

Children in Homeless Families: Risks to Mental Health and Development

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This study examined the psychological adjustment of 159 homeless children in comparison with a sample of 62 low-income children living at home. In each group, ages ranged from 8 to 17 years. As expected, homeless children were found to have greater recent stress exposure than housed poor children, as well as more disrupted schooling and friendships. Child behavior problems were above normative levels for homeless children, particularly for antisocial behavior. Across the 2 samples, however, behavior problems were more related to parental distress, cumulative risk status, and recent adversity than to housing status or income. Results suggest that homeless children share many of the risks and problems of other American children being reared in poverty.

In the past decade, there has been an alarming increase in the number of homeless families with children and, concomitantly, a growing concern about the welfare of children living under such precarious and marginal conditions (Institute of Medicine, 1988). In a status report from the U.S. Conference of Mayors (1989), it was estimated that 36% of all the nation's homeless were families, and well over half of those family members were children. Nationwide, it has been estimated that 100,000 children may be homeless with their parents on any given night (Institute of Medicine, 1988). Statewide surveys of shelter occupancy by the Minnesota Department of Jobs and Training (1991) have indicated that one third of the sheltered homeless are minors (ranging from 29% to 36% from May 1989 to February 1991).

Despite these concerns, little is known about the mental health and well-being of these children. Through 1990, most available data on homeless families consisted of demographic surveys, except for a small number of published studies of the physical health, education, and mental health of homeless children (Bassuk & Rosenberg, 1988, 1990; Bassuk & Rubin, 1987; Rafferty & Rollins, 1989; Wood, Valdez, Hayashi, & Shen, 1990; Wright, 1990). Even now, data on the psychological ad-

justment of homeless children are sparse (Molnar & Rubin, 1991; Rafferty & Shinn, 1991). In 1989, when the present study was initiated, there were only two published studies of mental health problems in children and mothers in homeless families, both conducted by Bassuk and her colleagues in Massachusetts. Their initial study included 82 homeless families with 156 children (Bassuk & Rubin, 1987; Bassuk, Rubin, & Lauriat, 1986). Behavior problems reported by parents for school-age children appeared to be elevated as did self-report symptoms of anxiety among the children. Only 50 of the children were of school age, including a small number of adolescents. Their second study, the first systematic attempt to compare homeless and housed poor families, included 86 homeless children and 134 housed children (Bassuk & Rosenberg, 1988, 1990). Again, the number of school-age children was small (21 children 6 to 11 years old and 10 adolescents). Homeless school-age children had somewhat higher scores than the housed poor children, but no significant differences were found in child- or parent-reported symptoms.

Methodologically sound studies of the mental health risks for homeless children are clearly needed to inform policymakers, mental health professionals, and educators who increasingly are confronted with helping these children. The goal of this study was to examine the psychological adjustment of homeless children aged 8 to 17 living in an emergency shelter in Minneapolis, Minnesota. We assumed that homelessness represents a financial crisis and, in many cases, occurs in the context of preexisting poverty. To determine whether any problems observed in homeless children exceeded the risks associated more generally with poverty and low socioeconomic status (National Center for Children in Poverty, 1990), we also studied a comparable group of children who were very poor but lived at home. We expected that a housed low-income sample would share many of the risks of a homeless group but also that there would be differences. Homeless children were expected to have experienced a higher level of *recent* stressful life events than that of poor children living in their own homes. Because mobility and shelter life may disrupt peer relationships, homeless children and adolescents were expected to report fewer best friends and less contact with friends than housed poor children and adolescents. We hypothesized that, because of greater adversity and fewer current resources, homeless children would have more

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behavioral and emotional problems than the housed poor children. However, both groups were expected to have high rates of risk factors associated with child problems, such as low parent education, a single parent, and exposure to family violence (Masten & Garmezy, 1985; Rutter, 1979; Sameroff & Seifer, 1990). Multiple risk status, which has been strongly related to mental health problems in children (Rutter, 1979; Sameroff & Seifer, 1990), was expected to be high in both samples. Therefore, both low-income samples were expected to have more problems than the general population, and multiplicity of risk was expected to predict child problems regardless of housing status.

We also expected age differences. Adolescents may be particularly sensitive to the adversities of shelter life, where they have little privacy, many rules, and little opportunity to be with friends. Older children also may be especially sensitive to the humiliations of homelessness. In the literature on disaster, older children and adolescents have been reported to have stronger reactions, perhaps because they have a greater appreciation of the magnitude and ramifications of a catastrophic situation (Masten, Best, & Garmezy, 1990). For these reasons, we hypothesized that among the homeless school-age sample, older children, especially teenagers, would show more problems and more negative self-perceptions. Sex differences and the interaction of sex and age were also considered because the literature on major stressors (such as divorce) and calamities has suggested that boys and girls may show different reactions (Masten et al., 1990). Following diverse stressors, externalizing symptoms have been reported more often among boys, whereas internalizing symptoms have been reported more often among girls.

Parents living in a shelter were expected to feel greater distress than the general population and other low-income parents, both because of their situation and because of the circumstances that led up to it. Also, the psychological functioning of parents may contribute to risk for housing instability. Poor parents with the security of a place to live were expected to be less distressed than homeless parents but more distressed than a normative sample. The distress level of parents was expected to be related to the behavioral and emotional problems of children as well as to the exposure of children to recent and chronic life events. The distress of mothers may be a critical mediator of the effects of poverty and homelessness for children, partly because of the effects of distress on parent behavior (McLoyd, 1990) and partly because school-age children are likely to be aware of and concerned about maternal distress.

Method

Subjects

Homeless sample. Families with 8- to 17-year-old children who resided in an emergency shelter in the summer of 1989 in Minneapolis were invited to participate in this study. Families were made aware of the study by signs, invitations, shelter staff, and a recruiting station near the drop-off center for children. Once a few families had participated, word of mouth appeared to attract many of the families. Families were individually recruited after they had resided in the shelter for at least 1 week. Newly arriving families who asked to participate were

requested to wait at least 2 days because the shelter staff had the impression, supported by our own observations, that some newly arriving families were quite distressed. We did not want to intrude on families immediately on their arrival. At the same time, we wanted to avoid self-selection bias for less distressed families.

Families are continuously moving in and out of the shelter, where they typically stay several weeks. To determine the success of recruitment after the study was completed, we tabulated the proportion of families and children who chose to participate for a 1-month sampling period in the middle of the summer. Eighty-two percent of the families and 84% of the children who had stayed a week or more participated. Most of the families who did not participate were not available or moved before they could participate. Of all families with children 8 to 17 years old who stayed in the shelter during this time, 62% of the families and 65% of the children participated. Thus, the sample was less representative of families who stayed only a few days, as one would expect from the recruitment procedures.

These families were representative not only of the sample at this particular shelter, but also of the shelter population of families with children in the Twin Cities. Comparisons of demographic data for this sample with results obtained in a metropolitan survey conducted in the same year suggested that this sample was similar to the survey respondents in many respects, including duration of homelessness, reasons reported for homelessness, family size, mother's education, family structure, proportion of minority mothers, and proportion receiving welfare benefits (Mueller & Friedrich, 1990).

The total sample included 167 children. However, 8 of the children who did not have valid parent data were excluded from the analyses. In most cases, the parent simply did not complete the forms. The final homeless sample included 93 parents and 159 children (83 under age 12 and 76 adolescents).

Most families had been homeless for less than 4 months: 76% of the parents reported that they had "no place to live" for less than a month, and another 19%, for 1 to 3 months. However, 9% reported that they had been homeless 1 year earlier, suggesting that some of the families had a history of unstable housing. Before living in the shelter, 48% of these families had lived in a place of their own (rather than in another shelter or by doubling up). An additional 39% had lived with friends or relatives. Very few had lived outside (3%), in a car (2%), or in a hallway (1%) before coming to the shelter. When asked the most important reason for coming to the shelter, 48% endorsed financial reasons related to housing, including the following: "could not find a place I could afford" (26%), eviction (11%), and fired or laid off from job (5%). Relationship problems, including battering (10%), were endorsed by 23% of the parents as the most important reason for coming to the shelter.

Low-income housed sample. We recruited the homeless sample first to ascertain their demographic characteristics, and then we recruited a very comparable sample of poor families who lived at home. A community with a high proportion of appropriate families was located, and families were recruited through food and recreational programs at the neighborhood community center. The housed sample included 53 families with 62 children (29 under age 12 and 33 adolescents). Although funds and personnel were not adequate to recruit a comparison sample as large as the homeless sample, families were recruited until a sufficient sample size was obtained to detect a mean difference of half a standard deviation between the two samples with probability greater than 90% (power analysis as suggested by Cohen, 1988).

Ten percent of the currently housed comparison sample reported that they had been homeless sometime during the target child's life. These families were not excluded from the housed sample because the goal was to match the samples as closely as possible except for *current* housing situation. The effects of including this subgroup of housed families was evaluated as part of the analyses.

Measures

Family status and background. Each parent in this study completed a questionnaire that included structured questions about family composition, parent education and employment history, housing history, reasons for coming to the shelter, use of social services, and the target child's education and several open-ended questions about family needs.

Stressful life events. Parents completed two questionnaires about life experiences that each target child had experienced. The Life Events Questionnaire (LEQ; Masten, Neemann, & Andenas, 1991) assesses recent stressors. The LEQ includes both discrete and chronic experiences, events that vary in desirability, and events that vary in whether the child can influence the events (controllability). Parents are asked to circle *yes* or *no* to indicate whether an event has occurred during the previous 12 months. For this report, only events that were not positive and out of the child's control (e.g., death of a parent, parent lost a job, and many arguments between adults living in the house) were included in the life events score. Both discrete and chronic negative events were included. A subsample of 22 parents completed this measure after 1 week. The test-retest correlation was .72 for this score.

Parents were also asked to indicate whether any of 10 major events had ever been experienced by the child. This list included changing schools, the death of siblings, and established risk factors such as abuse, foster care, and witnessing violence. Agreement (yes or no) over a 1-week interval ($n = 23$) varied from 43% to 100% for the 10 individual items, with a median agreement of 94%. Reports of divorce or separation and school changes were the least reliable over a 1-week interval in this high-stress situation. Reports of deaths, foster home placement, and being the victim of violence were more reliable, with agreement (yes or no both times) of 96% to 100%.

Child symptoms. Current behavior problems were assessed with the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983), which includes 118 symptoms rated by parents on a 3-point scale (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*). This instrument is widely used to assess child symptoms because of its strong psychometric properties and because it is one of the few available measures for children that has age and sex norms for nonclinical and clinical samples (Boyle & Jones, 1985; Sattler, 1990). New norms became available for this measure in 1991 (Achenbach, 1991) and were based on a representative national restandardization sample that was assessed in 1989, the same year data were collected in this study. This measure was scored on the basis of the new norms not only because they were contemporary but also because the new norms are superior to previous norms. The new normative sample was more representative, and the age range was extended from age 16 through age 18. Our two samples differed in ethnic composition from the national sample. However, in the restandardization studies, negligible differences were found for race, and separate norms are not provided by ethnicity in the manual. Scores were derived by means of the CBCL publisher's computerized scoring program, which provides raw and *T* scores for three global dimensions—Total Problems, Internalizing, and Externalizing—as well as eight syndrome scores for the age range in this study. The Externalizing global score comprises items from two syndrome scores, Delinquent Behavior and Aggressive Behavior. The global Internalizing score includes the items from the Withdrawn, Somatic Complaints, and Anxious/Depressed syndrome scores. There are three additional syndrome scores (Social Problems, Thought Problems, and Attention Problems) that are not included in either the Internalizing or Externalizing scores.

Parent symptoms. Parents completed the Symptom Checklist 90—Revised (SCL-90-R; DeRogatis, 1977), which is a widely used, 90-item self-report measure of symptoms that has shown good reliability and validity, particularly as a measure of current psychological distress

(DeRogatis, 1977; Payne, 1985). The Global Severity Index, the average of all item scores, was used in this study to index parents' distress; *T* scores were calculated according to the manual on the basis of nonclinical norms for boys and girls.

Child status and opinions. A structured questionnaire was developed for children to report their experiences and opinions in a variety of areas. This questionnaire included questions about school, friends, future expectations, and social support, as well as survey-type questions to assess the children's opinions of their city, country, living situation, school, and so forth. Children responded on a checklist to questions such as "Do you have a close friend you do things with?" and "How much have you been with your best friend in the last week?" They also responded to the question "Do you think you will live in a shelter for homeless people when you are an adult?" using three options: *no*, *maybe*, and *yes*.

Dysphoric mood. The Children's Depression Inventory (CDI; Kovacs, 1983) was used to assess current dysphoric mood. The 27-item CDI, a downward extension of the Beck Depression Inventory for adults, has shown good reliability and internal consistency for both clinical and nonclinical samples (Finch, Saylor, Edwards, & McIntosh, 1987; Kendall, Cantwell, & Kazdin, 1989; Kovacs, 1983, 1985). Studies have supported the validity of the CDI as a measure of depressive symptoms or dysphoric mood in both clinical and normative samples, although its sensitivity as a screen for the syndrome of depression in nonclinical samples has been questioned (the false negative rate may be high; Carey, Faulstich, Gresham, Ruggiero, & Enyart, 1987; Doerfler, Felner, Rowlison, Evans, & Raley, 1988; Kendall et al., 1989; Kovacs, 1983, 1985). It was selected for this study because it is widely used and therefore has expected values for the general population (Kendall et al., 1989). On the CDI, children endorse one of three descriptions that best applies to themselves during the previous 2 weeks (e.g., "I am sad once in a while," "I am sad many times," or "I am sad all the time"). One item concerning suicidal behavior was omitted, as often done in community surveys, with little effect on total scores. A score of 19 or higher on this measure approximates the top 10% in a normative population 8 to 14 years old and is widely used as the cutoff score for clinical significance (Kovacs, 1983, 1985). The alpha reliability in the present study for a sample of 208 children and adolescents was .80.

Self-perceptions. Children rated their own competence on scales drawn from the Self-Perception Profile for Children (Harter, 1982, 1985), including scales to measure perceived academic competence, social acceptance, athletic competence, appearance, and global self-worth. These scales developed by Harter have shown good internal consistency and reliability (Harter, 1982, 1985). Harter (1985) has reported internal consistencies in the range of .75 to .85 for these five scales among four samples of third- to eighth-grade middle-class children (90% White). In the present study, internal consistencies (alpha) were lower than usually reported for middle-class, primarily nonminority samples. Alphas were as follows ($N = 213$ children and adolescents): .47 for academic competence, .40 for social competence, .35 for athletic competence, .53 for appearance, and .44 for self-worth. For a subsample of 13 homeless adolescents, 1-week test-retest reliabilities were also obtained, with the following results: .75 for academic, .76 for social, .45 for athletic, .70 for appearance, and .58 for self-worth. Given the weaker reliability of this measure with this sample, results should be interpreted with caution.

Procedure

After the study was explained to parents, permission was obtained to invite children to participate. The survey was administered individually or in small groups of children, teens, and parents. All participants

were given the option of having the survey read aloud so that those who could not read (children and adults) could participate without embarrassment.

Adults were paid a \$10 honorarium for their time in completing the family survey. Teens at the shelter received \$5 plus an artist's sketch of themselves, and teens in the comparison group received a \$10 gift certificate. Children 8 to 12 years old received a \$5 gift, and those at the shelter also received a sketch for their participation.

Results

Demographic Comparisons

Demographic characteristics of the participating families are shown in Table 1. The two samples were very similar. The only significant difference between the samples on these demographic characteristics was for income. Although the average income was very low in both samples—well below the 1989 federal poverty level for a family with three children—homeless families reported a lower income for the past month, $t(139) = 4.99, p < .001$. It may not be possible to completely match a homeless sample with a housed sample on income, because some homeless families have *no* income. Because of the income difference between the two samples, income was statistically controlled in subsequent analyses.

Stressful Life Events

Parents of homeless children reported that their children had experienced substantially more negative life events (counting only stressors out of the child's control) during the previous year. Homeless children were exposed to almost twice as many stressors: 4.81 events on average, compared with 2.60, $t(213) = 5.08, p < .001$. Both discrete and chronic stressors were significantly higher in the homeless sample. Current income was not significantly related to the negative life events score in either

Table 1
Demographic Data for Comparing Homeless and Housed Poor Families

Demographic	Homeless	Housed poor
No. of families	93	53
Minority status	86%	93%
Average income	\$424	\$651
No. of child participants	159	62
Average age (years)	11.58	11.89
Boys	49%	58%
Girls	51%	42%
Minority status	94%	97%
African American	81%	89%
No. of mothers	73	46
Mother-headed household	67%	67%
Average age of mother (years)	32	35
Married/living with husband	17%	7%
High school education	58%	57%
Receiving AFDC support	60%	76%
Average number of children	3.3	3.5

Note. AFDC = Aid to Families with Dependent Children.

Table 2
Percentages of Homeless and Housed Poor Children Who Experienced Specific Major Lifetime Events

Event	Homeless (<i>n</i> = 159)	Housed poor (<i>n</i> = 62)
Death of a parent	8	11
Death of a sibling	10	10
Parents divorced or permanently separated	29	21
Lived in a foster home	7	3
Hospitalized	12	8
Victim of physical abuse	4	3
Saw violence	28	21
Changed schools	64	40

sample, (overall $r = -.09, p = .18$), and controlling statistically for income had a negligible effect on the difference in life events between the two samples.

Rates of major lifetime events were also compared (see Table 2). These rates were similar for the two groups, both overall and for most of the specific items. The only significant difference found was for the event of changing schools, which was endorsed significantly more often for homeless children, $\chi^2(1, N = 221) = 8.87, p < .01$.

Child Behavior Problems

To test the hypothesis that the people in these low-income samples would have more problems than the general population, we compared individual scores on the CBCL with those of the normative sample in the manual (Achenbach, 1991). Means for the Total Problem, Internalizing, and Externalizing scores are presented by age, sex, and housing status in Table 3. Homeless and housed sample means were compared with the normative sample means provided in the manual (Achenbach, 1991, Table 3-4, pp. 52-54) using two-sample *t* tests. Multiple tests were required because the CBCL is normed within age and sex groups. Significant differences are footnoted in Table 3. In the homeless sample, Externalizing scores were significantly higher than normative for all groups. Total Problem and Internalizing scores were also high for younger girls (ages 8-11). In the housed poor sample, scores were elevated above normative levels for female adolescents, both for Total Problem and Externalizing scores.

The proportion of children falling in the clinical range (defined as *T* scores of 60 or higher for each of the three global scores) is also indicated in Table 3. The number of children with Total Problem scores in the clinical range was 200% higher than the expected value of 18%, a significant difference, $\chi^2(1, N = 147) = 34.96, p < .001$. The proportion of housed poor children in the clinical range was about 50% higher than expected, which was not a significant difference, $\chi^2(1, N = 54) = 2.30, p = .13$. Proportions in the clinical range for Externalizing scores were higher than expected values for both the homeless and housed samples: For homeless, $\chi^2(1, N = 147) = 52.54, p < .001$; for housed, $\chi^2(1, N = 54) = 6.1, p < .05$. For the

Table 3
Child Behavior Checklist (CBCL): Mean Scores and Proportion of Scores in the Clinical Range (T = 60 or Higher)

Subject group and score	Homeless		Housed poor	
	M	SD	M	SD
Total Problems score	54.9	12.3	52.1	12.3
Ages 8-11				
Boys	53.8	11.4	52.4	15.4
Girls	56.3**	11.8	52.0	17.1
Ages 12-17				
Boys	55.4*	13.3	48.5	11.5
Girls	54.0	12.9	55.2**	7.7
Proportion in clinical range	37%		26%	
Internalizing score	52.2	11.0	49.4	10.8
Ages 8-11				
Boys	51.1	10.5	52.5	14.0
Girls	54.5*	10.8	49.8	9.6
Ages 12-17				
Boys	51.4	11.5	44.9*	10.3
Girls	52.0	11.4	50.8	7.2
Proportion in clinical range	27%		17%	
Externalizing score	56.0	12.0	53.4	11.7
Ages 8-11				
Boys	55.5**	11.9	51.7	15.2
Girls	56.4**	11.7	54.0	14.6
Ages 12-17				
Boys	56.9***	12.5	51.7	10.5
Girls	55.0*	12.5	56.5**	8.1
Proportion in clinical range	40%		30%	

Note. Footnotes indicate that the mean value is significantly different from the normative value provided in the CBCL manual (Achenbach, 1991, Table 3-4) for the particular age and sex group.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Internalizing score, only the homeless sample had a higher proportion in the clinical range, $\chi^2(1, N = 147) = 7.25, p < .01$.

The proportion of children falling in the clinical range ($T = 67$ or higher) on the syndrome scores of the CBCL are indicated in Table 4. For the homeless sample, chi-square tests were conducted to test obtained values against expected proportions based on the normative sample (Achenbach, 1991, Table 6-4, p. 102). Significantly higher proportions of homeless children scored in the clinical range for both subscales of the Externalizing score and for one of the three subscales of the Internalizing domain (Withdrawn). Frequencies of children with scores in the clinical range were also elevated for all three additional subscales, including Attention Problems, the syndrome subscale that best differentiated clinical referrals from nonclinical controls in the restandardization studies (Achenbach, 1991). Although expected cell frequencies were too small in the housed sample for statistical comparisons with the normative sample, some of these values also appeared to be high, most notably the Delinquent Behavior, Aggressive Behavior, and the Social Problems syndromes.

In a test of the hypothesis that homeless children would have more problems than housed poor children, CBCL T scores were regressed on sex, age, housing status, and their interactions. Income was statistically controlled before housing status was entered. Variables were entered hierarchically: Step 1, sex;

Step 2, age; Step 3, income; Step 4, housing status; Steps 5 through 7, two-way interactions of Sex \times Housing Status, Age \times Housing Status, and Sex \times Age; and Step 8, the three-way interaction of Sex \times Age \times Housing Status. Hierarchical regression maximized the power of the analysis by using the full discrimination of all the continuous variables (such as age) while incorporating true dichotomies (sex and housing status) by means of dummy coding. Results showed only one small effect. The interaction of sex, age, and housing status was significant for Internalizing scores, (R^2 increment at Step 8 = .02, $p < .05$). As suggested by the means in Table 3, younger homeless girls had higher scores and older housed boys had lower scores than their counterparts.

As noted in the Method section, six of the comparison families (10%) had been homeless sometime during the target child's life. If homelessness has lasting effects or if it represents a marker of greater general risk and disadvantage, then this subgroup might score worse than other housed poor families on parent or child measures of symptoms. The mean Total Problem score for the previously homeless subgroup was 57.00 ($SD = 11.9$), compared with 51.66 ($SD = 12.83$) for the rest of the housed group. If these 6 children were deleted from the regression analyses described earlier, the test for an overall difference in symptoms between the two samples (controlling for sex, age, and income) would be significant for externalizing symptoms (R^2 increment at Step 4 = .02, $p < .05$). Otherwise, results would be very similar.

The proportion of children scoring in the clinical range for all global and syndrome scores were also compared across the two study samples. Chi-square tests indicated no significant differences between the two samples in the relative proportion of children in the clinical range on any of these scores.

Mean scores on the CDI were 9.45 ($SD = 6.6$) for the home-

Table 4
Percentages of Scores in the Clinical Range (T = 67 and higher) for Syndrome Subscales of the Child Behavior Checklist (CBCL)

Subscale	Normative nonreferred ($n = 2,110$)	Homeless ($N = 147$)	Housed ($N = 54$)
Externalizing			
Delinquent Behavior	6	27.2**	20.4
Aggressive Behavior	5	19.0**	13.0
Internalizing			
Withdrawn	5	8.8*	7.4
Somatic Complaints	6	8.8	9.3
Anxious/Depressed	5	8.2	9.3
Additional			
Social Problems	5	12.2**	13.0
Thought Problems	4	14.3**	7.4
Attention Problems	5	14.3**	7.4

Note. The three additional subscales were not included in the global Internalizing or Externalizing scores. For the homeless group, obtained frequencies were compared with the rates for the normative sample provided in Table 6-4 of the CBCL manual (Achenbach, 1991). For the housed group, small expected cell frequencies precluded computation of chi-square values.
 * $p < .05$. ** $p < .001$.

less children and 8.13 ($SD = 5.5$) for the housed sample. Proportions in the clinical range for this instrument (scores above 18, the 90th percentile) did not significantly exceed expected values (10%) for either sample (12% for the homeless and 5% for the housed). Regression of CDI scores on the eight predictors described earlier (sex, age, income, housing status, and interactions) yielded no significant effects.

Child Competence, Friends, and Self-Perception

We conducted hierarchical regression analyses to test for hypothesized differences in self-perception scores, using the same eight-step procedure followed for CBCL and CDI criteria. No main effects for housing status (Step 3) were found, indicating little overall difference in the two groups. However, the interactions of Age \times Status were significant for self-worth (R^2 increment at Step 6 = .02, $p < .05$) and perceived academic competence, (R^2 increment at Step 6 = .02, $p < .05$). There was also a significant interaction of Sex \times Status for academic competence, (R^2 increment at Step 5 = .03, $p < .01$). For self-worth and perceived academic competence, the hypothesized difference was found: Among homeless children, self-worth and academic confidence declined with age and were lowest among homeless adolescents. The pattern for boys and girls was very similar among the homeless children. Among the housed poor sample, in contrast, sex and age differences were apparent: Girls had much higher levels of self-rated academic competence than boys. Housed boys of all ages evaluated their academic competence at low levels, similar to homeless adolescents.

Participants were asked if they expected to live in a shelter as an adult. Significantly more homeless, compared with housed, children (30% versus 10%) responded *maybe* or *yes*, $\chi^2(1, N = 220) = 8.33, p < .01$.

As expected, significantly fewer homeless children than housed children reported having a close friend: 75% versus 93%, $\chi^2(1, N = 220) = 8.41, p < .01$. Homeless children also reported spending significantly less time with friends over the previous week, $\chi^2(3, N = 211) = 16.64, p < .001$: Twice as many homeless children (48%) had spent *no* time with friends over the previous week.

Parent-Guardian Symptoms

Mothers' reports of psychological distress on the SCL-90-R were compared first, including 66 homeless mothers and 42 housed mothers with valid data and excluding fathers and guardians. The average T score for homeless mothers was 56.2 ($SD = 11.5$), and for housed mothers it was 53.6 ($SD = 11.7$), which was not a significant difference, with or without income controlled.

Both groups of mothers had significantly more than the expected 10% of scores in the clinical range (T score ≥ 63): For 36% of homeless mothers, $\chi^2(1, N = 66) = 50.97, p < .001$, and for 24% of housed mothers, $\chi^2(1, N = 42) = 8.90, p < .001$. SCL-90-R scores were also elevated for other homeless parents or guardians (nonmothers) as well: Of 16 homeless nonmothers, 5 (31%) had scores above the cutoff. None of the 5 comparison nonmothers had scores above the cutoff.

For the 6 parents in the housed sample who had been homeless in the past, the mean SCL-90-R score was 58.00 ($SD = 10.0$). For the 42 parents with valid scores who had not experienced homelessness during the target child's life, the mean was 52.40 ($SD = 12.0$).

Cumulative Risk

Multiple-risk status was expected to be high in both study samples and to correlate with behavior problems in children. To examine the level and role of multiple-risk status, we created a composite risk variable. Not including income and housing status, seven major risk factors were available that have been strongly implicated as potential markers of risk for psychological problems in children (Masten & Garmezy, 1985; Rolf, Masten, Cicchetti, Nuechterlein, & Weintraub, 1990; Rutter, 1979): (a) Parent does not have a high school degree (or equivalent); (b) child currently has only one parent in the household; (c) child has experienced the divorce or permanent separation of parents; (d) a parent has died; (e) child has been in foster care; (f) child has experienced abuse; and (g) child has witnessed violence. Each was scored 1 for present and 0 for absent. A risk variable was created by summing across these seven risk factors. The mean score on the risk composite was 1.63 ($SD = 1.28$, range = 0–5) for the homeless sample and 1.83 ($SD = 1.0$, range = 0–5) for the housed sample, which was not a significant difference, $t(141.7) = 1.26, p = .21$. High proportions of both samples had two or more of these risk factors: 48% for homeless and 63% for housed children.

Child Problems Related to Parent Symptoms, Cumulative Risk, and Life Events

We hypothesized that child problems would be related to parent symptoms, life events, and multiple-risk status. To test these hypotheses, we performed a set of hierarchical regressions. The three global CBCL scores were regressed on the following: Step 1, sex; Step 2, age; Step 3, SCL-90-R score of parent; Step 4, risk score; Step 5, income; Step 6, life events; and Step 7, housing status. Parental distress was entered before risk or income to control for possible response sets related to parent distress. Multiple risk preceded life events to test whether recent life adversities would still have a significant relation to child problems even after controlling for parental distress, multiple-risk status, and income. Housing status was included as a predictor in the event that differences in parental distress or life events were obscuring the role of housing status as an additional risk factor. Results are presented in Table 5.

The distress of parents was strongly related to their reports of child symptoms for all three criteria. However, even when the variance accounted for by parental distress was controlled, the cumulative risk variable was related to child problems (see Table 5). Moreover, recent life events made a significant contribution to the variance in child problems even after the variance accounted for by both parent symptoms and risk was controlled. Income and housing status did not contribute to the prediction of child problems entered in Steps 4 and 6 or at any other point in the analysis.

Table 5
Hierarchical Regression of Child Behavior Checklist (CBCL) Scores on Parent Distress and Risk Factors

Step and total R^2	Total Problems		Internalizing		Externalizing	
	R^2 increment	F^a	R^2 increment	F^a	R^2 increment	F^a
1. Sex	.00	0.46	.01	2.02	.00	0.04
2. Age	.01	1.25	.02	2.91	.00	0.08
3. Parent distress	.17	40.02***	.17	40.26***	.16	35.25***
4. Risk	.06	14.05***	.03	7.43**	.07	17.12***
5. Income	.00	0.00	.01	1.69	.01	1.70
6. Life events	.02	5.04*	.03	6.80**	.02	4.73*
7. Housing status	.00	0.46	.00	0.00	.01	1.56
Total R^2	.26	9.34***	.26	9.34***	.26	9.30***

Note. $N = 191$.

^a F test on the increment in R^2 ; $dfs = 1, 189$, at Step 1 and progressing to 7, 183, at Step 7 and for the overall F test.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Because a large proportion of these two samples were African American, this risk analysis was also conducted within this more homogeneous minority group ($N = 164$). Results were very similar. For Total Problem and Externalizing scores, parental distress, risk, and life events were all significant predictors. For Internalizing scores, parent distress and life events were also significant, but the risk variable was not significant at Step 4, ($R^2 = .01$, $p = .15$). For Internalizing scores among these African-American children, sex was also a significant predictor: African-American girls had higher scores than boys ($R^2 = .03$, $p < .05$). Income and housing status were not significant predictors for any criterion.

Discussion

Results suggest that homeless children have greater stress exposure and fewer resources than low-income children of similar background whose families have housing. Even among very poor families, homelessness appears to be associated with lower income and more recent adversity. Homelessness in children was also associated with disrupted friendships and more school changes.

As we hypothesized, child behavior problems were significantly higher in the homeless sample than in the normative sample for the CBCL, particularly in the domain of antisocial behavior. Moreover, high proportions of homeless children and adolescents fell in the clinical range for global behavior problems and syndrome dimensions on this measure. Among housed poor children, female adolescents had high scores for overall problems and for externalizing problems in particular. High proportions of housed poor children and adolescents fell in the clinical range for antisocial problems and for several syndrome scores, suggesting social problems as well as externalizing problems.

Comparing homeless with housed poor children indicated few significant differences in behavior problems. Instead, the pattern of scores suggested an underlying continuum of risk, with homeless children at greater risk. The primary predictors of child behavior problems in this study were parental distress,

cumulative risk history, and recent life events, rather than housing status. All three of these variables could be considered risk indicators. They also were based on reports from parents, raising the possibility of a response bias related to parental distress. However, even with parental distress controlled, risk and life events predicted child problems.

The finding that CBCL scores covaried with risk and life events among these poor, primarily minority, children suggests that the differences found between homeless and normative samples on the CBCL were related to differences in adversity and disadvantage rather than to differences in ethnic composition between the normative sample and the children participating in this study. This interpretation would be consistent with Achenbach's (1991) finding that ethnicity made little difference in CBCL scores, although some differences were observed for socioeconomic status.

Results for the CBCL are congruent with two recent studies of homeless school-age children. Both found higher but not significantly higher scores on the CBCL in homeless children, compared with low-income control groups and high rates of homeless children in the clinical range (Bassuk & Rosenberg, 1990; Rescorla, Parker, & Stolley, 1991).

Scores on the CDI did not differ significantly by sex, age, housing status, or life events. Means and standard deviations found for this measure were similar to values reported in community samples (Finch, Saylor, & Edwards, 1985; Kovacs, 1983; Smucker, Craighead, Craighead, & Green, 1986). Similar results have been reported in other studies of homeless and housed poor school-age children (Molnar & Rubin, 1991). These findings suggest that either this measure is not sensitive to variations in dysphoric mood in these samples or that dysphoric mood is not a salient problem among these low-income children. Interestingly, scores on the Anxious/Depressed syndrome subscale of the CBCL also were not significantly elevated.

Adolescents were expected to have more problems and more negative self-perceptions than younger homeless children. This hypothesis was only partly supported. Homeless adolescents did report lower self-worth and more negative perceived aca-

ademic competence. However, parents reported high levels of externalizing problems for younger as well as older homeless children and more internalizing problems among younger girls. Among homeless children, younger girls appeared to have the most overall behavioral and emotional problems. In the housed sample, female adolescents appeared to have the most problems, at least from the parent's perspective.

This study had several limitations. First, it was a cross-sectional investigation, and processes that may account for the development of problems in parents or children or the linkages found among adversity, parent problems, and child problems could not be examined. Prospective studies are needed to begin to tease apart how parent behavior or illness, life events, and housing instability influence each other and how, in turn, child and parent behavior may influence each other. Furthermore, child and parent problems may be linked by common underlying genetic vulnerabilities. Sorting out the possible role of genetic and environmental influences would require twin or adoption studies.

Second, measures were limited to questionnaires, which are expeditious for initial studies of an area but inherently limited. Structured interviews of parents and children would provide better diagnostic information as well as the additional perspective of clinical judgments. Tests of academic achievement and intellectual functioning would add an important domain of functioning that was unavailable in this study.

Third, this study was limited by the lack of measures specifically validated and standardized for minority or low-income children. These low-income children, for example, appeared to have difficulty completing the Self-Perception Profile measure, even with assistance. Their difficulties may account for the low internal consistencies of the scales in this study. This measure may not be suitable for use with psychosocially disadvantaged children or children experiencing severe stress. Similarly, the CDI may not be a valid indicator of negative mood for disadvantaged or minority children, although, in this case, the internal consistency was satisfactory. The CBCL, on the other hand, appeared to be effective, although ideally it would be preferable to have norms for specific minority groups. Until more normative data on the mental health and development of minority children and more suitable measures are available for disadvantaged children, it would be highly informative to add a second control group to studies such as this one, matched for ethnicity but diverse in socioeconomic status. Normative comparisons add an important dimension to the evaluation of risk as well as intervention effectiveness (Kendall & Grove, 1988).

Finally, the homeless sample in this study had been homeless for a relatively short time, compared with some of the homeless families in cities such as New York or Los Angeles. Chronic homelessness may take a greater toll on children. It is also possible that parental mental health and multiple-risk status are related to chronic homelessness. Systematic investigations are needed of chronic and short-term homelessness in relation to the mental health of parents and children. Such studies could provide important data for improving mental health services for families at risk for homelessness.

Homelessness is a marker of adversity and poverty, but results of this study suggest that it is important to move beyond hous-

ing status to understand the problems of homeless children. Homeless children are at considerable risk for psychological problems, but so are millions of other American children living in poverty, often one step away from homelessness, who share many of the same risk factors (Children's Defense Fund, 1990; National Center for Children in Poverty, 1990). Crisis interventions and programs to provide some stability in the lives of homeless children might reduce the distress of parents and children alike. Policies to facilitate the school stability of homeless and other mobile children might provide beneficial continuity. However, programs to prevent homelessness and to ameliorate the underlying risks associated with child problems may have the greatest benefit to the distressed families in this study as well as many other American children.

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Bassuk, E., & Rubin, L. (1987). Homeless children: A neglected population. *American Journal of Orthopsychiatry*, 57, 279-286.
- Bassuk, E. L., & Rosenberg, L. (1988). Why does family homelessness occur? A case-control study. *American Journal of Public Health*, 78, 783-788.
- Bassuk, E. L., & Rosenberg, L. (1990). Psychosocial characteristics of homeless children and children with homes. *Pediatrics*, 85, 257-261.
- Bassuk, E. L., Rubin, L., & Lauriat, A. S. (1986). Characteristics of sheltered homeless families. *American Journal of Public Health*, 76, 1097-1101.
- Boyle, M. H., & Jones, S. C. (1985). Selecting measures of emotional and behavioral disorders of childhood for use in general populations. *Journal of Child Psychology and Psychiatry*, 26, 137-159.
- Carey, M. P., Faulstich, M. E., Gresham, G. M., Ruggiero, L., & Enyart, P. (1987). Children's Depression Inventory: Construct and discriminant validity across clinical and nonreferred (control) populations. *Journal of Consulting and Clinical Psychology*, 55, 755-761.
- Children's Defense Fund. (1990). *S.O.S. America! A children's defense budget*. Washington, DC: Author.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- DeRogatis, L. R. (1977). *SCL-90-R administration, scoring and procedures: Manual I*. Baltimore: Clinical Psychometric Research.
- Doerfler, L. A., Felner, R. D., Rowlison, R. T., Evans, E., & Raley, P. A. (1988). Depression in children and adolescents: A comparative analysis of the utility and construct validity of two assessment measures. *Journal of Consulting and Clinical Psychology*, 56, 769-772.
- Finch, A. J., Jr., Saylor, C. F., & Edwards, G. L. (1985). Children's Depression Inventory: Sex and grade norms for normal children. *Journal of Consulting and Clinical Psychology*, 53, 424-425.
- Finch, A. J., Jr., Saylor, C. F., Edwards, G. L., & McIntosh, J. A. (1987). Children's Depression Inventory: Reliability over repeated administrations. *Journal of Clinical Child Psychology*, 16, 339-341.
- Harter, S. (1982). The Perceived Competence Scale for Children. *Child Development*, 53, 87-97.
- Harter, S. (1985). *Manual: Self-Perception Profile for Children*. Unpublished manuscript, University of Denver, Denver, CO.
- Institute of Medicine, National Academy of Sciences. (1988). *Home-*

- lessness, health, and human needs. Washington, DC: National Academy Press.
- Kendall, P. C., Cantwell, D. P., & Kazdin, A. E. (1989). Depression in children and adolescents: Assessment issues and recommendations. *Cognitive Therapy and Research, 13*, 109–146.
- Kendall, P. C., & Grove, W. M. (1988). Normative comparisons in therapy outcome. *Behavioral Assessment, 10*, 147–158.
- Kovacs, M. (1983). *The Children's Depression Inventory: A self-rated depression scale for school-aged youngsters*. Unpublished manuscript, University of Pittsburgh School of Medicine, Pittsburgh, PA.
- Kovacs, M. (1985). The Children's Depression Inventory (CDI). *Psychopharmacology Bulletin, 21*, 995–999.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*, 425–444.
- Masten, A. S., & Garmezy, N. (1985). Risk, vulnerability, and protective factors in developmental psychopathology. In B. B. Lahey & A. E. Kazdin (Eds.), *Advances in clinical child psychology* (Vol. 8, pp. 1–52). New York: Plenum Press.
- Masten, A. S., Neemann, J., & Andenas, S. (1991). *Life events and adjustment in adolescents: A study of confounded measures and mediating processes*. Unpublished manuscript.
- McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioeconomic development. *Child Development, 61*, 311–346.
- Minnesota Department of Jobs and Training. (1991, May 10). *Shelter survey data*.
- Molnar, J., & Rubin, D. H. (1991). *The impact of homelessness on children: Review of prior studies and implications for future research*. Unpublished manuscript.
- Mueller, D., & Friedrich, J. (1990). Homeless families in the Twin Cities: Profile from two studies. *WRC Report: Issues in Human Services Research and Policy, 1*, 7–9.
- National Center for Children in Poverty. (1990). *Five million children: A statistical profile of our poorest young citizens*. New York: Columbia University, Author.
- Payne, R. W. (1985). Review of the SCL-90-R. In J. Mitchell, Jr. (Ed.), *Mental measurements yearbook* (pp. 1325–1326). Lincoln: Buros Institute of Mental Measurements, University of Nebraska.
- Rafferty, Y., & Rollins, N. (1989). *Learning in limbo: The educational deprivation of homeless children*. Long Island City, NY: Advocates for Children of New York, Inc.
- Rafferty, Y., & Shinn, M. (1991). The impact of homelessness on children. *American Psychologist, 46*, 1170–1179.
- Rescorla, L., Parker, R., & Stolley, P. (1991). Ability, achievement, and adjustment in homeless children. *American Journal of Orthopsychiatry, 61*, 210–220.
- Rolf, J., Masten, A. S., Cicchetti, D., Nuechterlein, K., & Weintraub, S. (Eds.). (1990). *Risk and protective factors in the development of psychopathology*. New York: Cambridge University Press.
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention of psychopathology: Volume III: Social competence in children* (pp. 49–74). Hanover, NH: University Press of New England.
- Sameroff, A. J., & Seifer, R. (1990). Early contributors to developmental risk. In J. Rolf, A. S. Masten, D. Cicchetti, K. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology*. (pp. 52–66). New York: Cambridge University Press.
- Sattler, J. M. (1990). *Assessment of children* (3rd ed.). San Diego, CA: Sattler.
- Smucker, M. R., Craighead, W. E., Craighead, L. W., & Green, B. J. (1986). Normative and reliability data for the Children's Depression Inventory. *Journal of Abnormal Child Psychology, 14*, 25–39.
- U.S. Conference of Mayors. (1989). *A status report on hunger and homelessness in America's cities: A 27-city survey*. Washington, DC: Author.
- Wood, D. L., Valdez, R. B., Hayashi, T., & Shen, A. (1990). Health of homeless children and housed, poor children. *Pediatrics, 86*, 858–866.
- Wright, J. D. (1990). Homelessness is not healthy for children and other living things. In N. A. Boxhill (Ed.), *Homeless children: The watchers and the waiters*. New York: Haworth Press.

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