A Longitudinal Population-Based Study of Factors in Adolescence Predicting Homelessness in Young Adulthood

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Abstract

Purpose: Almost everything known about risk factors for homelessness is based on cross-sectional studies of non-random samples. Furthermore, most studies have focused on a small number of risk factors and have not evaluated their relative importance. Our aim was to examine which factors, in a population-based sample of adolescents, independently predict homelessness in young adults.

Methods: Participants (n = 10,433) in the US National Longitudinal Study of Adolescent Health (Add Health) were initially selected through systematic random sampling of US high schools. Interviews were conducted at home in 1994–1995 when the participants were 11–18 years of age and again in 2001 when participants were 18–28 years of age. We examined the relationships between a range of risk factors reported in adolescence (mood-related problems, substance involvement, delinquency, personality, quality of family relations, neighborhood quality, school adjustment, religious affiliation, perpetration of violence, and experiences of victimization) and experiences of homelessness reported in young adulthood, using regression analysis.

Results: Each risk factor predicted homelessness. However, only family relationship quality (odds ratio [OR] = .79, 95% confidence interval [CI] = .69–.90), school adjustment problems (OR = 1.57, 95% CI = 1.35–1.82), and experiences of victimization (OR = 1.27, 95% CI = 1.11–1.45) were found to independently predict homelessness.

Conclusions: Among a range of well-established risk factors, a troubled family background, school adjustment problems and experiences of victimization were found to be the strongest predictors of homelessness in a general population of young people. Our findings suggest possibilities for the early identification of young persons at risk for homelessness through schools, agencies offering family-based support, and clinical services. © 2009 Society for Adolescent Medicine. All rights reserved.

Keywords: Homeless; Population-based; Longitudinal; Adolescence; Young adulthood; Family; Victimization; School adjustment; Substance use; USA

One of the most pressing social problems facing the United States today is the high rate of homelessness. The homeless represent a most excluded group in society struggling with problems in many areas, including poverty, social isolation, psychiatric illness, and substance problems. Of adult Americans, 7.4% (13.5 million persons) may have experienced homelessness at some point during their lives [1]. The problem is, however, of worldwide importance.

Understanding which individuals are at increased risk of homelessness is crucial for the development of effective service delivery programs. Because of the hidden and mobile nature of homelessness, the study of truly representative
samples of homeless individuals poses challenges that have, so far, not been overcome. Studies into the causes of homelessness have focused almost exclusively on non-random samples recruited through service settings, generally homeless shelters but also clinics, prisons, or the streets.

These results indicate that homeless persons have frequently experienced family backgrounds characterized by conflict, lack of care, abuse, and low emphasis on moral/religious issues as well as experiences of violent victimization, neighborhood adversity, school adjustment problems, and school failure [2–7].

The prevalence rates of mental health problems, substance abuse problems, and antisocial and offending behavior are considerably higher among homeless persons than among the general population [8–10]. The prevalence of substance use disorder, internalizing symptomatology, and suicide attempts may be particularly high among homeless youngsters, who also frequently report feelings of uselessness and lack of self-respect [11–13].

These findings provide important insights; however, it is unclear to what extent the findings apply to risk of homelessness for young people in the general population. Sample characteristics based on studies in homeless shelters, for example, are likely to be influenced by the geographical region (e.g., socio-economic and political differences), service provider (e.g., exclusion criteria enforced in shelters), and the overrepresentation of longer-term and recurrent homeless individuals [14,15]. Further understanding of the causes of homelessness rests in part on population-based studies.

Although the causal pathways of homelessness are poorly understood, long-term effects of past events are likely to contribute to the problems that homeless people face [16]. With few exceptions, research in homeless populations has been based on cross-sectional studies, precluding establishment of the temporal relationships between risk factors and homelessness [15]. Longitudinal studies in which risk factors have been established before the onset of homelessness can provide important insights into the pathways into homelessness. Because these pathways can be expected to be complex, it has been argued that studies are needed that estimate the magnitude of a range of well-established risk factors, taking their interrelations into account [16].

The current study explores the relationships between risk factors assessed in a large sample of non-homeless adolescents with experiences of homelessness reported 6 years later in young adulthood. Risk factors were selected a priori based on previous studies of homelessness in non-random samples. Specific aims were as follows: (1) to assess to what extent a range of well-established risk factors are replicated in a nationally representative sample when a longitudinal design is used; and (2) to evaluate the relative importance of individual risk factors by taking their interrelations into account. To our knowledge this represents the first population-based longitudinal study of risk factors for homelessness.

Methods

Participants

The National Longitudinal Study of Adolescent Health (Add Health) represents the largest, most comprehensive survey of adolescents ever undertaken, aimed at exploring the causes of health-related behavior of adolescents and outcomes in young adulthood. Respondents were first recruited in 1994–1995 (Time 1), when they were 11–18 years of age. The primary sampling frame for the Add Health study included all high schools in the United States with an 11th grade and at least 30 enrollees. From this, a systematic random sample of high schools was selected. A clustered sampling design was used to ensure that the sample was representative of US high schools with regard to region, urbansicity, school type and size, and ethnicity. Overall, 79% of schools (134 schools) contacted agreed to participate. Among students, a random sample was selected to take part in in-home interviews. Eligibility at this stage was based on whether respondents attended a US school and were listed on 7th through 12th grade enrollment rosters.

Respondents were re-contacted 6 years later (Time 2, 2001, age 18–28 years). Every effort was made to re-interview respondents, including young persons residing in correctional facilities. Of those re-contacted, 15,170 completed an interview (response rate, 76%). The study design has been described in detail elsewhere (http://www.cpc.unc.edu/projects/addhealth and [17]).

The present study is based on participants who completed the Time 1 assessment, excluding non-randomly selected subsamples, duplicates, and individuals who were living in a group home or shelter at Time 1 or had no data on homeless status at Time 2.

All informed consent forms, questionnaires and procedures used in Add Health were reviewed and approved by the University of North Carolina at Chapel Hill Institutional Review Board for the Protection of Human Subjects, at the School of Public Health.

Data collection

At Time 1, data were gathered by computer-assisted interview. For less sensitive topics, questions were read aloud and the respondent’s answers entered into laptop computers. For more sensitive topics, audio computer-assisted self-interviewing was used to maximize response confidentiality and to minimize possible underreporting of high-risk behavior. Interviews took 1–2 hours and were administered in the presence of trained assistants who could provide assistance with the non-sensitive parts of the questionnaire if requested. At Time 2, an interviewer administered in-home interview was conducted, in which sections containing sensitive questions were self-administered.
Table 1
Means and standard deviations for the risk factors and their associations with homelessness

<table>
<thead>
<tr>
<th>Risk factors in adolescence (Time 1)</th>
<th>Ever Homeless (N = 428)*</th>
<th>Never Homeless (N = 10,005)*</th>
<th>Associations with homelessness16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatic symptoms2</td>
<td>18.40 (9.32)</td>
<td>14.92 (7.65)</td>
<td>1.58 (1.43)</td>
</tr>
<tr>
<td>Depressive symptoms3</td>
<td>10.19 (7.43)</td>
<td>7.00 (5.76)</td>
<td>1.72 (1.55)</td>
</tr>
<tr>
<td>Low self-esteem4</td>
<td>23.12 (6.97)</td>
<td>21.36 (5.85)</td>
<td>1.38 (1.24)</td>
</tr>
<tr>
<td>School dissociation5</td>
<td>24.99 (7.33)</td>
<td>20.93 (3.28)</td>
<td>1.82 (1.65)</td>
</tr>
<tr>
<td>School adjustment problems6</td>
<td>13.71 (6.08)</td>
<td>9.80 (4.84)</td>
<td>2.18 (1.96)</td>
</tr>
<tr>
<td>Good relations with mother7</td>
<td>29.52 (5.32)</td>
<td>31.20 (4.24)</td>
<td>0.70 (0.64)</td>
</tr>
<tr>
<td>Good relations with father8</td>
<td>19.72 (4.72)</td>
<td>21.27 (3.74)</td>
<td>0.91 (0.89)</td>
</tr>
<tr>
<td>Good family relationship quality9</td>
<td>22.22 (5.32)</td>
<td>24.82 (4.62)</td>
<td>0.56 (0.51)</td>
</tr>
<tr>
<td>Neighbourhood quality10</td>
<td>13.09 (2.58)</td>
<td>13.69 (2.46)</td>
<td>0.78 (0.70)</td>
</tr>
<tr>
<td>Religious affiliation11</td>
<td>12.94 (5.23)</td>
<td>14.25 (4.74)</td>
<td>0.79 (0.71)</td>
</tr>
<tr>
<td>Substance involvement12</td>
<td>14.14 (13.26)</td>
<td>8.74 (10.51)</td>
<td>1.71 (1.54)</td>
</tr>
<tr>
<td>Delinquency13</td>
<td>5.86 (6.22)</td>
<td>3.28 (4.11)</td>
<td>1.61 (1.46)</td>
</tr>
<tr>
<td>Perpetration of violent acts14</td>
<td>3.10 (3.79)</td>
<td>1.48 (2.51)</td>
<td>1.79 (1.61)</td>
</tr>
<tr>
<td>Experiences of victimization15</td>
<td>1.02 (1.54)</td>
<td>0.41 (0.95)</td>
<td>1.83 (1.64)</td>
</tr>
</tbody>
</table>

1*Values are based on variables in the original metric before standardization or normalization.
2Somatic symptoms: Tired/ weak/ dizzy/ trouble relaxing/ frequent crying/ insomnia/ wake up tired/ feel very sick/ feel hot/ frequent stomach aches/ fearful/ poor appetite/ chest pains/ headaches/ aches, pains/ cold sweats/ painful urination/ too sick for social activities/ sore throat, cough/ acne/ too sick for school
3Depressive symptoms: from the Center for Epidemiological Studies Depression Scale (CES-D): Frequency during past week of being depressed/ sad/ the blues/ lonely/ bothered by things/ people dislike you/ trouble keeping mind focused/ life is a failure/ fearful/ too tired to do things/ hard to get going/ life not worth living/ people unfriendly to you/ poor appetite/ talk less than usual.
4Low Self-esteem: Not proud of self/ don’t like self/ no good qualities/ doesn’t feel socially accepted/ feel unloved and unwanted/ physically unattractive/ do everything wrong/ low energy/ often sick/ when sick, do not recover quickly/ poor coordination
5School adjustment: Frequency during current (or past) school year of feeling unhappy at school/ not part of school/ not close to people at school/ teachers treat students unfairly/ unsafe in school/ teachers don’t care about me/ students prejudiced/ problems with teachers/ with other students/ with homework/ with paying attention
6School adjustment problems: from the Center for Epidemiological Studies Depression Scale (CES-D): Frequency during past week of being depressed/ sad/ the blues/ lonely/ bothered by things/ people dislike you/ trouble keeping mind focused/ life is a failure/ fearful/ too tired to do things/ hard to get going/ life not worth living/ people unfriendly to you/ poor appetite/ talk less than usual.
7Low religiosity: Do not attend religious services; religion is not important; do not pray; no youth groups; do not believe scriptures are word of God
8Substance use:
9Frequency alcohol consumption/ drunkenness/ 5 or more drinks single occasion/ alcohol outside family/ hung over/ throwing up after drinking/ frequency of marijuana use/ best friends drink alcohol/ alcohol use more than 2-3 times/ regret actions because alcohol/ best friends smoke marijuana/ regular smoking/ best friends smoke cigarettes/ regret sex because alcohol/ parents trouble due to alcohol/ high at school/ date problems due to alcohol/ smoking/ driving while drunk/ friend problems due to alcohol/ drunk at school/ other illicit drug use/ driving while high on drugs/ physical fight because alcohol/ early age first sex/ school problems due to alcohol.
10Delinquency: Shoplifting/ stealing worth <$50/ property damage/ stealing worth >$50/ graffiti painting/ burglary/ selling drugs/ loud and rowdy in public/ lying to parents about whereabouts/ jaywalking/ gang fighting.
11Perpetrator of violence: Frequency past year of getting into a serious physical fight/ seriously injuring someone/ using or threatening with a weapon/ getting into a physical fight/ pulling a knife or gun on someone/ shooting or stabbing someone/ carrying weapon to school/ lighting after drinking/ carrying weapon at school/ ever using weapon in a fight
12Experiences of victimization: Frequency past year someone pulled a knife or gun on you/you were shot by someone/ someone stabbed you/ you were jumped/ serious injury from fight. For the purpose of this paper, we split the “violence factor” reported in our previous papers ([18] and van den Bree MB and Pickworth WB). Risk factors predicting changes in marijuana involvement in teenagers. Arch Gen Psychiatry 2005;62:311–9) into two components: perpetration of violence and experiences of victimization.
13Odds ratios (OR) were obtained from logistic regression analyses run for each risk factor separately. Covariates age, gender, self-described ethnic status, urban status, parent education, and parent occupation were estimated in the first step and the change in model fit noted after the inclusion of each risk factor, in turn.
14All risk factors were significant at p < .001.
15Analyses relating to the variable “Good relations with father” are based on 258 “Ever homeless” participants and 7319 “Never homeless” participants.
Study variables

All measures have been piloted extensively in the Add Health Study. Homeless status at Time 2 was assessed based on three questions: (1) “Where do you live now?” One participant responded affirmatively to, “Homeless—that is, you have no regular place to stay,” (2) “Have you ever been homeless for a week or longer—that is, you slept in a place where people weren’t meant to sleep, or slept in a homeless shelter, or didn’t have a regular residence in which to sleep?” A total of 370 participants responded “yes.” (3) “Have you ever stayed in a homeless shelter?” A total of 119 participants responded “yes.” In all, 428 individuals were classified as having had experiences of homelessness based on one or more of these questions.

Risk factors were established in adolescence (Time 1) and used to predict accounts of homelessness reported in young adulthood (Time 2). To establish these risk factors, nine risk factor domains (mental health problems, personality, school functioning, family relations, neighborhood affiliation, religious affiliation, substance involvement, delinquency, and violence) were first established a priori from the literature, and variables were selected from the Add Health data set to best represent these domains.

Within each risk factor domain, the presence of subdomains comprising correlated items was established using factor analysis. Orthogonal rotation (Varimax) was used to increase the independence of individual risk factors within each domain. A total of 14 risk factors were thus established, which were used as the basis for calculating summed risk factors scores to serve as independent variables in regression analysis. For each subject, for each risk factor, summed risk factor scores were obtained by adding items with relatively high loadings on a factor (≥.30), discarding items with lower factor scores. Further information about the risk factors is available elsewhere [18]. The great majority of the sample completed all items making up each risk factor (i.e., >95% of the sample had no missing values for 11 of the 14 risk factors). Individuals with 15% or more missing responses to the items contributing to a summed risk factor score were excluded from further analyses. For those with less than 15% missing values, an imputation formula was used, based on replacing the missing items by the mean of the non-missing responses. Chronbach alpha coefficients (standardized) ranged between .74 and .92 for most factors, except neighborhood quality and experiences of victimization (both .63). Before further analysis, the scored risk factors were normalized using the Blom transformation.

Regression analysis

Logistic regression analyses were conducted in two steps: (1) the relationship between homelessness and each individual factor was evaluated; and (2) risk factors that were significant in step 1 were all entered simultaneously in a stepwise logistic regression analyses to evaluate the subset of factors best predicting homelessness. This approach takes into account the interrelationships of the variables so that the unique contribution of each risk factor can be evaluated. Because age, gender, ethnicity, urban status, and socio-economic status of the parental home can influence homelessness and its associations with other factors, these variables were included in each model before introduction of the risk factors. Therefore, the associations between experiences of homelessness and the risk factors were corrected for the influences of these five variables. Variance inflation factor and tolerance statistics indicated that collinearity did not affect the stability of multiple regression models.

As has been reported in other longitudinal population-based studied, data on the father were missing in a considerable portion of the sample: for 29% of respondents, all items assessing relationship with the father were missing. Therefore, stepwise regression analyses were conducted twice: first, including this factor and establishing its significance on homelessness status; and next, having established that this risk factor was not significant, regression analyses were repeated excluding it, allowing inclusion of more respondents in the analyses. Results of the latter analyses are presented.

Stepwise logistic regression was repeated using a sample weights statement in STATA [19]. This procedure corrects for design effects and unequal probability of selection of participants to ensure that results of analyses are nationally representative with unbiased estimates. The sample weight used is suitable for longitudinal analyses combining Time 1 and Time 2 data, it includes an adjustment for non-response and ensures that the Time 2 sample adequately represents the same population as the Time 1 sample. A more conservative significance level of $p < .01$ was specified to correct for an inflation of Type 1 error resulting from multiple testing across regression analyses (univariate effects, multiple logistic regression analyses).

Results

The sample comprised relatively even proportions of males ($N = 4890; 46.9\%$) and females ($N = 5543; 53.1\%$). Participants were approximately 68% white, 22% Black/African-American, 5% Hispanic, 8% Asian/Pacific Islander, and 5% Native American. The majority of respondents (77%) were living in a detached single-family house at Time 1 and approximately 28% lived in an urban area.

A total of 428 participants (4.1%) were classified as ever being homeless, with a slight preponderance for males (males, 52%; females, 48%; $\chi^2_1 = 4.48, p = .03$). Homelessness status was not associated with age at Time 2 ($t = 1.78, p < .10$). Homeless: mean $= 21.72$ years, SD = 1.57; Never homeless: mean $= 21.58$ years, SD = 1.62).

Table 1 presents means and standard deviations for the study variables, as well as results of regression analyses evaluating associations between each risk factor and homelessness. Each risk factor significantly predicted homelessness (all at $p < .001$).
In a large, nationally representative population-based sample, we found that poor family relationship quality, school adjustment problems, and experiences of victimization as reported in adolescence independently predicted accounts of homelessness in young adulthood.

**Poor family relationship quality**

Poor family relationship quality reflected lack of affiliation and togetherness between adolescents and their families. Homeless people frequently report family-related distress while growing up, including lack of affection, care, and support, as well as high levels of parent–child conflict, rejection, and experiences of neglect and abuse [3–6,20].

A dysfunctional family background can contribute to a young person running away from home, early onset and longer duration of homelessness, and reduced chances of successful reunion with caretakers [21–25].

Because Add Health participants were interviewed in their parental homes at Time 1, experiences of physical and sexual abuse were not queried. During young adulthood, however, retrospective accounts of such experiences were obtained, and in cross-sectional analyses we found that neglect and investigation of the family by social services were significantly and independently associated with homelessness [5].

Negative family experiences can be detrimental to normative adolescent development and may become manifest through a variety of adverse outcomes, including mental health, substance use, and school problems as well as increased risk of future victimization [12,26,27]. Our findings of a link between poor family relations and homelessness in a population-based sample add to findings in already homeless samples that have tended to focus on severe adversity (abuse and neglect). Together these findings testify to the damaging consequences of adversity in the family environment while young persons are growing up and point to the crucial importance of effective family-based prevention and early intervention strategies.

**School adjustment problems**

School adjustment problems, including poor achievement, lack of academic aspirations, and getting into trouble also significantly predicted experiences of homelessness. Such problems may reflect lower intellectual functioning [27], and/or social problems and inability to conform to a structured school environment [7,30]. School adjustment problems may contribute to a youth’s decision to run away from home [7,22]. Homeless persons frequently report school failure and discontinuation [31,32]; for example, Warren et al reported that more than 62% of runaway youths had been suspended from school at least once [32].

Many homeless individuals have few or no educational qualifications [4,31], and this has been associated with earlier onset and chronicity of homelessness and worse accommodation...
outcomes and depression [23]. Programs that effectively tackle school disengagement can have an important impact on high-risk youths’ future lives.

Experiences of victimization

Experiences of victimization in adolescence, including having been threatened and/or injured, also predicted homelessness. Living on the streets can be dangerous, and homeless persons frequently report experiences of victimization [7,33]; however, such occurrences may also be common before the first episode of homelessness. Kipke et al reported 21% of youth indicated having been punched, hit, burned, or beaten up and 7–14% having been attacked with and/or hurt by a weapon before they became homeless [33].

Victimization increases risk of psychological distress, psychiatric problems, and substance abuse, which can persist for years after the event [11,34], as well as impaired social cognition, poor understanding of social roles, and hostile behavior, attribution, and problem solving style [35]. Homeless youth with traumatic experiences, including adverse experiences within the family, are at increased risk for subsequent victimization [28,36]. Prevention of experiences of victimization or, at the very least, effective support for youths with such experiences, may reduce risk of later adverse outcome, including homelessness.

Rate of homelessness

We found that 4.6% of young adults reported at least one experience of homelessness. A somewhat higher prevalence of 7.6% was found in the large cross-sectional US Youth Risk Behavior Survey [37]. There is no consensus about the actual prevalence of homelessness among the young, and studies have reported considerable discrepancy in rates (from 52,000 to 1,300,000 [37]). Differences in sampling strategy and definition of homelessness may have contributed to differences in rates between the two studies.

Relation between risk factors

The complex pathways leading to homelessness and associated mental health and other problems remain poorly understood. Because of methodological limitations inherent to the study of homeless persons [14,15,37], much remains to be elucidated about the causal relationships between homelessness and associated risk factors.

Our findings suggest that a number of risk factors, including mood-related problems, low self-esteem, substance use, delinquency, perpetration of violent acts, and neighborhood quality may not be directly related to homelessness but, rather, share common causes with poor family relations quality, school adjustment problems, and experiences of victimization.

Many studies have reported high rates of mental health problems, criminal behavior, and substance misuse in already homeless people; however, the temporal relations remain unclear; there is evidence that mental health and substance use problems can precede homelessness and contribute to its increased risk [4,23] but homelessness can also cause or exacerbate existing psychological and substance abuse problems [38].

Similarly, our finding that delinquency is not a significant independent risk factor agrees with reports that crime is less likely to precede homelessness but may increase sharply after its occurrence [38], as well as findings that homeless person predominantly engage in petty crimes related to street subsistence strategies and creative sheltering, whereas violent acts are less likely [9,10,39].

Study implications

Our findings suggest, first, that early recognition and support of children growing up in adverse circumstances is crucial in the prevention of homelessness and, possibly, associated psychopathology. Professionals working with the young, including teachers, health care and social workers, and medical staff who treat the effects of violent victimization should be aware of the link between victimization and homelessness and should be educated about recognition and assessment of high risk youngsters. Schools could play an important role in early identification of young people who display school adjustment problems. However, intervention efforts aimed at helping youngsters adjust to school and complete their education may be most effective in early adolescence, before disengagement with school has become firmly established [39].

Second, clinical and social service providers should be educated about the links between family adversity, victimization, and homelessness. Provision of adequate support may be complicated by the fact that homeless youths may not disclose their traumatic experiences.

A study interview is sometimes the first time that homeless youth disclose traumatic experiences, and disclosure during an interview can contribute to an individual’s realization that he or she needs professional help [38]. Adequate service provision for homeless persons with mental health problems can reduce risk of chronic homelessness [40]. Because homeless youths present with so many complex problems, highly specialized service provision is needed, pointing to the need for recruitment of individuals with such skills as well as high-quality professional training.

Finally, awareness of the role of traumatic experiences in pathways to homelessness on the part of the general public, health care professionals, the police and those in legal professions may reduce the stigmatization and marginalization homeless people frequently experience.

Study limitations

Participants were initially recruited through the school system and included in this study if they participated on two occasions, which may have resulted in under-representation...
of youngsters at high risk for homelessness. However, the results remained the same when we used sample weights. Youngsters reporting experiences of homelessness were more likely to be excluded from the analyses because they had 15% or more missing values for risk factors. However, we found no significant differences in risk factor means for participants reporting homeless experiences who were included in the study, versus those who were not included. One exception was that those individuals with homeless experiences who were excluded had higher scores on substance involvement, and this should be kept in mind when interpreting our findings.

Homeless experiences were not queried in adolescence, and the majority of young adults who reported homelessness reported on past experiences. Although all respondents were living at home at Time 1, we cannot entirely exclude the possibility that a small number had experienced homelessness before the first assessment. However, we excluded from this study 38 individuals who were living in a group home or shelter at Time 1. In addition, we repeated our analyses excluding individuals who reported having run away from home at least once in the year before the Time 1 assessment, and the pattern of results remained the same. We suggest that these results, taken together, represent an estimate of the temporal relations between risk factors occurring in adolescence and subsequent homelessness.

All information was based on self-reports. However, studies in homeless youths indicate that their accounts of family functioning concur with those of their parents/care-takers [19]. Furthermore, respondents provided information knowingly for research purposes but blind to the current study hypotheses, possibly reducing risk of reporting bias.

We analyzed a range of risk factors taking into account the covariates age, gender, parental and socio-economic factors, and ethnicity. Despite the advantages of a longitudinal design, we cannot rule out the possibility that other factors may have influenced both risk factors as well as homelessness.

Many comparisons between behaviors and experiences of homeless individuals were made in this study, and it is therefore possible that significant findings have arisen by chance. A more stringent significance level of $p < .1$ was used to minimize this possibility. Additional research is needed to confirm the results and to further enhance their practical implications.

To conclude, poor quality of family relations, school adjustment problems, and experiences of victimization may increase later risk of homelessness in the general population. These findings point to possibilities for early identification of young people at risk for homelessness through agencies offering family-based support, as well as through schools and clinical services.

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