

Indicators of Children's Well-Being: A Review of Current Indicators Based on Data from the Federal Statistical System

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THIS ESSAY WAS written to familiarize participants of the 1994 Conference on Indicators of Children's Well-Being with the variety of indicators of children's well-being currently in use that are based on federal data. The indicators reviewed here were culled from existing federal government and private publications which feature descriptive measures of children's well-being that are available through the federal statistical system. This review does not exhaust all of the important measures of child well-being that are available from the vast federal statistical system, nor does it tap the full range of measures that could be created. Rather, the collection represents a listing of the available measures that one or more organizations thought important enough to publish as indicators of child well-being.

The review has been organized to correspond to the following topics: health; education; economic security; population, family and neighborhood; and social development and problem behavior. For each of the topics, indicators and their characteristics are listed and summarized in the tables which appear in the appendix. The characteristics covered in the tables include a description of the variables; the age groups for which they are available; their periodicity; the geographic levels at which the indicators can be produced (that is, national, state, and local); and the data source from which the indicator is constructed. The tables also list indicators discussed by the authors whose work is represented in this volume.

In the text the following items are reviewed for each of the five areas: the major data sources from which most of the indicators are constructed; the indicators themselves; and any obvious limitations of the existing set of indicators in each area. Where appropriate, new developments within the federal statistical system that may address one or more of these limitations are also identified.

In compiling this collection of indicators, I have not used a rigid definition of "indicator." The only hard and fast criterion used is that the data on which the measure is based must be gathered on a regular basis so that trends can be tracked over time. This has left by the wayside many valuable measures of child well-being that appear in one-time surveys sponsored by the federal government. There are many desirable characteristics that an indicator should have (see Kristin

Moore's contribution to this volume), but at a minimum a measure must be taken at regular intervals if it is to function as a social indicator.

CHILD HEALTH

Sources of Data

Data related to child health are relatively detailed and abundant. There are four major federal sources of data that offer periodic measures of child health in the federal statistical system. The National Vital Statistics System offers data from birth and death registries. Information contained in birth certificates includes basic physical and health characteristics of the infant at the time of birth, selected demographic characteristics of child and parent(s), and information on prenatal care. Most of these data are available on an annual basis down to the county level for the entire United States.

The National Health Interview Survey (NHIS) is a large annual survey (over forty thousand households in 1996) that monitors the health status, health-care utilization, and health-related behaviors of the U.S. population. The survey has recently undergone a substantial redesign, which will be fully implemented in 1997. In the redesign, a great deal of attention has been paid to maintaining trend data for key health measures. The survey is funded and designed by the National Center for Health Statistics.

The Youth Risk Behavior Survey (YRBS) is a survey of students in grades nine through twelve. It gathers a great deal of unique data on teen behaviors, practices, and attitudes on a range of important topics, especially health-related behavior. The survey was first done in 1990, again in 1991, and has been fielded every second year since. There is a national survey, and separate state and city surveys as well. In 1995, thirty-nine states and sixteen cities participated. At present, nearly two-thirds of the state and city surveys are based on representative samples of their populations. The survey was developed by the Division of Adolescent and School Health, Centers for Disease Control and Prevention.

The National Health and Nutrition Examination Survey (NHANES) collects detailed medical and biometric data on members of the United States noninstitutional population. It gathers information through personal interviews, physical examinations, and clinical and laboratory tests. Three NHANES surveys have been fielded to date, covering the years 1970 to 1974, 1976 to 1980, and 1988 to 1994.

These major data sources allow for separate reporting of most indicators for narrow age groups, and for the larger race/ethnicity groups (white, African American, and Hispanic). In addition, indicators from the Vital Statistics System can be produced for Asian/Pacific Islanders and Native American populations. Vital Statistics estimates also are routinely produced for distinct subgroups within the Hispanic and Asian/Pacific Islander populations.

Appendix table 1.1a lists child health and related indicators that have been derived from federal data sources and which appear in one or more publications of indicators reviewed for this essay. The indicators have been sorted into four categories: mortality, health conditions, health care, and health-related behavior. The table also includes measures discussed by other authors in this volume which are not discussed here.

Mortality

Simple mortality rates often are reported for all children under age eighteen, and for five-year age groups. In addition, within the first year of life, rates are commonly reported for neonatal (first twenty-eight days following birth) and post-neonatal groups.

Mortality indicators also are commonly reported by major causes of death. Common causes of death reported for infants and young children include sudden infant death syndrome (SIDS), congenital anomaly, and unintentional injury. For adolescents, rates of “violent death” (a combination of car accident, homicide, and suicide) are most often reported, though some publications also report mortality by type of violent death. Because most of the mortality indicators are taken from the death registries of the Vital Statistics System, they are available at national, state, and local levels on an annual basis.

Health Conditions

A number of health condition indicators are reported for newborns, due in large part to the abundance of information available from birth certificates.¹ Two composite indicators based on birth certificate data, the healthy birth index and the children’s health index, have been reported in recent national Kids Count reports. (See appendix table 1.1a for definitions.) Other indicators taken from this data source include low birth weight (under 5.5 lbs.), very low birth weight (under 3.3 lbs), and whether the child was born with a congenital anomaly.

Health conditions commonly reported as indicators for children of all ages include HIV/AIDS, child abuse, measles, obesity, lead levels in the blood, children limited by chronic health conditions, and developmental delays. Among adolescents, indicators related to health condition include rates of venereal disease (syphilis, gonorrhea), whether the youth has seriously contemplated suicide within the last year, and rates of victimization from violent crime.

Health Care

Indicators of children’s health-care receipt include the presence (or absence) and type of (public or private) health insurance coverage, immunization rates among two-year-olds, the proportion of children lacking a usual source of care, the number of physician and dental visits within the past year, and rates of late or no prenatal care. Most of these measures are available on an annual or semiannual basis for all age groups of children. Measures of health care receipt below the national level are more limited, consisting of prenatal care (available at the state and local levels), immunization among two-year-olds² and health insurance coverage rates (available at the state level).

Health-Related Behavior

Indicators of health-related behavior among adolescents are relatively abundant, and include the proportion of teens who are sexually active, the proportion of sexually active teens using varied methods of contraception, cigarette smoking,

problem drinking, use of illegal drugs, riding with a drunk driver, physical exercise, nutrition, and use of a bicycle helmet.³ Major sources for this information include the Youth Risk Behavior Survey and the Monitoring the Future Survey (described in this chapter). In addition, the National Survey of Family Growth provides information on sexual activity and contraceptive measures, and the National Household Survey on Drug Abuse provides data on drug use. Regularly reported indicators of health-related behavior for children prior to adolescence are scarce, and have been limited primarily to safety belt and bicycle helmet use.

Major Limitations of Existing Health Indicators

There are several significant limitations to the existing set of indicators of child health. First, indicators of child health-related behavior appear to be limited primarily to adolescents, and, among those, to adolescents attending school. Both the Youth Risk Behavior Survey and the Monitoring the Future surveys are limited to adolescents attending school. The National Survey of Family Growth and the National Household Survey on Drug Abuse cover adolescents who are not in school, but they do not cover some important health-related behavior, and are limited to the national level.

Second, institutionalized children are underrepresented in the current collection of child health indicators. Of the major sources of health indicator data identified above, only the Vital Statistics System regularly collects data on institutionalized children. This is a significant limitation, since children are commonly institutionalized for health-related reasons.

Third, indicators of health care receipt at the state and local levels are limited. The most complete data of this sort relates to prenatal care. State data on immunization among two-year-olds recently became available through the National Immunization Survey, but it is unclear whether this survey will continue past 1998. State-level indicators of health insurance coverage are produced using the Current Population Survey, but they have large standard errors, making them of limited use for identifying all but the largest changes in coverage rates.

EDUCATION

Sources of Data

Four federal databases provide data for most of the indicators related to children's education. The National Assessment of Educational Progress (NAEP) is a biennial survey measuring the educational achievement and related behavior of children in the fourth, eighth, and twelfth grades. Surveys are produced every other year for the nation and for states that have volunteered to participate in the program. The national assessment has been conducted since 1969, and the state assessments since 1990. In 1996, forty-four states participated in the survey. Reading and math skills are assessed every two years. Skills in other areas including science, writing, history, and geography have been assessed on a more occasional basis.

The National Household Education Survey (NHES) is a nationally representative biennial survey with a rotating set of topical modules that are repeated periodically. These include modules on school readiness, school safety and disci-

pline, early childhood program participation, parental involvement, citizenship, and civic participation. The survey began in 1991. The original survey design called for an annual survey with topical modules repeated every three years. Since the switch to the biennial design, it has not been determined how often the modules will be repeated.

The School Enrollment Supplement to the Current Population Survey (CPS) is fielded annually in October. This nationally representative survey provides data on current and recent enrollment status, highest grade completed, diplomas received, and type of school. Schooling data are gathered on all persons ages three and over in each household. The survey, begun in 1946, represents our best source of long-term trend data in this area.

The Schools and Staffing Survey (SASS) is a survey of schools, teachers, and administrators. It was first fielded in 1987, and is repeated every three to five years. Estimates are produced for the nation as a whole, and for each of the fifty states. Over nine thousand schools are involved in all. Each sample school provides aggregate data of the demographic characteristics of their student population in addition to detailed information on school programs, finances, staff characteristics, and other social characteristics of the school. Its potential as a source of data for indicators relating to the qualities of children's school environment is only beginning to be explored.

Appendix table 1.2a lists indicators of educational well-being that have been derived from federal data sources and which appear in one or more of the publications of indicators reviewed for this chapter. The indicators have been divided into four categories: enrollment, achievement/proficiency, education-related behaviors and characteristics, and school characteristics.

Enrollment

Among prekindergarten children, enrollment indicators include rates of preprimary and center-based enrollment among all such children ages three and over, and rates of Head Start enrollment among the eligible population. In the middle years, the focus changes to children who have repeated a grade, or who are behind the appropriate grade for their age. Among teens and postteen youth, indicators focus on rates of high school dropout and graduate rates, and rates of on-time graduation. Indicators of college attendance and degree receipt are also produced.

Achievement/Proficiency

Most of the indicators of scholastic achievement come from the NAEP, and are available for children in the fourth, eighth, and twelfth grades. Children have been rated according to their level of accomplishment in each of the subject areas covered, including math, reading, writing, science, history, and geography.⁴ Separate indicators are reported by sex and for major race/ethnicity groups, including whites, blacks, Hispanics, Asian/Pacific Islanders, and Native Americans.

In addition, each year many college-bound high school students take the Scholastic Aptitude Test (SAT). Scores are available separately for the verbal and math sections of the exam. Average scores are available for national, state, and

local areas. Scores are often reported by sex, and for the major race/ethnicity groups.

Education-Related Behavior and Characteristics

The NHES provides a number of indicators of school readiness among pre-kindergarten and kindergarten children, including the proportion who are read to daily; regularly told stories in the household; taken to the library one or more times per month; engage in art or music activities with an adult household member; and who engage in other learning activities such as a concert, museum visit, zoo, household chores, or a discussion of family history. Among three- to seven-year-olds, the NHES also determines the proportion who have ever had learning disabilities.

For older children (grades four, eight, and twelve), the NAEP provides data from which a number of positive and negative indicators of education-related behavior have been calculated, including the proportion who average a particular number (one or more, two or more) of hours of homework per night, read ten or more pages per day, watch six or more hours of television per day, or were absent from school three or more days in the previous month. In addition, NAEP provides data for determining the proportion of students in the three age groups who have positive general attitudes toward mathematics and science.

School Characteristics

A commonly reported indicator of children's school environments is the average annual expenditure per student. Though the federal government does collect and publish a great deal of information about the characteristics of schools, little of this information has made its way into publication efforts featuring indicators of child well-being. Recently, however, the Annie E. Casey Foundation's Kids Count project has sponsored the development of an innovative indicator of school environments reflecting the proportion of children attending "troubled schools." These are defined as schools with significant student behavioral, conduct, or staff morale problems as reported by school administrators in the Schools and Staffing Survey. This is a valuable source of data on the school environments experienced by children, one from which additional valuable indicators potentially could be developed.

Major Limitations of Existing Education Indicators

The federal statistical system currently supports a large and comprehensive collection of periodically measured indicators of children's educational well-being. In addition, new topical modules being fielded periodically as part of the NHES (early childhood program participation, parental involvement, citizenship and civic participation modules) are expanding that coverage in new and informative directions.⁵

One significant weakness in the current set of education indicators is the lack of measures on the quality of children's school environments. The Schools and Staffing Survey offers an existing source from which additional indicators of this

sort may be constructed. In addition, the NHES early childhood program module may provide important data regarding the quality of preschool environments.

ECONOMIC SECURITY

Sources of Data

Five federal surveys provide data for most of the indicators related to children's economic security. The decennial census provides information on income receipt, employment, and housing quality. Though this information is not as detailed as in the other surveys, the census is unique in providing the capability to produce estimates for small geographic areas (down to the block group) and for relatively small population subgroups (for example, Native Americans) that are not as well represented in the smaller and more frequently fielded federal surveys.

The Income and Demographic Supplement of the Current Population Survey (CPS), fielded each March, is a large annual cross-sectional survey of the United States noninstitutionalized population involving over fifty thousand households. National-level estimates can be produced separately for narrowly defined age groups and major race/ethnicity subgroups with this survey. State-level indicators often can be produced by combining three to five consecutive years of data, although such estimates usually cannot be produced for age or race subgroups, and the estimates for smaller states have large standard errors (Pollard and Riche 1994). A special CPS supplement on child support is fielded in April of every other year, providing detailed data on child support arrangements and receipt.

The Survey of Income and Program Participation (SIPP) is a continuous longitudinal survey that has been fielded since 1983. Households are interviewed every four months. Income, program participation, and employment measures are recorded for each month, and are more detailed and somewhat more accurate than those taken in the CPS, whose measures refer to the previous year. Special child care, child support, and child well-being topical modules have been fielded on a regular basis. Prior to 1996, each panel was followed for thirty months. Beginning in 1996, however, households are being followed for fifty-two months.

The Panel Study of Income Dynamics (PSID) is a longitudinal survey to study the determinants of economic well-being and program usage among U.S. families. The survey began in 1968 with a sample of approximately four thousand eight hundred households, and has followed these households and their descendants annually since that time. It is a unique source of data which can be used to construct economic indicators of well-being that cover the entire period of childhood (see Duncan and Moscow this volume).

The American Housing Survey is a biennial survey that monitors the quality and quantity of America's housing stock. In addition to the national survey, there are individual representative surveys of over forty major metropolitan areas. Each metropolitan area is surveyed once every four years. In addition to extensive information on the quality and cost of the physical residence and characteristics of the neighborhood, basic demographic and income data are gathered on the residents of each household. Thus, indicators of children's housing and neighborhood quality can be constructed from this data source.

Appendix table 1.3a contains a listing of existing indicators of children's economic well-being that are currently available through the federal statistical system. They have been sorted into four categories: poverty/income, income support

programs, employment, and housing. Except where noted on the table, all measures described are available on an annual basis at the national level. Indicators based on data from the CPS can be produced for states by the five-year averaging method described above, with its attendant limitations. Indicators of children's economic security below the state level are available only every ten years from the census. Virtually all of the indicators represented can be produced for age-specific subgroups.

Poverty/Income

Existing indicators of child poverty include extreme poverty (below 50 percent of the official poverty line), poverty, and various definitions of "near poverty," ranging from 125 percent to 200 percent of the poverty line. Such poverty indicators are virtually always based on the official federal poverty line. Indicators of household income are most often expressed as median or mean levels of annual income. Finally, there are a number of common indicators based on the receipt of income from particular sources. Most of these are reflective of participation in federal income support programs. Exceptions are the indicators related to receipt of child support, which include the "proportion of eligible families not receiving child support payments" and the "proportion of mother-headed families receiving child support" within the previous year. Data on other nonfederal sources of income (for example, earnings, investment income) are widely available through the federal statistical system, but have not been developed as indicators of children's economic well-being.

Government Support Programs

Indicators related to government support programs include the proportion of children living in families who have participated in the following programs: Aid to Families with Dependent Children (AFDC), Food Stamps, Medicaid, subsidized or public housing, energy assistance, and free or reduced-price lunches. Typically there are separate indicators for each type of program, though useful composite indicators reflecting participation in multiple programs or any of several programs certainly could be constructed. In 1996, AFDC was ended and replaced with the Temporary Assistance for Needy Families Block Grant (TANF). It is unclear whether a TANF-based measure comparable to AFDC receipt can be constructed, though it seems unlikely.

Employment

These include both parental employment measures and measures of employment among older children. Indicators of parental employment include the proportion of children where all residential parents are in the workforce, the proportion of children with no parents working, and the proportion for whom no parents are fully employed (working full time, full year). These indicators reflect concerns about both family economic stability, and the absence of parental/child time due to parental labor force activity. Often such indicators are given separately by the age of the child, with particular attention paid to the experience of younger children (less than age one, three, or six).

Youth employment-related indicators that have been used include a straight unemployment rate among sixteen- to nineteen-year-olds, and the proportion who are idle (not in school, not at work or in the military). These are often reported separately by gender.

Housing

Indicators of housing quality that have been produced include the proportion of children living in crowded conditions (less than one room per person), living in houses with inadequate plumbing or kitchen facilities, living in relatively expensive housing (with housing costs exceeding 50 percent of family income), and living in housing with moderate to severe physical problems.

Major Limitations of Existing Indicators of Economic Security

A major limitation of existing indicators of children's economic well-being is the lack of regularly updated measures below the national level. With the exception of some housing data for selected metropolitan areas, measures of children's economic well-being are not available between decennial censuses below the state level. Even at the state level, indicators can be produced only by combining multiple years of CPS data, and are not very sensitive to change. This is a significant shortcoming of the existing federal statistical system, since such information is often needed for economic and government program planning. The Census Bureau is developing a survey that would provide such estimates annually for all states and places with populations over two hundred and fifty thousand. Estimates down to the census tract level could be produced every five years. Called the American Communities Survey (ACS), it will include most of the information on the decennial census long form. This survey may replace the decennial census long-form questions altogether. It is currently being field-tested and is expected to be fully operational by 2000.

Until recently, a second major limitation has been the lack of longitudinal indicators of economic well-being even at the national level. Measures which look at multiyear poverty and income-support program use are superior to single-year measures in identifying children whose families are under prolonged financial stress (Duncan et al. 1994). However, as a direct result of the recommendations from the essay by Duncan in chapter 12 of this volume, such measures have been constructed using data from the PSID, and have been included in an annual federal report on child well-being (Brown and Stagner 1996).

POPULATION, FAMILY, AND NEIGHBORHOOD CHARACTERISTICS

Sources of Data

The indicators included in this section are primarily descriptive, demographic measures. The four primary data sources for these indicators are the decennial census, the Current Population Survey Income and Demographic Supplement, the Survey of Income and Program Participation, and birth certificate data from the Vital Statistics System. Each of these data sources has been described in this essay. In addition, estimates of the number of children are generated each year by the Population Estimates Branch of the U.S. Bureau of the Census. Appendix

table 1.4a contains a listing of existing indicators of children's demographic, family structure, and neighborhood characteristics that are available through the federal statistical system.

Child Characteristics

Indicators of basic child characteristics include the number of children, the percent within each major race/ethnicity group (white, black, Asian/Pacific Islander, Native American, and Hispanic), the percent who changed residences in the previous year,⁶ and the percent who are linguistically isolated.⁷ Children as a percent of the total population has also been used as an indicator.

Family and Household Characteristics

Common indicators related to family structure and living arrangements include the proportion of children living in two-parent and single-parent families, with stepparents, and with neither parent, in subfamilies within multigeneration households, and in institutions or group headquarters. Recent changes in the decennial census and the Current Population Surveys allow one to estimate the percentage of children living with a parent who is cohabiting, though one cannot determine whether the cohabitant is also the biological parent of the child.

There are in addition several family indicators related to birth and family formation including the percent of births to unmarried women, to teens, to unmarried teen women, and the rate of second births to unmarried teen mothers. In addition, a composite indicator called the New Family Index reports the percent of first births to women with less than twelve years of schooling who are unmarried and under the age of twenty.⁸ It is an indicator of the proportion of new families that are high risk.

Neighborhood Characteristics

The decennial census provides census tract characteristics related to income and poverty, welfare use, employment, family structure, educational attainment, and other population measures. To date, two such indicators have appeared in publications featuring indicators of child well-being. The first is the proportion of children living in high poverty areas (40-plus percent). The second is the proportion living in "severely distressed neighborhoods," defined as neighborhoods with values one or more standard deviations beyond the mean level in at least four of the following five characteristics: poverty, female-headed families, high school dropouts, males unattached to the labor force, and families receiving public assistance.⁹

Major Limitations of Existing Indicators of Population, Family, and Neighborhood

The federal statistical system provides a great deal of data from which a broad array of useful child and family demographic indicators can be constructed, and which can be presented for age and race/ethnicity subgroups. There are two

significant limitations, however. First, between decennial censuses, the data do not support indicators for places below the state level, and state-level indicators can be constructed only by combining multiple years of CPS data. This problem will be largely addressed once the American Communities Survey is fully operational.

A second significant limitation is the lack of longitudinal indicators. Such indicators can reflect changes in family structure or residential stability over time, which are known to be negatively related to child well-being (Coleman 1988; Hetherington and Clingempeel 1992). The SIPP may be able to support some such indicators when it expands to four and one-half years of coverage per cohort. The PSID is another potential source of data which could be used to construct such measures. Some valuable longitudinal family indicators may require retrospective marriage and residential histories such as those taken in the National Survey of Families and Households.

SOCIAL DEVELOPMENT AND PROBLEM BEHAVIOR

Sources of Data

Indicators in this area would include age-appropriate measures of psychosocial development and measures of both prosocial and antisocial or problem behavior. The major federal sources of data for such indicators include the National Household Education Survey, the Youth Risk Behavior Survey, the National Household Survey on Drug Abuse, and Monitoring the Future. The first two data sources have been described in this essay. Monitoring the Future is an annual survey of a nationally representative sample of high school students. It has interviewed twelfth-grade students since 1975, and eighth- and tenth-grade students since 1991. The survey focuses on questions concerning drug use; delinquency; crime victimization; aspirations related to schooling, work, and family formation; and attitudes concerning such topics as race relations and the government.

The National Household Survey on Drug Abuse is a national survey of drug use that includes a special sample of twelve- to seventeen-year-olds. It has been fielded every one to three years since 1971, and is now scheduled to be repeated annually. The survey gathers information on lifetime, past, and current drug use, as well as frequency of use for all illicit drugs, cigarettes, and alcohol.

In addition to these data sources, the FBI's Uniform Crime Report system provides some data on youth arrests, and the National Survey of Family Growth provides data on sexual and fertility behavior for females ages fifteen to nineteen.

Appendix table 1.5a lists and provides descriptive information on indicators of child social development and problem behavior which are based on federal data sources and which appeared in one or more of the publications reviewed for this essay.

Prosocial Behavior and Attitudes

Available indicators in this area have been limited primarily to the behavior and attitudes of teens. Existing indicators of prosocial behavior include the percent of teens who participate in organized sports, who regularly attend church, and who

do the following activities on a daily basis: read, see friends, perform household chores, play music, do art, or write. Indicators related to attitudes and beliefs include the proportion who report that their peers approve and support hard work and good behavior, those who hold a variety of positive life goals as being extremely important (for example, success in work, good family life, strong friendships, community involvement), and the proportion who are concerned about national problems such as crime, drugs, hunger and poverty, race relations, nuclear war, economic problems, and pollution.

Problem Behavior and Attitudes

Indicators of teen problem behavior include measures of drug use, delinquency and violence, and sexual activity. Measures related to drug use include the proportion who regularly smoke cigarettes, who binge drink, who have driven drunk, and who have used various other controlled substances (for example, cocaine, crack, marijuana, or LSD) within the last thirty days. The proportion reporting peer approval for such behavior is also reported. Indicators related to violence include the proportion of teens who have carried a weapon to school, or who have been in a fight within the last thirty days, and the proportion of ten- to seventeen-year-olds arrested for violent crimes within the past year. Indicators related to sexual activity include the proportion who are sexually experienced, who are sexually active, the number of partners, and the proportion who have had unprotected intercourse within the past year.

The Behavior Problems Index (BPI) is a composite indicator of problem behavior-based parent report. It is a twenty-eight-item scale developed by Nicholas Zill and James Peterson, and is based on the Achenbach Behavior Problems Checklist (Achenbach and Edelbrach 1981) and other child behavior scales. Versions of the scale differ by age group, and have been developed for children as young as age four. The BPI has been asked in 1981 and 1988 as part of the Child Health Supplement to the National Health Interview Survey (NHIS). A four-item measure also based on Achenbach's work has been included in the recently redesigned National Health Interview Survey.

Major Limitations of Existing Measures of Social Development and Problem Behavior

Of all of the categories of indicators reviewed in this chapter, this is the area in which the most work remains to be done. The most striking limitation of the current set of indicators of children's social development and problem behavior is the lack of measures for children prior to their teen years. And yet this is an area in which a great deal of measurement work has been done, both on direct measures of social development in early childhood, and on measures of family functioning and the home environment that are known to affect a child's social development and well-being (Zaslow, Brown, Coiro, and Blumenthal 1994; Love, Aber, and Brooks-Gunn 1994; Phillips and Love 1994). Though measures of this sort have appeared in previous federally sponsored surveys (including the National Survey of Children, the National Survey of Families and Households,

and the National Longitudinal Survey of Youth), until very recently none have been incorporated into surveys that are to be repeated on a regular basis.

The National Center for Health Statistics has been considering incorporating some social development and family functioning measures into a NHIS child and family topical module as part of its NHIS redesign. This module, should it develop, will not be fielded before 1998 at the earliest. In addition, the school-readiness supplement to the NHES, which is scheduled to be repeated every few years, contains a number of social-development-related measures for children age three through seven that can serve as the basis for new, regularly reported indicators for young children.

A second limitation has to do with inadequate coverage of the teen population. Many of the current indicators of social development and problem behavior for teens are based on data sources that include only those teens who are still in school. While the YRBS and Monitoring the Future are valuable sources of data, they do not provide information on the very teens who are the most likely to be experiencing difficulties in these areas: those who have dropped out of school. It is important that these or other surveys, such as the NHIS, be expanded to gather regular measurements of this sort for all teens.¹⁰

Finally, the existing set of indicators of prosocial behavior and attitudes requires further development. Historically, considerably more time and effort have been devoted to conceptualizing and tracking negative behavior and attitudes than positive ones (see Moore 1994). Both conceptual work, determining which positive and behavioral attitudes are most important, and further data development are needed in this area.