 0 | 8 | 4 | 8 |
| Stranger | | | | | | | | |
| | | 4 | | 5 | | | | 7 |
| Additional | 1 | 1 | 1 | 1 | 5 | 11. | 3 | 1 |
| Traumatic | 3 | 0 | 3 | 0 | | 9 | 1 | 0 |
| Experiences | | | | | | | | |
| - | | 2 | | 8 | | | | 7 |
| PTSD Criteria | 6 | 4 | 5 | 4 | 2 | 59. | 1 | 4 |
| Met | 2 | 8 | 7 | 7 | 5 | 5 | 4 | 9 |
| | | | | | | | 4 | |
| | | 4 | | 5 | | | | 7 |
| Total # of | Minir | num | Maxi | mum | M | ean | S. | D. |
| Traumatic | | | | | | | | |
| Experiences | | | | | | | | |
| Emergency | (|) | | 8 | 2 | 2.99 | 1. | 85 |
| Shelter | | | | | | | | |
| Transitional | (|) | | 8 | | 3.50 | 2. | 05 |
| Housing | | | | | | | | |
| Permanent | (|) | | 8 | | 3.55 | 2. | 10 |
| Supportive | | | | | | | | |

| | Emergency | Transitional | Permanent | Total |
|---------------|-----------|--------------|------------|--------|
| | Shelter | Housing | Supportive | Sample |
| | % | % | Housing | % |
| | | | % | |
| Traumatic | 74 | 83 | 86 | (79) |
| Event | | | | |
| Multiple | 48 | 61 | 57 | (56) |
| Trauma | | | | |
| Events | | | | |
| Physical | 34 | 50 | 43 | 42 |
| Abuse— | | | | |
| Family | | | | |
| Member | | | | |
| Physical | 13 | 13 | 19 | 14 |
| Abuse | | | | |
| Stranger | | | | |
| Sexual | 34 | 46 | 60 | 42 |
| Abuse— | | | | |
| Family | | | | |
| Member | | | | |
| Sexual Abuse- | 9 | 18 | 7 | 12 |
| -Stranger | | | | |
| Homelessness | 21 | 27 | 22 | 22 |
| | | | | |
| Maternal | 32 | 35 | 31 | 33 |
| Substance | | | | |
| abuse | | | | |
| Paternal | 38 | 36 | 52 | 39 |
| Substance | | | | |
| Abuse | | | | |
| Foster Care | 20 | 26 | 31 | 24 |
| | | | | |

Appendix 4. Maternal Adverse Childhood Experiences

| | Emergency | Transitional | Permanent | Total |
|-----------------|-----------|--------------|------------|--------|
| | Shelter | Housing | Supportive | Sample |
| | | | Housing | |
| | % | % | % | % |
| Treatment | · | · · · | | |
| Inpatient | 12 | 21 | 49 | 21 |
| Mental Health | | | | |
| Hospitalization | | | | |
| Outpatient | 28 | 45 | 63 | 40 |
| Mental Health | | | | |
| Treatment | | | | |
| Mental Health | 24 | 40 | 63 | 36 |
| medication | | | | |
| evaluations | | | | |
| Mental Health | 6 | 5 | 20 | 8 |
| Day Treatment | | | | |
| Program | | | | |
| Mental Health | 4 | 3 | 18 | 5 |
| Intensive Case | | | | |
| Management | | | | |
| Disorders | 1 | 1 | I | |
| Depression | 52 | 62 | 83 | 60 |
| PTSD | 14 | 19 | 40 | 20 |
| | 10 | | | 15 |
| Bipolar | 12 | 18 | 33 | 17 |
| Anvioty | 23 | 27 | 37 | 26 |
| Аплісту | 23 | 27 | 51 | 20 |
| Phobia | 13 | 13 | 22 | 14 |
| Obsessive | 9 | 7 | 21 | 10 |
| Compulsive | | | | |
| Disorder | | | | |
| Psychotic | 6 | 3 | 5 | 5 |
| Disorders | | | | |

Appendix 5. Maternal Mental Health