

The Prevalence of Homelessness Among Adolescents in the United States

ABSTRACT

Objectives. Homeless adolescents represent one of the nation's most vulnerable populations. This study reports the 12-month prevalence of homeless episodes among US adolescents.

Methods. Personal, audiotaped interviews were conducted in 1992 and 1993 with a representative household sample of 6496 adolescents aged 12 to 17 as part of the Youth Risk Behavior Survey sponsored by the Centers for Disease Control and Prevention. Respondents reported whether they had spent the night in any of a variety of locations other than home during the previous 12 months.

Results. Altogether, 7.6% of the youths questioned reported that they had spent at least 1 night in a youth or adult shelter (3.3%), a public place (2.2%), an abandoned building (1.0%), outside (2.2%), underground (0.4%), or with a stranger (1.1%). Boys were much more likely than girls to report having experienced a homeless episode.

Conclusions. This study suggests that homelessness among adolescents is not simply an urban problem and that prevention programs targeting homeless youths should be implemented nationwide. Additional research is needed to assess the frequency and duration of homeless experiences. Future studies of homelessness in the general population should include questions pertinent to adolescents. (*Am J Public Health.* 1998;88:1325-1329)

Christopher L. Ringwalt, DrPH, Jody M. Greene, MS, Marjorie Robertson, PhD, and Melissa McPheeters, MPH

Recent literature suggests that homeless youths may constitute a high-risk population that urgently requires the attention of policy-makers.¹⁻³ Compared with their domiciled peers, homeless youths are at significantly greater risk for medical problems and health-compromising behaviors, including human immunodeficiency virus (HIV) infection and other sexually transmitted and infectious diseases; substance abuse; psychotic behavior, depression, and suicide attempts; prostitution; and trauma.^{2,4-12} Furthermore, service providers report that the homeless youth population seems to be increasing in size, with an apparent trend toward clients who are more troubled and who have multiple problems.¹³ Many homeless youths have difficulty meeting basic needs, in large part because of the scarcity or inappropriateness of existing services and their lack of access to housing, education systems, medical and mental health services, and social welfare programs.

To plan programs and interventions for these young people, public health professionals and social workers need accurate information on the size and characteristics of the population of homeless youths.¹⁴ However, there is little empirical evidence about the number of youths who experience homelessness, largely because of the challenges inherent in studying this population. These challenges include contradictory definitions of what constitutes homelessness, an absence of standardized methodology for sampling homeless youths, and an overreliance on data from shelters and agencies, which likely lead to inaccurate conclusions about the size and characteristics of the population.^{1,2,9,12,15,16}

Clearly, estimating the size of a mobile and changing homeless population is difficult.¹⁷ For a number of reasons, most methods for developing such estimates are problematic.^{1,15,17,18} Homeless youths are largely a "hidden" population owing to their high residential mobility, diffusion through-

out communities, and movement into and out of domiciles, public institutions, and the streets. Also, many homeless youths avoid contact with shelters, medical services, and the police, service providers who might otherwise estimate their numbers.^{1,13,15,19} Homeless youths also tend to congregate in locations inaccessible to traditional survey methodologies (e.g., on the streets or in abandoned buildings) and are often visually indistinguishable from youths in general, are reluctant to admit to homelessness, and avoid interviewers whom they may mistake for victimizers or representatives of the police or social services. Nonetheless, existing evidence does suggest that homeless youth constitute a growing population.

Although often contradictory, federal reports are the most consistent source of national estimates of runaway and homeless youths. Two such studies have reliably measured the number of runaway youths, although neither has adequately documented the number of runaways who experienced homelessness. These studies found numbers of runaway youths that ranged from 519 000 to 635 000 in 1975 and 450 700 in 1988.²⁰⁻²²

A Department of Health and Human Services report estimated in 1983 that between 733 000 and 1 300 000 US youths could be classified as either runaways or homeless.² In contrast, a report issued by the US General Accounting Office, based on a survey of intake workers at federally funded

Christopher L. Ringwalt, Jody M. Greene, and Melissa McPheeters are with Research Triangle Institute, Research Triangle Park, NC. Marjorie Robertson is with the Department of Epidemiology, University of California at San Francisco.

Requests for reprints should be sent to Christopher L. Ringwalt, DrPH, Research Triangle Institute, 3040 Cornwallis Rd, Research Triangle Park, NC 27709-2194.

This paper was accepted March 25, 1998.

TABLE 1—Proportion of Youths Aged 12 to 17 Years Reporting Homeless Episodes of at Least One Night's Duration Within Previous 12 Months: Youth Risk Behavior Survey, 1992–1993, (n = 6496)

Location of Homeless Episode	Proportion of the Sample, %	Estimated No. of the National Population	Unique Episode, %	95% Confidence Interval
Youth or adult shelter	3.3	672 191	2.6	2.8, 3.8
Public place	2.2	461 133	1.3	1.8, 2.7
Abandoned building	1.0	206 592	0.4	0.7, 1.3
Outside	2.2	454 573	1.3	1.8, 2.6
Underground	0.4	87 882	0.1	0.2, 0.6
Stranger's home	1.1	217 454	0.5	0.8, 1.4
Any	7.6	1 567 043	...	6.9, 8.3

youth shelters, estimated that in 1987 between 52 000 and 170 000 unaccompanied youths aged 16 and younger were homeless.¹⁷

Estimates of homeless populations generally are based on point prevalence methods,^{15,16,23} which estimate the number and characteristics of individuals who are homeless at a given point in time, such as a typical day. While useful as guides to daily demand on services, such estimates tend to be biased toward describing individuals with longer periods of homelessness.²³ Since homelessness among youths is much more episodic than chronic,^{1,24} estimates of average duration are biased upward and estimates of annual prevalence and incidence are biased downward.²⁵ Furthermore, estimates derived from survey data, especially data based on shelter or other service populations,¹⁶ tend to underestimate the extent of homelessness²⁶ because they undercount hidden homeless individuals.²⁵

An alternate strategy is to generate a period prevalence estimate of the number of youths who experience any homelessness during a given period, providing insight into the process by which individuals enter into or exit from homelessness.^{15,23} Period prevalence estimates are particularly important for planning purposes because they include individuals who experience short-term episodes of homelessness.^{15,23} Although considered harder to generate,¹⁵ period prevalence estimates also serve policymakers as a measure of the cumulative impact of homelessness on the larger population.²³

In a recent study, researchers used this type of strategy with a national household probability sample to estimate the lifetime and 5-year prevalence of homelessness among US adults.²⁵ The researchers suggested that interviews with adults in households could avoid bias by capturing a nationally representative sample of formerly homeless persons who may have been hidden while they were homeless; those with brief or intermittent episodes of homelessness; and those who might deny or avoid discussing their homelessness during an in-person interview.

Using a similar approach, this study presents an estimate of the annual prevalence of homelessness among youths, derived from a nationally representative household survey among youths aged 12 to 17. In addition, focus groups of adolescents were convened after the study was completed to determine the nature and extent of any ambiguity in the questions tapping homeless episodes.

Methods

Sample Design

The sample consisted of adolescents aged 12 to 17 who responded to the 1992 Youth Risk Behavior Survey, a supplement to the National Health Interview Study (NHIS) sponsored by the Centers for Disease Control and Prevention. The NHIS used a multistage probability sample of the civilian noninstitutionalized population of the United States. The NHIS sampling strategy yielded 51 643 eligible households and interviews with 49 401 families. Black and Hispanic families were oversampled.

From within each selected family, 1 youth attending school and up to 2 youths who were not in school or whose school status was unknown were selected for the sample. Of the 13 789 youths sampled, interviews were completed with 10 645, yielding a final response rate of 77.2% (or 73.9% of the original NHIS sample). The sample used in this study included the 6496 respondents between the ages of 12 and 17.

Data Collection

Field interviewers provided each adolescent with an audiocassette containing taped interview questions read by someone of the same sex. The youths listened as each question was read twice and then recorded their answers on forms that included response options only. This methodology protected the privacy of respondents;

assisted respondents who had poor reading skills; prevented respondents from reading through the questionnaire in a hasty or careless fashion; and standardized the manner in which questions were asked. After the interview, the youths returned their answer sheets to the interviewers in sealed envelopes.

Definitions and Measures

Because previous research offered little consensus on definitions of homeless experiences, we chose to base ours on federal guidelines.²⁷ We considered youths to be homeless if they spent the night in a youth or adult shelter or in any of several locations not intended to be dwelling places or where their safety would be compromised.

Respondents were asked whether, during the past 12 months, they had spent the night (1) in a youth or adult shelter; (2) in a public place, such as a train or bus station, a restaurant, or an office building; (3) in an abandoned building; (4) outside in a park, on the street, under a bridge or overhang, or on a rooftop; (5) in a subway or other public place underground; (6) with someone they did not know because they needed a place to stay; or (7) in a car, truck, or van. Subsequently, we chose to disregard the seventh question because of its inherent ambiguity (i.e., an adolescent could have spent the night in a vehicle while traveling with family).

Sociodemographic characteristics of the respondents were also assessed, including sex, age at the time of the interview, race/ethnicity, family income (i.e., above or below poverty, as determined by parents' responses to the NHIS), and family structure (i.e., living with both parents or some other arrangement), as well as the region of the country and the population density of the area where the respondent lived.

Data Analysis

We generated prevalence estimates and associated confidence intervals for the number of youths who had spent at least 1 night during the previous 12 months in each of the 6 locations specified above, as well as for an aggregate measure of all 6 experiences considered together. In addition, we disaggregated respondents who reported any homeless experience, using the sociodemographic characteristics mentioned above to estimate the relative numbers of key population subgroups and to determine the significance of any differences noted.

Results are weighted to reflect the multistage sample design, the oversampling of minorities, and the selection of only 1 in-school youth per family relative to up to 2

TABLE 2—Percentages of Youths Aged 12 to 17 Reporting Specific Types of Homeless Episodes, by Demographic Characteristics: Youth Risk Behavior Survey, 1992–1993 (n = 6496)

	Shelter	Public Place	Abandoned Building	Outside	Underground	Stranger's home	Any
Sex							
Male	4.4*	2.7**	1.4***	3.3*	0.7†	1.1	9.6*
Female	2.1	1.7	0.6	1.1	0.1	1.0	5.4
Race							
White	2.7	2.4	0.9	2.4	0.3	1.1	7.7
Black	4.4	1.9	1.4	1.5	0.6	0.6	7.7
Hispanic	3.8	1.4	0.9	2.1	0.5	0.9	6.7
Other	5.7	2.6	1.1	2.2	1.1	2.1	8.6
Poverty status							
In poverty	3.0	2.3	1.0	2.2	0.4	1.0	7.4
Not in poverty	4.4	1.8	1.1	2.4	0.9	1.5	8.3
Family situation							
Both parents	3.1	2.2	0.9	2.0	0.4	0.9	7.2
Other	3.6	2.2	1.0	2.6	0.4	1.2	8.6
Region							
Northeast	2.6	2.2	1.0**	2.1	0.7	0.8	6.0
Midwest	3.1	2.4	0.4	2.0	0.3	1.0	7.5
South	3.4	1.8	1.1	1.9	0.4	1.0	7.6
West	3.9	2.8	1.7	3.0	0.4	1.4	9.0
MSA status							
MSA—central city	3.9	2.4	1.1	2.9	0.3	1.0	8.3
MSA—non—central city	2.7	2.0	0.9	1.9	0.3	1.0	6.8
Non-MSA	3.6	2.6	1.1	2.1	0.8	1.4	8.4

Note. MSA = metropolitan statistical area. *P* values were derived from the χ^2 test of proportions. **P* < .0001; ***P* < .05; ****P* < .001; †*P* < .01.

out-of-school youths.²⁸ Data were analyzed with SUDAAN,²⁹ a software package specifically designed for the analysis of complex, stratified survey data. SUDAAN specializes in providing accurate estimates of standard errors and the confidence intervals derived from them to account for clustering effects of complex sample designs.

Results

Approximately 7.6% of the respondents reported having spent at least 1 night in the past 12 months in one of the 6 homeless locations listed in Table 1. Youths most often reported spending the night in a youth or adult shelter; the next most frequently reported locations were "a public place" and "outside."

Table 2 indicates the proportion of respondents who answered each of the homeless episode questions positively, disaggregated by the demographic characteristics specified above. Generally speaking, boys were much more likely than girls to report homeless episodes, especially as these episodes related to staying in shelters and sleeping outside. Otherwise, no significant differences were observed, with one exception: adolescents living in the West were most likely to have spent the night in an abandoned building, while their counterparts

living in the Midwest were least likely to have spent the night in such a location.

Discussion

We found that 7.6% of a nationally representative sample of youths reported that they had experienced at least 1 night's homelessness over a 12-month period. Because the magnitude of the estimate was so startling, we reviewed our methods and data to determine whether the estimate might be artificially inflated. We reexamined each of the 6 questions constituting the homeless indicator to assess their face validity.³⁰ As mentioned earlier, we disregarded the question about spending the night in a vehicle because such behavior might be unrelated to homelessness as defined in this study. We also evaluated individual response patterns to judge whether some respondents might have reported stays in all sites for reasons of caprice or boredom. We found such patterns of individual response to be minimal (1%).

We were concerned about the 3.3% of the sample (corresponding to about 670 000 youths nationally) who indicated that they had spent the night in a youth or adult shelter. For most of these (2.6% of the sample), the shelter stay was the only type of homeless experience reported. It seems unlikely that so many youths would have spent the night in youth

shelters, since only an estimated 150 000 youths are sheltered nationwide over a 12-month period (Laura Thomas, National Runaway Switch Board, oral communication, May 5, 1996).⁴ Further investigation revealed that shelter stays decreased markedly with age (from 5.2% of 12-year-olds to 1.6% of 17-year-olds). Since it seemed unlikely that so many respondents, especially younger ones, had stayed in adult shelters, we considered whether they might have meant stays in family shelters, but we found that only 40 000 youths annually (aged 13 to 16 years) are estimated to be in family shelters.¹⁷ The possibility remains that some respondents may simply have misunderstood the term *shelter*. In retrospect, a definition should have been provided with the question. To err on the side of caution, we excluded respondents who indicated that a shelter stay was their unique homeless experience. The overall period prevalence estimate was thereby revised down to 5.0%.

The rates for the other 5 types of sites appeared reasonable. Data confirmed our expectation that relatively few youths would report spending the night in a subway or other place underground, given the small number of metropolitan areas with subway systems. Also as expected, the numbers of youths reporting spending the night in an abandoned building or with a stranger were low compared with the numbers who had spent the night outside or in a public place.

Contrary to expectation, the prevalence of homelessness varied little by sociodemographic or geographic factors. Compared with those for girls, rates for boys were higher overall and for most specific types of homelessness (except for going home with a stranger). Having stayed in an abandoned building was reported most often by respondents from the West and least often by respondents from the Midwest. The prevalence of homelessness did not vary significantly by race, family poverty, family structure, or residence either in a metropolitan area or in a particular region of the country.

While more conservative than the original estimate, a 5.0% annual prevalence of homelessness among youths is still surprising. Nevertheless, it is of the same order of magnitude as an estimate generated from the recent study of homeless adults cited earlier, which employed a similar sampling strategy.²⁵

Readers are cautioned that these estimates are based only on youths aged 12 to 17 years living in households. The sample excluded youths staying in single-room occupancy hotels or other group quarters²³ and those in institutions such as juvenile detention facilities and mental hospitals; such youths are more likely than the domiciled youth population to have experienced homelessness.^{1,25} The sample also excluded youths who were currently homeless, and it likely underrepresented youths with longer periods of homelessness.³¹ Also, these conclusions are based on self-reported retrospective data that are subject to recall bias, and the prevalence of homelessness may be underreported because of stigma.

Because we were concerned that adolescents responding to the survey may have misunderstood the questions we asked them, we convened 2 focus groups to probe how respondents may have interpreted these items. Purposive sampling in the central Piedmont area of North Carolina yielded 26 youths aged 12 to 17 years, with a mean age of 13.8; 5 were female, 16 classified their ethnic identity as African American, 8 were White, and 2 were multiracial. All participants, who were paid \$20 for a 1-hour session, reported that they were attending school at the time of the interview.

Members of 1 focus group suggested that the introduction, context, and repeated emphasis of the questions made it clear that they were, in fact, addressing homeless experiences. However, neither group thought that all of the questions were unambiguous. Focus group members had the greatest difficulty with "spending the night in a public place," which they thought might be interpreted as "hanging out on the streets with friends past

3:30 AM," even if you did return home before sunrise. They had somewhat less difficulty with the question relating to spending the night in a car, truck, or van, which they thought could pertain to sleeping while on a trip or camping out. Staying in youth or adult shelters, they indicated, could relate to "squats," where adolescents meet to hang out and drink alcohol; to juvenile detention centers; and to huts designed for campers. Finally, going home with a stranger could mean staying with a friend of a friend because you could not, or did not want to, go home.

The focus groups we conducted emphasized the importance of understanding in advance the multiple potential meanings of questions tapping homeless experiences, and of specifying the meaning of these questions in greater detail. Also important is an understanding of how the perceived client and purpose of the survey may bias reporting. Some of the focus group members said that they would be likely to underreport such behavior, while others thought that they would do just the opposite, either to act as advocates for homeless youths or, more simply, to "piss off the government."

These cautions notwithstanding, this study presents our best empirically derived lower-bound estimate to date of the annual prevalence of youth homelessness in the United States. These results are pertinent to the discussion of the extent and distribution of homelessness in the nation. This estimate of the number of youths who experience homelessness in the course of a year comes from a study that, like the work of Link and colleagues, adopted an approach that overcomes many weaknesses of past prevalence studies.^{18,25}

The principal strength of this study is its use of a sample that was a carefully developed national probability sample, population based rather than service based, and sufficiently large to permit exploration of differences by sociodemographic and geographic subgroups. Other strengths include its use of an annual rather than a point prevalence estimate of homelessness and its behavioral definition of homelessness. In addition, while a household survey may seem to be an unlikely vehicle by which to secure national estimates of homeless youths, such surveys have been used before to estimate the numbers of runaway youths and homeless adults. If carefully executed, and with due attention paid to the specificity of questions asked, such studies can be used to develop reliable lower-bound estimates of the annual prevalence of homelessness among youths. Household surveys also allow for iterations over time to determine trends in the population if sampling and data collection procedures are carefully replicated.

These findings suggest that youth homelessness is a national phenomenon that is much more common than is generally thought. While many episodes of homelessness may be short in duration or located in relatively protective settings (e.g., shelters), other episodes are potentially more serious (e.g., spending the night outside or in an abandoned building, or going home with a stranger). Future research should include questions about frequency, duration, and other details of each type of experience, especially those involving stays in vehicles and shelters.³² Equally useful for developing an understanding of the problem of homelessness among youths would be information about whether the youth experienced homelessness alone, with other youths, or with family members.¹⁷ Coverage of such issues should be considered in the next iteration of the household version of the Youth Risk Behavior Survey. In addition, the questions themselves should be examined for the accuracy with which they address the issue of homelessness as opposed to other problem behaviors in adolescents. Finally, our findings suggest that the prevalence of homelessness among youths in this country is substantial and should be considered in future estimates of homelessness among the general population. □

Acknowledgments

Data analysis and manuscript preparation were funded by a grant from the National Institute on Drug Abuse (grant DA08849). Support for the questions concerning homeless episodes that were added to the Youth Risk Behavior Survey came from the Administration on Children, Youth, and Families (contract 105-90-1703).

We would like to thank Dr Fletcher Linder of the University of North Carolina School of Public Health for conducting our adolescent focus groups and Jonathan Simmons and Debra Harris of Research Triangle Institute for their editorial and clerical assistance.

References

1. Robertson MJ. Homeless youth: an overview of recent literature. In: Kryder-Coe JH, Salamon LM, Molnar JM, eds. *Homeless Children and Youth: A New American Dilemma*. New Brunswick, NJ: Transaction Publishers;1991: 33-68.
2. Russell LA. *Homeless Youth: Child Maltreatment and Psychological Distress* [dissertation]. Los Angeles: University of California, Los Angeles, School of Public Health; 1995.
3. Solarz AL. Homelessness: Implications for Children and Adolescents. *Social Policy Report*. Ann Arbor, Mich: Society for Research in Child Development. 1988;3;No. 4.
4. Greene JM, Ringwalt CL, Kelly JE, Iachan R, Cohen Z. *Youth With Runaway, Throwaway, and Homeless Experiences: Prevalence, Drug*

- Use, and Other At-Risk Behaviors*. Vols 1 and 2, final report under contract no. 105-90-1703 from the Administration on Children, Youth, and Families. Research Triangle Park, NC: Research Triangle Institute; 1995.
5. Greenblatt M, Robertson M. Lifestyles, adaptive strategies, and sexual behaviors of homeless adolescents. *Hosp Community Psychiatry*. 1993;44:1177-1780.
 6. Kennedy JT, Petrone J, Deisher RW, Emerson J, Heslop P, Bastible D, Arkovitz M. Health care for familyless, runaway street kids. In: Brickner PW, Scharer L, Keen L, Savarese BA, Marianne S, Brian C, eds. *Under the Safety Net. The Health and Social Welfare of the Homeless in the United States*. New York, NY: W.W. Norton & Co; 1990:82-117.
 7. Kipke MD, O'Conner S, Palmer R, MacKenzie RG. Street youth in Los Angeles: profile of a group at high risk for human immunodeficiency virus infection. *Arch Pediatr Adolesc Med*. 1995;149:513-519.
 8. Robertson MJ. *Homeless Youth in Hollywood: Patterns of Alcohol Use*. Berkeley, Calif: Alcohol Research Group; 1989. A Report to the National Institute on Alcohol Abuse and Alcoholism (Report No. C51).
 9. Robertson M, Koegel P, Ferguson L. Alcohol use and abuse among homeless adolescents in Hollywood. *Contemp Drug Probl*. 1989;16:415-452.
 10. Rotheram-Borus MJ, Meyer-Bahlburg HFL, Koopman C, et al. Lifetime sexual behaviors among runaway males and females. *J Sex Res*. 1992;29:15-29.
 11. Sherman DJ. The neglected health care needs of street youth. *Public Health Rep*. 1992;107:433-440.
 12. Yates GL, MacKenzie R, Pennbridge J, Cohen E. A risk profile comparison of runaway and non-runaway youth. *Am J Public Health*. 1988;78:820-821.
 13. Horn W. Written before the Subcommittee on Children, Family, Drugs, and Alcoholism, Committee on Labor and Human Resources of the US Senate. February 7, 1990.
 14. Jahiel R. The size of the homeless population. In: Ren IJ, ed. *Homelessness: A Prevention-Oriented Approach*. Baltimore, Md: Johns Hopkins University Press; 1992:337-359.
 15. Burt M. *Practical Methods for Counting Homeless People*. Washington, DC: Interagency Council on the Homeless and US Dept of Housing and Urban Development; 1992.
 16. Culhane DP, Dejowski EF, Ibanez J, Needham E, Macchia I. Public shelter admission rates in Philadelphia and New York City: the implications of turnover for sheltered population counts. *Housing Policy Debate*. 1994;5:117-140.
 17. Link BG, Phelan J, Bresnahan M, Stueve A, Moore R, Susser E. Lifetime and five-year prevalence of homelessness in the United States: new evidence on an old debate. *Am J Orthopsychiatry*. 1995;65:347-354.
 18. *Children and Youths: About 58,000 Homeless and 186,000 in Shared Housing at Any Given Time*. Gaithersburg, Md: US General Accounting Office; 1989. GAO/PEMD-89-14.
 19. Robertson MJ, Clark R. *Surviving for the Moment: A Report on Homeless Youth in San Francisco*. Berkeley, Calif: Alcohol Research Group; 1995.
 20. Caton CLM. The epidemiology of homelessness. In: Caton CLM, ed. *Homeless in America*. New York, NY: Oxford University Press; 1990:19-35.
 21. Opinion Research Corporation. *National Statistical Survey on Runaway Youth*. Washington, DC: US Dept of Health, Education, and Welfare, Office of Human Development; 1976.
 22. Finkelhor D, Hotaling T, Sedlak AJ. *Missing, Abducted, Runaway, and Thrownaway Children in America: First Report, Numbers and Characteristics*. Washington, DC: US Dept of Justice, Office of Juvenile Justice and Delinquency Prevention; 1990.
 23. Rossi PH. Comment on DP Culhane et al.'s "Publish shelter admission rates in Philadelphia and New York City: the implications of turnover for sheltered population counts." *Housing Policy Debate*. 1994;5:163-176.
 24. Institute of Medicine. *Homelessness, Health, and Human Needs*. Washington, DC: National Academy Press; 1988.
 25. Link BG, Susser E, Stueve A, Phelan J, Moore RE, Struening E. Lifetime and five-year prevalence of homelessness in the United States. *Am J Public Health*. 1994;84:1907-1912.
 26. Applebaum RP. Counting the homeless. Paper presented at: Conference on Homelessness, George Washington University; December 13, 1986; Washington, DC.
 27. Stewart B. McKinney Homeless Assistance Act, Pub L No. 100-77, July 22, 1987.
 28. Camburn D, Cynamon M. Observation of new technology and family dynamics in a survey of youth. Paper presented at: Annual Meeting of the American Statistical Association; January 4, 1993; Fort Lauderdale, Fla.
 29. Shah BV, Barnwell BG, Bieler GS. *SUDAAN Users Manual, Release 7.0*. Research Triangle Park, NC: Research Triangle Institute; 1996.
 30. Bauman KE. *Research Methods for Community Health and Welfare*. New York, NY: Oxford University Press; 1980.
 31. Rossi PH. Strategies for homeless research in the 1990s. *Housing Policy Debate*. 1991;2:1029-1055.
 32. Cordray DS, Pion GM. What's behind the numbers? Definitional issues in counting the homeless. *Housing Policy Debate*. 1991;2:587-616.