What does it mean to be poor in America?

An examination of a variety of measures of material well-being shows those individuals living in poor families, in single-parent families, and in families receiving welfare to be significantly worse off than those living in nonpoor families

Maya Federman,
Thesia I. Garner,
Kathleen Short
W Boman Cutter IV,
John Kiely,
David Levine,
Duane McGough,
and
Marilyn McMillen

Authors' affiliations are on page 13. The interpretations presented in this article are the authors' own, and do not represent those of agencies with which they are, or have been, affiliated.

To understand the relationship between poverty and living conditions, a multifaceted understanding of what it means to be poor is required. In one sense, the answer to the question "What does it mean to be poor?" is straightforward—having cash income below the official poverty line for a given family size. In a broader sense, the living conditions of the poor are difficult to measure, both because annual cash income is only one factor related to living conditions, and because the poor are quite heterogeneous.

This article represents an effort to get closer to the answer by summarizing findings from nine national surveys that shed light on the living conditions of individuals living in poor and nonpoor families. It differs from earlier examinations of living conditions and the material well-being of American families in that it draws upon a broader set of household surveys and attempts to maximize uniformity in the definition of family types and poverty. This work represents a coordinated effort of representatives of various Federal agencies that produce and analyze data from nationally representative surveys.[1] The aim in this process has been to produce measurements of material well-being for an expanded set of dimensions, following a methodology that would promote comparability across surveys as much as possible.

Related research[2]

Although the official poverty measure in the United States is defined in terms of current before-tax cash income, some aspects of economic welfare can be more accurately gauged by measuring consumption or other dimensions of living conditions. Income measures ignore homeownership and other assets that can be important sources of consumption. Thus, some people, such as those who are retired or those whose incomes are only temporarily low, may be classified as poor based on income but do not have low consumption. Furthermore, the official poverty rate does not account for taxes or in-kind transfers such as food stamps or government-provided medical insurance, which improve living conditions without affecting a family's official poverty status.[3]

To address some of the limitations of basing the measure of poverty solely on cash income, David M. Cutler and Lawrence F. Katz compare poverty rates constructed using consumption expenditure data from the Consumer Expenditure Survey with the official poverty rates based on income from the Current Population Survey.[4] They find that, while the poverty rate is lower when measured using expenditures, trends in poverty rates based on both income and expen-

ditures are similar, and both rates rose during the 1980's, particularly for the nonelderly.

Daniel T. Slesnick also finds that consumption expenditure-based poverty rates are lower than income-based measures.[5] He notes that the reported postwar trend poverty is sensitive to the equivalence scale used and, for the late 1970's and the 1980's, to the price indexes used for the analysis.

Other researchers have analyzed measures of specific dimensions of material and economic well-being such as housing, neighborhood quality, consumer durables, income sources, spending patterns, and health to study the living conditions of low-income children and families. For example, Robert Rector analyzes the 1989 American Housing Survey and finds that nearly 40 percent of all households with incomes below the official poverty line own their own homes, but that only 18 percent of poor, single-parent families are homeowners.[6] The median value of homes owned by the poor is 58 percent of the median value of all homes owned in the United States. In addition, he reports that only 8 percent of poor households are overcrowded (defined as more than one person per room), and 53 percent of poor households have some type of air conditioning.

A recent Children's Defense Fund report summarizes findings along a large number of dimensions of disparities in resources and outcomes between poor and nonpoor children.[7] The evidence ranges from analysis of national data sources to studies limited to a specific State or community. According to the report, poor children have higher rates of various health problems, inferior housing, inferior schools, less access to computers and educational materials at home, inferior child care, higher rates of child abuse, higher rates of parental substance abuse, more frequent moves, more exposure to toxic chemicals and pollution, higher rates of lead poisoning, and other disadvantages.

Using data from the American Housing Survey, the decennial census, the Consumer Expenditure Survey, and the National Health Interview Survey, Susan Mayer and Christopher Jencks examine trends in various measures of the material well-being of children from 1969 to 1989.[8] They find that children in families in the lowest quintile of income have made both absolute and relative gains over time across a variety of measures of housing quality. Low-income children are now less likely to live in crowded housing and more likely to live in homes with indoor plumbing, central heat, and major appliances such as air conditioners and dishwashers. In addition, they are now more likely to have seen a doctor in the preceding year. At the same time, low-income children are now less likely to live in households that own their own homes or have access to an automobile, and are more likely to live in neighborhoods identified by their parents as having a crime problem.

Mayer and Jencks suggest that some of the improvement in housing conditions may have resulted because newer housing for low-income families became available as their more affluent counterparts moved to the suburbs. Government programs may also have played a role in improving living conditions in some dimensions. For example, these researchers report that the proportion of low-income children having access to a telephone grew during the 1970's, when universal access was a government policy, but ceased growing during the 1980's when universal access declined as a policy priority. In summary, Mayer and Jencks note that, despite the gains experienced by low-income children, their measured living conditions remain significantly lower relative to other children's.

Using data from the 1992–94 Consumer Expenditure Survey, William D. Passero[9] examines selected characteristics and spending patterns of working poor and nonworking poor consumer units. A consumer unit is defined as poor if it received welfare income[10] at any time during the preceding 12 months, and as working poor if the unit had at least one member who worked outside the home for at least 27 weeks over the preceding 12 months.[11]

Passero reports that consumer units in the working poor group are larger; these units have an average of more than 4 persons, compared with 3.5 persons in the nonworking poor group. Consumer units in the working group report average total expenditures that are 85 percent higher than those of the nonworking group. Not surprisingly, the nonworking poor apportion a greater share of expenditures to commodities such as food, shelter, and utilities. About 40 percent of spending is for shelter and utilities and 30 percent is for food among the nonworking group, while only 30 percent of the total is for shelter and utilities and 20 percent is for food among the consumer units with at least one working member. The spending share on transportation for the working poor is almost twice (18 percent) that of the nonworking poor. Ownership of various durable items, or access to them in the home, is significantly lower for the nonworking poor. However, home computers are scarce among both groups; about 10 percent of the working poor report home access to or ownership of computers, while 4 percent of the nonworking poor do so.

Mark Lino examines income sources, spending patterns, and characteristics of poor households with at least one child, using the 1990–92 Consumer Expenditure Survey.[12] Lino applies a stricter definition of poverty than has generally been used by others: a household is poor if its before-tax income is below the official poverty threshold *and* its total expenditures are below the official poverty threshold.[13] He reports that a majority of these poor households have reference persons who are single parents (51 percent) and that 97 percent of these single parents are mothers. Food stamps is the most commonly reported source of income for poor households with children. (Sixty-nine percent of these households reported income from food stamps

during the survey period.) Fifty-four percent of the poor households report receiving wages or salaries, and 54 percent report receiving some type of public assistance. In addition, Lino finds that, of those households with reference persons who are unemployed, 65 percent report not working because they were taking care of family members and 18 percent report not working because of illness.

Scope and method

Nine nationally representative surveys were analyzed to create a comprehensive picture of the living situations of families: the 1993 American Housing Survey, the 1992–93 Consumer Expenditure Survey, the 1993–94 Current Population Survey (October 1993 Education Supplement and March 1994 Annual Demographic Supplement), the 1992 High School and Beyond Survey, the 1992–93 National Crime Victimization Survey, the 1993 National Health Interview Survey, the 1993 National Household Education Survey (School Readiness Component and School Safety and Discipline Component), the 1989–90 National Maternal and Infant Health Survey, and the 1992 Survey of Income and Program Participation—Extended Measures of Well-Being topical module. Here, the year of the survey refers to the interview or collection period. Reference periods are noted in the table footnotes and in the survey descriptions presented in appendix A.

In general, results are shown for individuals living in both poor and nonpoor families. Families are defined as including a household head, or reference person, and household members related to the head by blood, marriage, or other legal arrangement. Thus, individuals living alone and unrelated individuals living in the household are not included. An exception is the analysis of the National Crime Victimization Survey; for this survey, results of all households are presented because data on families were not available.

For all surveys but one, the poor are defined as those individuals living in families whose before-cash incomes fall below the official poverty thresholds for their family type.[14] For the Consumer Expenditure Survey, total family expenditures, rather than incomes, are compared to the official thresholds. In each of the other surveys, the definition of family before-tax income is designed to be as close as possible to the definition of income used by the Census Bureau in calculating official poverty rates. The definition of family expenditures is the same as that used in official Bureau of Labor Statistics publications. (See appendix A.) Because of differences in the questions asked and in the definition of income used, it is not possible to match income levels exactly across surveys. However, because poverty rates for individuals in each family type are similar across most of the surveys, any differences are likely to be minimal.[15]

All of the estimates presented in this article were tabulated on a person-weighted, rather than family-weighted, basis.[16] This is in contrast to the procedure followed in most of the previous research cited above. In those other studies, averages across families rather than across individuals are produced when results by family characteristics of the poor and nonpoor are tabulated. With the approach used here, one can make statements about the living conditions of individuals. For example, in 1993, 40.8 percent of all poor individuals living in families lived in homes that their families owned. In most cases, the use of person-weights has little impact on the findings. For example, results from the American Housing Survey and those from the Survey of Income and Program Participation differ only marginally when estimated with person-weights versus family-weights (results not shown). For the Consumer Expenditure Survey and the Current Population Survey, the use of person-weights leads to slightly higher mean total family expenditures and incomes than when family-weights are used; however, the percent distributions of expenditures and income change little.[17]

Person-weights, rather than family-weights, were used here for two reasons. First, person-weighted results for surveys in which the unit of data collection is the family (the American Housing Survey; the Consumer Expenditure Survey; data on income sources, taxes, and benefits in the Current Population Survey; and the Survey of Income and Program Participation) are more directly comparable to results from the surveys in which the unit of data collection is the individual (the remaining five surveys, and the educational attainment and health insurance receipts components of the Current Population Survey). Second, the material living conditions of family members are the focus of this article and weighting each family's characteristics by the number of people in the family gives the best approximation of that concept. There is, however, no adjustment for differences in economies of scale in the household, nor is account taken of differences between adults and children in terms of their needs; this is most relevant for understanding the income and expenditure results. One can say, for example, that the average family income of individuals living in poor families is $8,501; however, this does not mean that each person has full access to this income, but only that the average individual lives in a household with this income. With greater family size, individuals would likely be worse off in a welfare sense than members of smaller families with the same income.

In addition to estimates for individuals living in poor and nonpoor families, results also are produced for two subpopulations: individuals in poor, single-parent families and individuals in families receiving welfare. Poor, single-parent families are defined as families that have incomes below the official poverty threshold and that have an unmarried head of household and at least one child under age 18.[18] Families receiving welfare are defined as families with chil-

dren[19] that report receiving welfare assistance sometime during the reference period. To allow for maximum comparability of results, the following discussion usually focuses on poor, single-parent families because the definition of families receiving welfare varies across some surveys and is absent in others.[20] The accompanying tables present data for all individuals living in families receiving welfare assistance, rather than for persons in poor families that receive assistance. It is not uncommon for families who receive welfare at some point over the reference period to have income above the poverty line measured over the entire interval. For example, job loss or divorce could make a family eligible for welfare assistance at some point in the period, even if the average income over the whole period is above the poverty line. In addition, some programs have eligibility thresholds above the poverty line. Because results are similar for both groups, we present tabulations for only one. In those cases in which results are substantially different, results for poor families receiving welfare also are noted.

Percent distributions of persons and of mean income and expenditures of families are presented for four family types: nonpoor families; poor families; poor, single-parent families; and families receiving welfare.

A portrait of the poor

The results for individuals living in poor and nonpoor families are divided into seven categories: income sources, spending patterns, housing, consumer durables and utilities, crime and neighborhood, health and nutrition, and education. In the first four categories, the unit of data collection is the family; thus, results are presented by family chracteristic. For example, the mean total expenditures of poor families is $11,596. The unit of data collection for the last two categories is the individual in general; thus, results are for the average individual of the relevant population. For example, 27 percent of poor children aged 5 to 7 years have fewer than 10 books. The crime and neighborhood category has measures of both family (or household) and individual characteristics. The final table presents an "index of deprivation" for individuals that reflects several family characteristics.

Summary tables of all variables discussed in the text are provided for each category. The source survey for each variable is noted in each table. All differences discussed below are statistically significant at the 1-percent level.

Income sources. Poor families differ from nonpoor families both in the levels and sources of their incomes. (See table 1.) The average poor person lives in a family whose income is about a sixth as much as the family income of the average nonpoor person ($8,501 versus $55,394). For the single-parent poor and those in families receiving welfare, average family incomes are $6,794 and $12,678.[21]

Table 1. Income and selected taxes and transfers of families in 1993

Item	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
Current Population Survey				
Total before-tax family income	$55,394	$8,501	$6,794	$12,678
Percent of income from:				
Wages and salaries	78.9	50.0	35.8	46.0
Self-employment earnings	6.2	1.7	.6	1.3
Public assistance/ welfare	.2	20.3	39.8	34.6
Selected taxes and transfers:				
Federal income tax	$6,878	$15	$7	$268
State income tax	1,805	19	7	95
FICA payroll tax	3,093	370	187	446
Earned income tax credit	116	484	356	321
Public assistance/ welfare	115	1,727	2,701	4,381
Food stamps	65	1,392	1,871	2,241

NOTE: Family-level data, person-weighted. Data collected in March 1994, with 1993 as the reference period.

The average nonpoor person lives in a family that receives 85.1 percent of its income from wages, salaries, and self-employment earnings, compared to 52 percent for the poor and only 36 percent for those in poor, single-parent families. A larger proportion of the income of poor families comes from public assistance and welfare: 20 percent, compared with only 0.2 percent for the nonpoor. For those in poor, single-parent families, 40 percent of family income comes from public assistance and welfare.

Not surprisingly, poor families pay less in taxes and receive more in government transfers than do the nonpoor. On average, the Earned Income Tax Credit fully offsets the Federal and State income and FICA payroll taxes for the family of the average poor person. Additional taxes, such as sales taxes, are not included in these calculations. The family of the average nonpoor person pays an estimated $11,660 in Federal and State income and FICA taxes (less the Earned Income Tax Credit). The average poor person lives in a family that receives $1,727 in public assistance and welfare and $1,392 in food stamps. For those in poor, single-parent families, welfare and food stamp transfers are $2,701 and $1,871 ($4,381 and $2,241 for families receiving welfare).

Spending patterns. In this section, expenditure data from the Consumer Expenditure Survey, in conjunction with the official poverty thresholds, are used to determine if an individual lives in a poor family. Individuals defined as poor using expenditure data may not have the same family charac-

teristics as individuals identified as income-poor in other sections of this article.[22] Poverty rates, measured using expenditure data, are generally lower than in the other surveys, although trends across family types are similar.

Differences between the poor and the nonpoor in average family expenditures are smaller than differences in average family incomes. (See table 2.) While average family incomes of the non-income-poor are over 6 times as large as those for the income-poor ($55,394 versus $8,501), average family expenditures of the non-expenditure-poor are only about 3 times as large as those for the expenditure-poor ($36,926 versus $11,596). For the single-parent poor and those in families receiving welfare, average family expenditures are $9,172 and $16,280.[23]

According to the data presented in tables 1 and 2, total family expenditures exceed total before-tax family income for all but the nonpoor. Transfer benefits, such as food stamps, are not reflected in the income figures, nor are taxes paid by families. When these are accounted for in income, the spending power of poor families increases. For example, if the value of food stamps and the Earned Income Tax Credit are added to before-tax income, and taxes paid are subtracted, the ratio of expenditures to income becomes smaller, falling from 1.36 to 1.16 for poor families, from 1.35 to 1.04 for single-parent poor families, and from 1.28 to 1.13 for welfare families. The fact that expenditures still exceed income is likely related to how expenditures are defined (appendix A), possible underreporting of income compared to expenditures, differences in the types of families that are considered poor on the basis of income versus expenditures, and differences in income and expenditure distributions.[24]

Table 2. Expenditures by families in 1992–93

Expenditures	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
Consumer Expenditure Interview Survey				
Total family expenditures	$36,926	$11,596	$9,172	$16,280
Percent of expenditures for:				
Food	15.6	29.8	34.3	25.5
Shelter	18.6	22.3	25.5	24.0
Utilities	6.9	14.0	13.7	10.8
Apparel	4.9	5.1	6.7	6.0
Transportation	20.1	10.3	6.4	13.3
Health care	5.4	2.8	1.2	2.2
Entertainment	5.4	2.8	2.8	3.9
Personal insurance and pensions	10.9	5.4	2.1	4.8

NOTE: Family-level data, person-weighted. Quarterly data collected from January 1992 to December 1993, with reference period from October 1991 to November 1993. Results are presented for expenditure nonpoor and poor families.

The composition of spending also varies by family type. Not surprisingly, a greater share of poor people's total expenditures is allocated to purchasing items frequently considered necessities: food, shelter, utilities, and apparel. Seventy-one percent of poor persons' family expenditures are spent on these necessities, compared to 46 percent for the nonpoor. For those in expenditure-poor, single-parent families, an even larger share of total family expenditures, 80 percent, is spent on necessities. Spending a larger share of total expenditures on necessities leaves a smaller portion for other items such as transportation, health care, personal insurance and pensions, and entertainment (including admissions to events, television, toys, and pets).

Housing. Rates of homeownership vary dramatically across both income levels and family types. (See table 3.) Seventy-eight percent of the nonpoor live in homes that their families own, compared with only 41 percent of the poor. For those in poor, single-parent families and those in families receiving welfare, the homeownership rate is even lower, 24 percent. Thus, the nonpoor are 3 times more likely to live in homes they own than are those in poor, single-parent families.

The main reason for the difference in ownership rates between all individuals in poor families and individuals in poor, single-parent families is the high rate of ownership among individuals in poor, elderly families, 63 percent of whom live in homes they own (results not shown). In addition, 51 percent of people in poor two-parent families live in homes they own.

The poor are at greater risk of being evicted from their home or apartment, with eviction rates 5 times as high as those of the nonpoor. While only 0.4 percent of the nonpoor were evicted in the previous 12 months, 2.1 percent of the poor, 2.4 percent of the single-parent poor, and 2.6 percent of those in welfare-recipient families lost their homes. Twenty-six percent of the poor and 29 percent of those receiving welfare were in families that did not pay the full rent or mortgage at some point in the survey year. The rate for the nonpoor was much lower, only 7.5 percent.

Those in poor and nonpoor families differ according to the characteristics and condition of their housing as well. For example, poor individuals are more than twice as likely to live in crowded housing; 19 percent of those in poor families live in housing with more than one person per room, compared to only 4 percent of the nonpoor. Similarly, those in poor families are about twice as likely to live in housing with upkeep problems as are the nonpoor. Eleven percent of the poor have housing with moderate upkeep problems and 4 percent have severe upkeep problems. Among persons living in nonpoor families, 4 percent have housing with moderate problems and 2 percent have severe problems.[25]

Consumer durables and utilities. For some major consumer

Table 3. Housing characteristics in 1992 and 1993

[Percent of persons]

Housing characteristic	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
American Housing Survey				
Owned home	77.6	40.8	24.3	24.9
More than one person per room (crowding)	4.2	19.2	16.7	23.6
Moderate upkeep problems	3.3	11.3	12.5	11.9
Severe upkeep problems	1.7	3.8	4.4	4.3
Survey of Income and Program Participation				
Conditions in home unsatisfactory enough that one would like to move	9.5	26.6	33.5	34.5
In the past 12 months, there was a time when the household:				
Did not pay the full amount of the rent or mortgage	7.5	25.9	26.0	29.1
Was evicted from home/apartment for not paying rent/mortgage	.4	2.1	2.4	2.6

NOTE: Family-level data, person-weighted. American Housing Survey data were collected from July through December 1993, with 1993 as the reference period. Survey of Income and Program Participation data were collected from September through December of 1992, with these same months as the reference period.

Table 4. Durable items and utilities1992 and 1993

[Percent of persons]

Durable or utility item	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
Survey of Income and Program Participation				
Items currently in the home or building that are in working condition:				
Washing machine	92.7	71.7	67.5	66.3
Clothes dryer	87.3	50.2	43.9	44.8
Refrigerator	99.5	97.9	98.1	98.2
Color television	98.5	92.5	92.1	92.2
Stove	99.5	97.7	97.3	98.0
Air conditioning	71.9	49.6	46.0	40.7
Telephone	97.2	76.7	69.9	67.5
In the past 12 months, there was a time when the household:				
Did not pay the full amount of the gas, oil, or electricity bill	9.8	32.4	37.0	40.7
Had service turned off by the gas, electric, or oil company	1.8	8.5	10.1	10.5
Had telephone service disconnected because payment was not made	3.2	16.0	18.0	20.3
American Housing Survey				
Car or truck owner	97.2	76.8	64.1	65.3

NOTE: Family-level data, person-weighted. Survey of Income and Program Participation data collection and reference periods are September through December 1992. American Housing Survey data were collected between July and December 1993, with 1993 as the reference period.

durables, the poor and nonpoor differ little in access. (See table 4.) Almost all of the poor, like the nonpoor, have access to refrigerators and stoves: 98 percent versus 99.5 percent. Also, 92 percent of people in poor and in single-parent poor families and 98 percent of people living in nonpoor families have access to a color television.[26]

For several other consumer durables, the poor have considerably lower rates of access, although for most of the items measured, their access rates are still above 50 percent. For example, 77 percent of the poor and 70 percent of the single-parent poor have access to a telephone, compared with 97 percent of the nonpoor. Similarly, 72 percent of the nonpoor live in families that have air conditioning (central or room), while 50 percent of those in poor families and 46 percent of those in poor, single-parent families do. People in poor families also are considerably less likely to have access to washing machines and apparel dryers. (Because the Survey of Income and Program Participation asks whether the family has these items in either the home or the building, actual ownership rates of some items are likely lower.) About 77 percent of the poor and 64 percent of those in poor, single-parent families have a household car or truck available, compared to 97 percent of the nonpoor.

Finally, the poor are more likely to have problems paying utility bills and to have services cut off. The poor and the single-parent poor are more than 3 times as likely as the nonpoor to have not paid their utility bill at some time during a 12-month period. The poor are more than 4 times as likely to have their utilities cut off, while the single-parent poor are more than 5 times as likely. Finally, the poor are 5 times as likely as the nonpoor to have their telephone service disconnected because payments were not made, while the single-parent poor are 6 times as likely.

Crime and neighborhood. Individuals who live in poor households,[27] especially those in poor, single-parent households, are much more likely to be victims of crime than are those who live in other households. (See table 5.) Those living in poor households are twice as likely as the nonpoor to be victims of violent crimes (rape, assault, and robbery); those in poor, single-parent households are more than 3 times as likely.

The difference in the incidence of personal theft between the poor and the nonpoor is not statistically significant, but those in poor, single-parent households again suffer crimes at a higher rate. Rates of theft for the nonpoor are 60 per 1,000 people per year, compared to 66 for the poor and 85 for those in poor, single-parent households. The rates of incidence for household crimes (burglary, household theft, or motor vehicle theft) are high for both the poor and the poor in single-parent families. Poor households are almost one and a half times as likely and poor, single-parent households are more than twice as likely as nonpoor households to suffer these crimes.

Consistent with the statistics on crime victimization, the poor are less likely to report living in safe neighborhoods. Ninety-three percent of the nonpoor live in families whose family head reports that the neighborhood is safe from crime, compared to only 78 percent of the poor, 72 percent of those in poor, single-parent families, and 67 percent of those in families receiving welfare. Similarly, the poor are more likely to live in families whose head reports being afraid to go out[28]: this was the case for only 9 percent of the nonpoor, compared with 19.5 percent of the poor, 21 percent of those in poor, single-parent families, and 25 percent of those in families receiving welfare.

Overall, the poor are more likely to express dissatisfaction with the communities in which they live: 18 percent of the poor and 25 percent of those in poor, single-parent families are in households that report that their neighborhood is bad enough that they would like to move, compared with only 7 percent of the nonpoor. Similarly, 15 percent of the poor and 20 percent of persons in poor, single-parent families are in families that report that community services in their neighborhoods are bad enough that they would like to move, compared with only 6 percent of the nonpoor.

Given that these measures of safety and neighborhood quality are subjective, it is plausible that differences would be greater if measured on an absolute scale, because people tend to adjust their expectations according to their experiences.[29]

Health and nutrition. Poor mothers are much more likely than are nonpoor mothers to experience problems in birth and pregnancy. (See table 6.) The number of infant deaths within the first year is higher: 13.5 per 1,000 live births for poor mothers and 14.6 for poor, single mothers, compared to 8.3 for nonpoor mothers. Similarly, the percentage of live births with low weight and the rate of preterm births is about twice as high for poor and for single, poor mothers as for nonpoor mothers.[30]

Poor and nonpoor mothers also differ in quality of prenatal care. The Centers for Disease Control defines inadequate prenatal care as lack of prenatal doctor visits in the first trimester, a strong predictor of birth outcomes. Forty-three percent of poor mothers and 49 percent of poor, single mothers reported no prenatal doctor visits in the first trimester, compared with only 16 percent of nonpoor mothers.

Poor children are more likely to have had a disability or health impairment lasting more than 6 months: 24 percent of poor children (aged 3 through 7) suffered such problems, compared to 18 percent of nonpoor children. Similarly, 25 percent of poor children in single-parent families have had a disability.

Poor children also are less likely to have a particular clinic, health center, or doctor's office that they usually visit when sick, and are more likely to use an emergency room as their usual clinic, if they have one. Twenty-three percent of poor children usually use an emergency room or have no usual clinic when sick, compared to only 8 percent of nonpoor

Table 5. Characteristics of crime and neighborhood conditions in 1992

Characteristic	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
National Crime Victimization Interview Survey				
Violent crimes, per 1,000 people per year	26.15	53.68	87.50	.....
Thefts, per 1,000 people per year	59.69	66.01	84.66	.....
Household crimes, per 1,000 households per year	143.29	207.10	317.59	.....
Survey of Income and Program Participation (percent of persons)				
Neighborhood safe from crime	93.0	78.1	72.4	67.4
Afraid to go out	8.7	19.5	20.7	24.6
Neighborhood condition bad enough that one would like to move	6.5	18.4	24.5	27.5
Community services bad enough that one would like to move	5.5	15.1	19.7	20.5

NOTE: For the National Crime Victimization Interview Survey, results are presented for households or persons living in households, rather than for families. Family- and household-level data are person-weighted, except for data from the National Crime Victimization Interview Survey. Person-level data are presented for crimes and thefts. National Crime Victimization Interview Survey data were collected between January 1992 and June 1993, with 1992 as the reference period. Survey of Income and Program Participation data collection and reference periods are September through December 1992.

children. Poor and nonpoor children do not differ as to whether they have a usual place to which they go for routine care.

Poor and nonpoor children under age 18 do not differ significantly in terms of whether they had visited a doctor in the past year, perhaps because medicaid is available to poor children. However, poor children are less likely to see a dentist regularly. Sixty-two percent of nonpoor children have seen a dentist within the last year, compared with only 41 percent of the poor.

Differences also exist in the presence and source of health insurance coverage. Thirteen percent of those in nonpoor families, compared with 29 percent of those in poor families, are not covered by health insurance at any time during the year. Those in poor, single-parent families actually have a lower rate, 19 percent, than do all poor families. The higher coverage of the single-parent poor most likely results from their access to medicaid. The poor are less likely to be covered by private health insurance and are more likely to be covered by medicaid for all or part of the year. Only 24 percent of the poor (17 percent of those in poor, single-parent families) have private health insurance, while 46 percent are covered by medicaid (68 percent of the single-parent poor). In contrast, 78 percent of the nonpoor have private health insurance and only 6 percent are covered by medicaid.

Finally, the poor are more likely to live in families that report sometimes or often not having enough food to eat. Ninety-nine percent of the nonpoor live in families where the head reports having enough food to eat, compared to 89 percent of persons in poor families and 87 percent of persons in poor, single-parent families.

Education. Poor students are more likely to have repeated a grade and to have been expelled from school. (See table 7.) Thirty-one percent of poor youth (grades 3 through 12) are reported by their parents to have repeated a grade, which is twice the rate for nonpoor students, 15 percent. Poor students are more than 3 times as likely as are nonpoor students to be expelled from school, 3.4 percent versus 1.0 percent. Also,

Table 6. **Health characteristics of persons in 1988, 1992, and 1993**

Characteristic	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
National Maternal and Infant Health Survey				
Number per 1,000 live births:				
Infant deaths in first year	8.3	13.5	14.6	14.3
Percent of live births:				
Low birth weight (less than 2,500 grams)	5.5	10.2	12.8	11.6
Preterm (gestation under 37 weeks)	7.3	13.0	15.2	15.1
Percent of mothers:				
Inadequate prenatal care	15.6	43.1	48.8	42.1
National Household Education Survey				
Percent of children aged 3 to 7 years:				
Is there a particular clinic, health center, doctor's office, or other place the child is usually taken when *sick?*				
Yes, an emergency room	5.3	14.7	17.2	.....
No	3.1	8.3	6.1	.....
Child has a usual place where they are taken for *routine* care	41.8	40.1	40.2	.....
Child ever had one or more disabling conditions	17.5	23.8	24.7	.....
National Health Interview Survey				
Percent of children under age 18 who:				
Visited the doctor in the past year	84.0	80.0	.....	.....
Visited the dentist in the past year	62.0	41.0	.....	.....
Current Population Survey				
Percent of persons:				
Covered by private health insurance for all or part of the year	80.0	21.1	16.0	.....
Covered by medicaid for all or part of the year	6.1	54.5	71.6	.....
Not covered by health insurance at any time during the year	12.1	26.8	18.0	.....
Survey of Income and Program Participation				
Percent of persons living in families that had enough food in the past 4 months	98.6	89.0	86.9	85.8

NOTE: Data are for individuals, except that the Survey of Income and Program Participation results are based on family-level data, person-weighted. National Maternal and Infant Health Survey data were collected in 1989 and 1990, with 1988 as the reference period. Current Population Survey data were collected in March 1994, with 1993 as the reference period. National Household Education Survey data were collected from January through April 1993; the reference period is the period since the beginning of the 1992–93 school year, or the current period. Survey of Income and Program Participation data collection and reference periods are September through December 1992. National Health Interview Survey data were collected from January through December 1993, with the 12 months prior to the interview as the reference period.

Table 7. Educational characteristics of persons in 1992–93

[In percent of persons]

Characteristic	Nonpoor families	Poor families	Single-parent families
Current Population Survey—Education Supplement			
Percent of children under age 15:			
Children (in school) who use a computer at school	63.3	54.8	51.9
Children who use a computer at home	23.0	3.2	2.5
National Household Education Survey			
School Safety and Discipline Component			
Percent of students grades 3 to 12:			
Student has repeated a grade since starting school	15.4	31.3	31.6
Student has been expelled from school (at some point)	1.0	3.4	3.5
Percent of students grades 6 to 12:			
Student thinks he/she will attend school after high school	96.1	90.1	90.2
Student thinks he/she will graduate from a 4-year college	89.7	82.7	82.3
School has security guards	28.8	43.3	46.2
School has metal detectors	4.1	11.5	12.8
School Readiness Component			
Percent of prekindegarten children:			
Child not enrolled in preschool or Head Start	5.8	8.6	7.1
Child enrolled in public (not private) preschool/Head Start program	31.0	75.5	78.2
Child attends Head Start program	11.1	48.2	54.5
Child attends a preschool program (other than Head Start)	86.2	52.9	49.3
Percent of children aged 5 to 7:			
Child has fewer than 10 books	5.4	27.2	28.5
Child watches more than 3 hours of television per day	32.9	49.4	52.3
Child watches more than 4 hours of television per day	15.1	29.2	30.8
Child moved three or more times between birth and 5th birthday	19.5	28.0	27.9
High School and Beyond Survey			
Percent of persons in 1980 sophomore cohort who:			
Attended either a 2- or a 4-year college	69.6	48.3	47.6
Completed requirements for a bachelor's degree	32.6	16.9	13.2

NOTE: Data are for individuals. Current Population Survey—Education Supplement data collection and reference periods are October 1993. National Household Education Survey data were collected from January through April 1993; the reference period is the period since the beginning of the 1992–93 school year or the current period. High School and Beyond Survey data were collected in 1992 and early 1993, with reference periods of fall of 1980 through spring of 1992 for edcuation questions and 1991 for total household income before taxes.

poor students are considerably more likely to attend schools with security guards and metal detectors.

Both poor and nonpoor students have high expectations that they will attend and graduate from college. Ninety percent of poor students expect to attend school after high school and 83 percent anticipate graduating. Ninety-six percent of nonpoor students expect to continue their education, and 90 percent expect to graduate college. On the other hand, actual attendance and graduation rates exhibit differences. Forty-eight percent of poor students and 70 percent of nonpoor students attend either a 2- or 4-year college; 17 percent of poor students and 33 percent of nonpoor students complete a bachelor's degree.[31]

Home computer use by children (aged 14 and younger) varies dramatically by income, although it was not prevelant for either the poor or the nonpoor. Twenty-three percent of children in nonpoor families use a computer at home, compared with only 3 percent of children in poor families and 2.5 percent of children in poor, single-parent families. Children have more equitable use of computers at school: 63 percent of nonpoor students compared with 55 percent of poor students and 52 percent of students in poor, single-parent families use a computer at school.

Most poor and nonpoor prekindergarten children are enrolled in a nursery or preschool program; only 9 percent of poor and 6 percent of nonpoor children did not attend such a program. The poor are much more likely to attend a Head Start program or other public preschool.

Young children (aged 5 to 7) in poor families watch more television than do those in nonpoor households and have fewer books. Almost one-third of them watch more than 4 hours of television per day, compared to only 15 percent of nonpoor children. Twenty-seven percent of poor children and 29 percent of poor children in single-parent families have fewer than 10 books, compared to only 5 percent of nonpoor children.

Finally, poor children change residence more often. Twenty-eight percent of poor children aged 5 to 7 move 3 or

Table 8. Overall deprivation in 1992

Number of deprivations[1]	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
Survey of Income and Program Participation				
Percent of persons in families with:				
No deprivations	87.0	44.9	43.2	34.6
One deprivation or more	13.0	55.1	56.8	65.4
Two deprivations or more	3.2	26.9	29.8	33.6
Three deprivations or more	1.0	11.8	12.9	14.6
Four deprivations or more	.3	4.0	4.5	4.9
Five deprivations or more	.1	1.1	1.1	1.7
Six deprivations or more	.0	.1	.1	.1
Seven deprivations or more	.0	.0	.0	.0
Average number of deprivations	.19	.99	1.06	1.21

[1]Deprivation = Evicted in past year;
Utilities disconnected in past year;
Telephone disconnected in past year;
Housing with upkeep problems;
Not enough food in past 4 months;
Crowded housing (more than 1 person per room);
No refrigerator;
No stove;
No telephone.

NOTE: Family-level data, person-weighted. Survey of Income and Program Participation data collection and reference periods are September through December 1992.

more times before their fifth birthday, compared to 20 percent of nonpoor children. The pattern is similar for older children as well.

Overall deprivation. The previous discussion provides information on the distribution of various assets, consumption commodities, and income. However, correlations across measures are not apparent. Families with limited resources may choose different allocations of commodities in order to make ends meet. Examining one dimension of living conditions at a time probably understates the extent to which families forego important other elements of material well-being.

To address this issue, an index of deprivation was created using data from the Survey of Income and Program Participation. (See table 8.) Deprivations were defined on nine family characteristics: evicted in the past year, gas or electricity turned off in the past year, phone disconnected in the past year, did not have enough food in the past 4 months, lives in crowded housing (more than one person per room), lives in housing with moderate or severe upkeep problems,[32] lives without a refrigerator, lives without a stove, and lives without a telephone. For each individual, the number of deprivations reported is the total number of these characteristics reported by the individual's family. The number of deprivations is between 0 and 9 for each individual. Each of these hardships was chosen because it is relatively rare in the overall U.S. population and represents an element of material well-being important in day-to-day life in this country that has been forgone.[33]

The majority of the poor live with at least one of these deprivations: 55 percent of the poor, compared with 13 percent of the nonpoor. Similarly, 27 percent of the poor face two or more deprivations, compared with only 3 percent of the nonpoor. Fifty-seven percent of those in poor, single-parent families suffer at least one deprivation and 30 percent live with two or more; 65 percent of those in families receiving welfare suffer at least one deprivation and 34 percent live with two or more. Overall, the average number of deprivations for the poor, the poor in single-parent families, and those in families receiving welfare is 5 to 6 times higher than for the nonpoor.

Some caveats

There are several factors that may lead to over- or underestimates of the differences in living conditions between the poor and nonpoor. For example, the measures presented here may overstate the actual deprivation of the poor because differences in possessions may reflect differences in preferences rather than differences in resources. These data do not permit one to distinguish, for each difference in living conditions identified here, the relative importance of choice versus limited resources. Moreover, an individual's lack of interest in material goods would be reflected in lower expenditures and fewer possessions. This lack of interest might also translate into lower income.

The use of short-term measures of poverty, such as those employed in this study, probably understates the relationship between persistent poverty and various outcomes. Roughly half of those who are poor in one year will remain poor for some years to come.[34] Some past studies have found that differences are more pronounced for the persistently poor than for those who are poor in only one year. For example, poverty is associated with deficits in children's cognitive development; the correlation is roughly twice as great for children who are in poor families 3 years in a row as for those poor a single year.[35] Jane E. Miller and Sanders Korenman find that differentials in children having low height for their age (stunting) and low weight for their height (wasting) also are greater for those living in long-term rather than short-term poverty.[36]

An understatement of the difference between poor families and the general population is likely to result because, in accordance with standard procedure, negative and zero

income and expenditure values were considered to be valid responses and were included in the calculation for the below-poverty populations. Negative incomes often are due to business losses or capital losses, and thus are a poor indicator that a family is poor. Calculations from the American Housing Survey suggest that excluding families that report negative or zero annual incomes from the poverty population increases the gap between the poor and the nonpoor for most variables. For example, homeownership among persons in poor families falls from 41 percent to 36 percent when such persons are excluded. Persons in families with negative or zero income have relatively high homeownership rates, 64 percent.

The difference in living conditions also may be understated due to a lack of adjustment for quality. If, for example, the durables owned by the poor were older or of lower quality, the differences between poor and nonpoor families would be understated.

Finally, certain populations, such as the homeless or persons who are institutionalized, are rarely included in the sample design of Federal household surveys such as these. It is likely that the most severe deprivation is concentrated among some of these unrepresented groups. If so, the results presented here understate the differences between the poor and the nonpoor. To more accurately identify the poor, changes in sample design and survey instruments need to be developed to specifically get at these vulnerable populations.

THE RESULTS PRESENTED IN THIS ARTICLE paint a broad picture of the living conditions of individuals in American families across a variety of measures of well-being, and allow comparisons across family types and income levels. Clear differences between the poor and nonpoor are evident. However, the analysis makes it clear that generalizations across the entire poverty population can be misleading. For example, homeownership rates for people in poor, single-parent families and for people in families receiving welfare are only three-fifths the rate for those in all poor families.

It is also important to note that the findings do not necessarily reflect a causal relationship between income and living conditions. By definition, raising a family's income will end its poverty. At the same time, higher income may not remove the differences in the living conditions or deprivations that have been identified. For example, if low parental education is highly related to both low income and a low probability that a child will attend college, then raising family income will not necessarily lead to an increase in the likelihood that the child will attend college. Determining the causality of these relationships is a subject for further study.

The current study can be extended along a number of dimensions. While data from a large number of surveys are analyzed here, many important aspects of living conditions remain unmeasured. For example, measures of assets, access to credit, employment patterns, homelessness, environmental hazards, accumulation of "cultural capital" such as connections to social networks, and more objective characteristics of neighborhoods could be included in future research. Further separating the family categories along other dimensions such as length of poverty spells, income to poverty threshold ratios, race, ethnicity, and geographic region would be useful. Similarly, different resource measures than before-tax cash income or expenditures and different thresholds than the official poverty threshold could be used. For greater progress to be made towards understanding the poor, these and other dimensions also need to be examined. □

Footnotes

AUTHORS' IDENTIFICATION: Maya Federman is a doctoral candidate in the Department of Economics, Harvard University; at the time this study was prepared, she was serving with the Council of Economic Advisors. Thesia I. Garner is a senior research economist with the Bureau of Labor Statistics. Kathleen Short is Chief of the Poverty and Health Statistics Branch, U.S. Bureau of the Census. W Boman Cutter IV, formerly a research assistant with the U.S. Department of the Treasury, is currently serving with the Peace Corps. John Kiely is Director of Housing and Demographic Analysis, with the National Center for Health Statistics. David Levine is an associate professor in the Haas School of Business, The University of California at Berkeley; at the time this study was prepared, he was serving with the Council of Economic Advisors. Duane McGough is Chief of the Infant and Child Health Studies Branch, U.S. Department of Housing and Urban Development. Marilyn McMillen is a senior statistician at the National Center for Education Statistics.

ACKNOWLEDGEMENTS: Comments, statistical assistance, and direction from Richard Bavier and John Greenlees were integral to the project. Additional comments and statistical assistance were provided by Stacy Bondanella, Paul Burke, Kathryn Chandler, Aurora D'Amico, Barbara Hawkins, Tom Kane, Chuck Nelson, Joanne Pascale, Bill Passero, Phil Rones, Anna Sanders, Kathryn Silbersiepe, Beth Schlaline, Martina Shea, Stephanie Shipp, Toby Stickler, Wolf Weber, and Barbara Wootton.

[1] This article is drawn from a larger report containing results for additional variables and family types. The complete tables are available in Maya Federman and others, "Living Conditions of Individuals Living in Poor and Non-Poor Families," Institute of Industrial Relations Working Paper No. 64 (The University of California at Berkeley, May 1996).

[2] The following works, although not referenced separately, also provided background for the present study: Robert Cage, Thesia I. Garner, Richard Miller, William Passero, and Elizabeth Reise, "Data Comparability Across Federal Household Surveys," Working Document (Bureau of Labor Statistics, 1992); David M. Cutler and Lawrence F. Katz, "Macroeconomic Performance and the Disadvantaged," *Brookings Papers on Economic Activity*, no. 2 (Washington, The Brookings Institution, 1991); Klaas de Vos and Thesia I. Garner, "An Evaluation of Subjective Poverty Definitions: Comparing Results from the U.S. and the Netherlands," *Review of Income and Wealth Series 37*, no. 3, September 1991; Hiram E. Fitzgerald, Barry M. Lester, and Barry Zuckerman, eds., *Children of Poverty: Research, Health Care, and Policy Issues* (New York, Garland, 1995); Aletha C. Huston, ed., *Children in Poverty: Child Development and Public Policy* (New York, Cambridge University Press, 1991); Aletha C. Huston, Vonnie McLoyd, and Cynthia

Garcia Coll, "Children and Poverty: Issues in Contemporary Research," *Child Development* (Special Issue: "Children and Poverty"), vol. 65, no. 2, 1994, pp. 275–82; Paul A. Jargowsky, "Beyond the Street Corner: The Hidden Diversity of Ghetto Neighborhoods," mimeo. (University of Texas at Dallas, 1995); Christopher Jencks and Kathryn Edin, "Do poor women have a right to bear children?" *The American Prospect*, Winter 1995, pp. 43–52; Susan Mayer and Christopher Jencks, "Recent Trends in Economic Inequality in the United States: Income versus Expenditure versus Material Well-being," in Dimitri B. Papadimitriou and Edward N. Wolff, eds., *Poverty and prosperity in the USA in the late twentieth century* (New York, St. Martin's Press, 1993); C.T. Ramey, D.M. Bryant, B.H. Wasik, J.J. Sparling, K.H. Fendt, and L.M. LaVange, "The Infant Health and Development Program for low birth weight premature infants: Program elements, family participation, and child intelligence," *Pediatrics*, March 1992, pp. 454–56; Martina Shea, "Dynamics of Economic Well-Being: Poverty, 1990–1992," *Current Population Reports* Series P70–42 (Bureau of the Census, 1995); Peter Townsend, *Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living* (Harmondsworth, England, Penguin Books, 1979); and Peter Townsend, *The Internation Analysis of Poverty* (Hemel Hempstead, England, Harvester–Wheatsheaf, 1992).

[3] The National Academy of Sciences Poverty Panel recently released a report recommending several changes to the official poverty measure, including adjusting for taxes and transfers. See Constance F. Citro and Robert T. Michael, eds., *Meauring Poverty: A New Approach* (Washington, National Academy Press, 1995).

[4] David M. Cutler and Lawrence F. Katz,"Rising Inequality: Changes in the Distribution of Income and Consumption in the 1980's," *American Economic Review*, May 1992, pp. 546–51.

[5] Daniel T. Slesnick, "Gaining Ground: Poverty in the Postwar United States," *Journal of Political Economy*, February 1993, pp. 1–38.

[6] Robert Rector, "How the Poor Really Live: Lessons for Welfare Reform," Heritage Foundation Backgrounder No. 875 (The Heritage Foundation, Jan. 31, 1992).

[7] Arloc Sherman, *Wasting America's Future: The Children's Defense Fund Report on the Costs of Child Poverty* (Boston, Beacon Press, 1994).

[8] Susan Mayer and Christopher Jencks, "Has Poverty Really Increased Among Children Since 1970?" Working Paper 94–14 (Northwestern University, Center for Urban Affairs and Policy Reaseach, 1995).

[9] William D. Passero, "Spending Behavior of Families Receiving Welfare or Public Assistance, 1992–94," Paper presented at the 42nd Annual Conference of the American Council on Consumer Interests, Nashville, TN, March 27–30, 1996. This paper is available from its author at the Bureau of Labor Statistics, Washington, DC.

[10] Welfare is defined as including Aid to Families with Dependent Children, general assistance, emergency assistance, Cuban Refugee Assistance, Indian Assistance, Alaska Longevity Pay, and job training grants, such as Job Corps.

[11] To be considered working, the member had to be over 15 years of age and employed full time or part time; whether the member was paid for working was not relevant for Passero's definition. His analysis is limited to consumer units with a reference person under the age of 65 years.

[12] Mark Lino, "Income and Spending of Poor Households with Children," *Family Economics and Nutrition Review*, vol 9, no. 1, 1996.

[13] About 9 percent of all households with children were classified as poor using this definition, compared to the 16 to 18 percent of families with children classified as poor by the Census Bureau for the same period.

[14] Thresholds are adjusted for age, family size, and number of children. (Poverty rates are published annually in U.S. Department of Commerce, *Poverty in the United States*, Series P–60–185.)

[15] For each survey, appendix B lists poverty rates for individuals and descriptions of the calculation of poverty status.

[16] Person-weights are available in the Survey of Income and Program Participation. For the American Health Survey, the Consumer Expenditure Survey, and the Current Population Survey, person-weights were developed using the population household or consumer-unit weight, multiplied by the number persons in the family.

[17] See tables C-1 and C-2 in appendix C.

[18] The Consumer Expenditure Survey, the Current Population Survey, and the Survey of Income and Program Participation include only families in which the child is related to the household head by birth or legal arrangement.

[19] The family had to have at least one child under age 18.

[20] For this study, welfare for the Consumer Expenditure Survey is defined to include Aid to Families with Dependent Children, general assistance, emergency assistance, Cuban Refugee Assistance, Indian Assistance, Alaska Longevity Pay, job training grants such as Job Corps, and supplemental security income; the American Health Survey defines welfare as including Aid to Families with Dependent Children, general assistance, and supplemental security income; the Current Population Survey includes Aid to Families with Dependent Children and public assistance; and the National Maternal and Infant Health Survey and the Survey of Income and Program Participation includes only Aid to Families with Dependent Children. A comparable measure of welfare assistance is not available in the other surveys.

[21] For those individuals who both are poor and receive welfare, family income is $7,769, of which 56.0 percent comes from public assistance and welfare (based on person-weighted results).

[22] Garner, Johnson, and Kokoski found that 52 percent of the income-poor (based on before-tax income) had total consumer unit expenditures less than the poverty line, while 61 percent of expenditure-poor consumer units had incomes below the thresholds. Their results are based on Consumer Expenditure Survey data from 1982–84. (See Thesia I. Garner, David S. Johnson, and Mary F. Kokoski, "Experimental Consumer Price Index for the Poor" [BLS Working Paper, Bureau of Labor Statistics, 1996]. This paper is available from the authors at the Bureau of Labor Statistics.) Rogers and Gray found similar results when they examined quintiles of income and expenditure outlays. (See John Rogers and Maureen Gray, "CE data: quintiles of income versus quintiles of outlays," *Monthly Labor Review*, December 1994, pp. 32–37.)

[23] It is important to point out that these are arithmetic means, and not medians or modes. If the distribution of income is positively skewed, and that of expenditures is negatively skewed, higher mean expenditures would result. Skewness is not examined for in this study, however.

[24] Family expenditures for those individuals who both are poor and receive welfare are $11,012, and the share spent on necessities is 78.6 percent (based on person-weighted results).

[25] The U.S. Department of Housing and Urban Development defines moderate (severe) upkeep problems as the presence of 3 (5) or more of the following 6 problems: broken plaster or peeling paint, rats or mice, cracks in the wall, pipes or plumbing leaks, dents or holes in the floor, and roof, window, or basement leaks.

[26] Mayer and Jencks note that color televisions are a low-cost form of entertainment for poor families. See Susan Mayer and Christopher Jencks, "Has Poverty Really Increased."

[27] The National Crime Victimization Survey did not have measures for families available; thus, crime results are presented for individuals in poor and nonpoor households.

[28] The respondent reports that, in the past month, there were times when the he or she wanted to go somewhere but stayed home instead because he or she thought it would be unsafe to leave home.

[29] R. Janoff-Bulman, "Lottery Winners and Accident Victims: Is Happiness Relative?" *Journal of Personality and Social Psychology*, vol. 36, no. 8, pp. 917–27; and Robert H. Frank, "Frames of Reference and the Quality of Life," *American Economic Review*, May 1989, pp. 80–85.

[30] The income differentials in birth outcomes hold across age groups.

[31] Students who drop out of school before their sophomore year of high school are not included in the sample. Differences may be slightly greater if they are included.

[32] For the Survey of Income and Program Participation, residences with moderate upkeep problems are defined as having three or four of the following: leaking roof or ceiling; toilet, hot water heater, plumbing not

working; broken windows; exposed wiring; holes in the floor; cracks or holes in wall or ceiling; and rats, mice, or roaches. Problems are severe if there are five or more of the above.

[33] Specifically, we include all variables, except "lives without a color television," for which 95 percent or more of nonpoor individuals do not live in families that report the deprivation.

[34] Patricia Ruggles, *Drawing the Line—Alternative Poverty Measures and Their Implication for Public Policy* (Washington, The Urban Institute Press, 1990)

[35] Sanders Korenman, Jane E. Miller, and John E. Sjaastad, "Long-Term Poverty and Child Development in the United States: Results from the NLSY," *Children and Youth Services Review*, vol. 17, nos. 1 and 2, 1994.

[36] Jane E. Miller and Sanders Korenman, "Poverty and Children's Nutritional Status in the United States," *American Journal of Epidemiology*, vol. 140, no. 3, 1994.

Appendix A. Descriptions of the surveys

American Housing Survey

These data are from a sample of housing units interviewed between July and December 1993, and were collected by the Bureau of the census for the Department of Housing and Urban Development. The reference period is 1993. The same basic sample of housing units is interviewed every 2 years. The sample is updated by adding newly constructed housing units and units discovered through coverage improvement efforts.

For the 1993 American Housing Survey–National, a sample of approximately 56,700 housing units was selected for interview. About 3,300 of these units proved to be ineligible because they no longer existed or because they did not meet the definition of a housing unit (intended for occupancy as separate living quarters, not as group quarters). About 2,300 of the remaining units (both occupied and vacant housing units) were classified as "type A" noninterview because (a) no one was at home after repeated visits, (b) the respondent refused to be interviewed, or (c) the interviewer was unable to find the unit.

Sampled units are followed up by telephone or personal visit until an interview is obtained or they are classified as type A's. There is no oversampling. Biases that arise from nonsampling errors, which are larger than those due to sampling errors, are corrected to the extent possible through weighting changes.

Consumer Expenditure Interview Survey

The expenditure results presented in this article are based on data collected from January 1992 through December 1993 in the quarterly interview portion of the Consumer Expenditure Survey. The period to which the expenditures refer is October 1991 through November 1993. The survey is sponsored by the Bureau of Labor Statistics, with data collected by the Bureau of the Census under contract to BLS.

The sample is designed to represent the total civilian noninstitutional population and persons living in group quarters such as housing facilities for workers and college students. Military personnel living on base are not sampled. Approximately 5,000 consumer units, similar to households, are interviewed each quarter.

Expenditures are defined as the transaction costs, including excise and sales taxes, of goods and services acquired during the interview period. Expenditures include those for gifts, but exclude the value purchases or portions of purchases directly attributable to business purposes. Also excluded are periodic credit or installment payments on goods or services already acquired, although data on interest payments are collected. For each durable, the full purchase price is included as the expenditure. Vehicle purchase expenditures include the net outlays (purchase price minus trade-in value) on new and used cars and trucks, and expenditures for other vehicles such as motorcycles and private planes. For owned housing, neither the full purchase price of the housing nor the mortgage principle payment is included in expenditures; however, mortgage interest and related charges are included. Each quarter is assumed to be an independent sample and is treated as such when population weights are incorporated. Given this assumption, data from each quarterly interview are aggregated and expenditures are annualized for the purposes of this study.

Current Population Survey

Two supplements of the Current Population Survey are used for this study: the 1994 March Supplement or Annual Demographic Supplement, and the 1993 October Supplement on Education. The income and health insurance questions were asked in the 1994 March Supplement, with 1993 as the reference period. The collection and reference period for the education questions is October 1993.

The Current Population Survey is conducted by the Bureau of the Census for the Bureau of Labor Statistics. The population covered includes the civilian noninstitutional population of the United States and members of the Armed Forces in the United States living off post or with their families on post, but excludes all other members of the Armed Forces. The sample is about 60,000 households, including families and unrelated individuals; data are reported for more than 150,000 people. Coverage does not include residents of U.S. territories or other areas outside the 50 States and the District of Columbia.

High School and Beyond Survey

The data used here are drawn from the 1992 follow-up survey of the sophomores of 1980, conducted by the National Center for Education Statistics. Data were collected in 1992 and early 1993, with reference periods of fall 1980 through spring 1992 for education questions, and 1991 for total household income before taxes.

The High School and Beyond Survey was used to interview some 15,000 sampled members of the sophomore cohort. The survey is a longitudinal study of students enrolled in public, private, and parochial secondary schools in 1980 at the sophomore and senior grades. Parents, teachers, and school officials also were surveyed. The schools were selected as a stratified probability sample.

National Crime Victimization Survey

The data from this survey were collected by the Bureau of the Census for the Department of Justice between January 1992 and June 1993, and reflect incidents occuring from January 1 through December 31, 1992. The survey collects information on victimization events for a sample of 60,000 households (130,000 persons). Usually, residents of each address are interviewed seven times over 3 years. Data are gathered from residents living throughout the United States, including persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings. Crew members of merchant vessels, Armed Forces personnel living in military barracks, and institutionalized persons, such as

correctional facility inmates, are not included in the scope of this survey. Similarly, U.S. citizens residing abroad and foreign visitors to this country are excluded. With these exceptions, individuals aged 12 or older living in units designated for the sample were eligible to be interviewed.

National Health Interview Survey

The data for this survey are collected by the Bureau of the Census for the National Center for Health Statistics, through a continuing nationwide survey of the health and other characteristics of household members. A different, probability-sampled set of households with civilian, noninstitutionalized occupants is interviewed each week of the year. The data used for this study were collected between January and December 1993. The reference period is the 12 months prior to the date of the interview. The 1993 survey includes a total of 44,978 households containing 109,671 persons.

National Household Education Survey

Data used for this analysis were collected by Westat for the National Center for Education Statistics in two components: School Readiness and School Safety and Discipline. Data were collected from January through April 1993, and the reference period was the period since the beginning of the 1992–93 school year or "currently." The education survey is a telephone survey of the noninstitutional civilian population, with households selected using random-digit-dialing methods.

For the 1993 survey, nearly 64,000 households were screened. Approximately 11,000 parents of 3- to 7-year-olds completed interviews for the School Readiness component, and about 12,700 parents of children in grades 3 through 12 and about 6,500 youth in grades 6 through 12 were interviewed for the School Safety and Discipline component.

National Maternal and Infant Health Interview Survey

Data for this survey were collected in 1989 and 1990 by the Bureau of the Census for the National Center for Health Statistics. The reference period is 1988 for data analyzed in this study.

Data were collected from stratified systematic samples drawn from calendar-year 1988 vital records from 48 States, the District of Columbia, and New York City. Mothers were mailed questionnaires based on information from vital records. In order to ensure a representative sample with regard to such variables as age of mother and marital status, implicit stratification was employed. That is, after the live birth records were stratified, further sorting of vital records was done by age of mother and marital status within each of the live-birth strata. Similar subsorting was done for fetal and infant death records. Respondents included 9,953 women who had live births, 3,309 women who had late fetal deaths, and 5,332 women who had infant deaths.

Survey of Income and Program Participation

The data presented in the accompanying article were compiled from the Extended Measures of Well-Being topical module. Module questions were asked in wave 6 of the 1991 panel and wave 3 of the 1992 panel of the Survey of Income and Program Participation, an ongoing program of the Bureau of the Census. The collection and reference periods are September through December of 1992. The combined panels comprise responses on living conditions by reference persons representing households totaling almost 85,000 persons.

These data were not imputed for nonresponse, and frequencies thus are based only on the proportions of persons answering the questions. For the most part, nonresponse levels for these questions were in the range of 1 or 2 percent.

Appendix B: Poverty rates across surveys

Most of the surveys used for this analysis include a variable that can be used to determine whether a family or household's income was below the official Federal poverty threshold for its type during the reference period of the survey. In most cases, annual before-tax income is compared to the poverty thresholds. For example, when data from the Current Population Survey are used, annual before-tax cash income for a family is compared to the relevant poverty threshold for the corresponding year. However, when data from the Survey of Income and Program Participation are used, before-tax cash income over the 4-month reference period is compared to a poverty threshold for the same 4 months. When data from the Consumer Expenditure Survey are used, quarterly total expenditure data are annualized and compared to the appropriate yearly poverty threshold.

Some of the surveys do not collect actual income amounts, but only information about whether the income falls in a particular dollar range. These data do not lend themselves to analyses using an exact poverty line. In the National Crime Victimization Survey, a household is considered under the poverty threshold if it has:

Table B-1. Poverty rates for persons by survey

Survey	All families	Single-parent families	Families receiving welfare	Persons under age 18
Rates for all persons:				
American Housing Survey	16.0	46.1	73.0	—
Consumer Expenditure Survey	13.8	38.3	64.0	—
Current Population Survey	14.0	48.3	77.0	—
National Crime Victimization Survey	15.6	46.7	—	—
Survey of Income and Program Participation	13.0	45.5	82.0	—
National Health Interview Survey	13.0	—	—	—
Rates for persons in selected subpopulations:				
National Health Interview Survey	—	—	—	20.0
National Household Education Survey:				
School Readiness Component (rates for children from prekindergarten age to under 8 years)	28.1	54.6	—	—
School Safety and Discipline Component (rates for children in grades 3 to 12)	21.4	38.7	—	—
National Maternal and Infant Health Survey (rates for mothers who gave birth in 1988	24.9	55.1	74.2	—

NOTE: All data are person-weighted.

1 person and annual income under $7,500, 2 or 3 persons and annual income under $10,000, 4 persons and annual income under $15,000, 5 persons and annual income under $17,500, 6 or 7 persons and annual income under $20,000, 8 persons and annual income under $25,000, or 9 or more persons and annual income under $30,000. In the National Household Education Survey, a family is considered under the poverty threshold if it has: 2 or 3 persons and annual income under $10,000, 4 or 5 persons and annual income under $15,000, 6 or 7 persons and annual income under $20,000, 8 persons and annual income under $25,000, or 9 or more persons and annual income under $30,000. For the High School and Beyond Survey, children who report family incomes below $8,000 are considered poor.

Poverty rates across surveys are fairly similar. From 13 to 16 percent of persons living in families in the United States are poor based on data from the American Housing Survey, the Consumer Expenditure Survey, the Current Population Survey, the National Crime Victimization Survey, and the Survey of Income and Program Participation. For the National Health Interview Survey (persons under 18), the National Household Education Survey, and the National Maternal and Infant Health Survey, the poverty rates are higher (20 percent or greater) because the samples consist of children in the relevant age group in the former two surveys and of mothers giving birth in the reference period in the latter.

Appendix C: Family-weighted results for the CPS and the Consumer Expenditure Survey

Table C-1. Income and selected taxes and transfers of families in 1993

[Family-weighted]

Income and selected taxes and transfers	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
Current Population Survey				
Total before-tax family income	$52,785	$7,370	$6,209	$10,972
Percent of total before-tax family income from:				
Wages and salaries	76.2	46.3	36.4	42.9
Self-employment earnings	6.2	1.3	.7	1.3
Public assistance/welfare	.2	20.9	39.0	37.0
Selected taxes and transfers:				
Federal income tax	$6,639	$9	$4	$220
State income tax	1,726	15	7	80
FICA payroll tax	2,861	299	178	363
Earned Income Tax Credit	98	417	358	301
Public assistance/welfare	83	1,538	2,421	4,055
Food stamps	48	1,204	1,628	2,049

NOTE: Family-level data, family-weighted. Data were collected in March 1994, with 1993 as the reference period.

Table C-2. Consumer expenditures by families in 1992–93

[Family-weighted]

Expenditures	Nonpoor families	Poor families	Single-parent poor families	Families receiving welfare
Consumer Expenditure Interview Survey				
Total family expenditures	$35,036	$10,212	$8,636	$15,133
Percent of total family expenditures for:				
Food	15.4	29.8	33.3	25.2
Shelter	18.5	21.7	25.9	24.2
Utilities	7.0	14.5	13.8	10.8
Apparel	4.8	4.8	6.6	6.1
Transportation	20.0	10.2	6.4	13.3
Health care	5.8	3.5	1.3	2.2
Entertainment	5.4	2.9	2.9	4.0
Personal insurance and pensions	10.9	5.0	2.4	4.5

NOTE: Family-level data, family-weighted. Quarterly data were collected from January 1992 to December 1993, with a reference period from October 1991 to November 1993. Results are presented for expenditure nonpoor and poor families.