



**Indicators and Indices of Child Well-being:
A Brief History**

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The use of statistical indicators to monitor social trends dates at least to 1929 when the Committee on Recent Social Trends was established by President Hoover, and published *Recent Social Trends in the United States* in 1933 (Zill et al 1983). Statistical information provided the basis for the *Brown v. Board of Education* decision to desegregate schools in 1954, as well as other legal actions (Brim, 1975a). The field of indicators of *child well-being* has its origins, however, in the Social Indicators Movement of the 1960s which arose in a climate of rapid social change and a sense among social scientists and public officials in the Johnson Administration that government, with the use of social measurement and planning, should offer corrective responses to social problems (Aborn 1985). The then HEW issued, *Toward a Social Report* in 1969 which, along with other reports of the time, outlined strategies for maintaining data bases of indicators to track progress toward social goals and priorities (Aborn 1985; Zill et al 1983).

Seminal works on social indicators were written in the late 1960s and early 1970s, and we can trace to these origins the different conceptual approaches to developing child well-being indicators that exist today. For example, Campbell and Converse (1972) were concerned with developing subjective indicators of the quality of life such as aspirations, expectations, and life satisfaction, whereas Sheldon and Moore's (1968) *Indicators of Social Change: Concepts and Measurements* was a collection of the best thinking of the day on conceptualizing objective measures, reviewing available data, and recommending data needs that would enable descriptive reporting on the status of society across domains (Aborn 1985). In a chapter in the volume on family change, for example, Goode (1968) notes the following trends in the family: the rise of the divorce rate since the Civil War, decline in the birth rate since the early 19th century, the diminution of "patriarchal authority," and the increase in the freedom of children, especially in courtship and mate selection. His recommendations for data needs reflect the concerns of the day: data on family size and patterns over time by race and ethnicity, teen sexuality, and the effects of women's employment on family relations.

In the same volume, Duncan (1968) reviews and analyzes the available education data from the Census Bureau since 1900, out of which she creates a comprehensive set of

education indicators, but her description of data needs was visionary. She critiques attainment measures as imperfect for not recognizing the degree to which learning takes out of school, anticipating current day literacy assessments of everyday knowledge and skills, and she highlights the lack of data for out-of-school youth, which is still problematic to this day.

In the mid-1970s, a call for the need for a comprehensive set of social indicators on the state of the child across domains and across ecological contexts of children's lives came from Orville Brim (1975a, 1975b) and Nick Zill (Zill and Brim, 1975) at the Foundation for Child Development. Their recommendations seem very familiar to those working in the field today, but must have seemed revolutionary in their time. They called for surveys where children speak for themselves, and specifically on subjective measures of well-being, in addition to calling for surveys where the macro-structural influences on children, such as the economy, culture, sociology, and law, are understood. They called for statistical time-series data which measures change over time collected by federal agencies, and for wide dissemination of data, in order to put child development research in broader perspective and to help form policy. They introduced the phrase "Childhood Social Indicators" which "refers to statistical time series data measure changes (or constancies) in the health, behavior, and well-being of American children and in the conditions of their lives." (Zill and Brim 1975, p.1). They pointed to data needs in the areas of social and emotional well-being, including children's expectations, fears, and satisfaction; and presented their plans for a National Survey of Children in 1976 that would include such measures and lay the groundwork for future surveys in 7 areas of quality of life for children and their families. Brim (1975b) introduced the dichotomy between "being" versus "becoming" in reference to child well-being, using the term "becoming" to characterize the nation's orientation toward what children will become, rather than a national concern with their "being", that is in children in their own right as children. A current international child well-being indicator effort has adopted and uses that terminology which Brim introduced 30 years ago (Bowers and Ben-Arieh, 1999). In addition, Brim (1975b) presses for indicators of the ecology of child development in the settings where children develop, such as families, schools, communities, friendship groups, etc., and there has been a recent renewal of interest in developing just such

contextual indicators (Office of the Assistant Secretary for Planning and Evaluation, HHS 2004).

One of the early efforts to develop an index of child well-being that took context into account was the DIPOV index. Kogan and Jenkins (1974) co-directed a national study designed to develop indicators of the physical health and the social, emotional, and cognitive functioning of children in census-based geographic areas. One outcome of the study was an index based on census and health data which was labeled “Disorganized Poverty” or DIPOV. The DIPOV index addressed a perceived lack of focus on the state of health and welfare among children. In developing their measures for the index, the researchers separated measures of children’s health and welfare from contextual measures of the family and community. Their definition of contextual measures incorporated proximal environments as well as more remote or distal environments which have an effect on children.

Efforts began during the 1970s to synthesize existing data on children into “state of the child” reports at national, state, and international levels. Some examples include *Profiles of Children* produced for a White House Conference on Children in 1970, *The Status of Children* in 1975 and 1977, and *The Status of Children, Youth, and Families, 1979* funded by the Administration for Children, Youth, and Families of HHS. State “state of the child” reports proliferated from Arkansas to Virginia, to the Carolinas and Texas, in Illinois, New York City, and later, in New York and Massachusetts. Internationally, in honor of the International Year of the Child in 1979, UNICEF started the *State of the World’s Children* reports, the World Bank (1979) published a *World Atlas on the Child*, and the Population Reference Bureau (1979) published the *Children in the World* chart book and the *World’s Children Data Sheet*. The OECD also started producing reports on family demography and education during this time period (Zill et al, 1983).

In addition to state-of-the-child reports, flagship annual reports of federal statistical agencies such as the *Condition of Education* (U.S. Department of Education, 2004) and *Health: United States* (U.S. Department of Health and Human Services, 1975) began to be published during the 1970s which included indicators on children and youth in their respective domains, as well as occasional indicators of the broader social context.

That decade was also when new surveys were developed to respond to the call for more data on youth, including *Monitoring the Future* (since 1975), the High School and Beyond Survey (of the high school class of 1972), the National Longitudinal Survey of Youth ('79) and the beginning-of-time series data on educational achievement, the *National Assessment of Educational Progress (NAEP)*.

In recognition of the need to improve social indicator data on children, the Foundation for Child Development funded the Social Science Research Council's Child and Family Indicators Advisory Group to recommend ways of improving social indicators for monitoring the situation of children and families (Watts and Hernandez, 1982). Their recommendations included the following general guidelines: 1) organize data with children as a unit of analysis, not families; 2) measure contextual and environmental variables; 3) develop indicators to represent children's cumulative, not just current, experience; 4) adapt consistent definitions and rules of tabulation across surveys to allow direct comparisons, such as age groupings; 5) distinguish between families and households, and 6) disseminate data in a more timely fashion. Their specific recommendations included: 1) Maintain existing basic data collections; 2) publish a federally-sponsored biennial report on status of children to bring together statistics scattered across public and private publications; 3) establish a data archive to provide access to data on children; 4) develop indicators with new tabulations of existing data and new questions on existing surveys; 5) and specifically recommended that the National Health Examination Survey be replicated; that a national time use study of children and associated adults be conducted every 5-10 years; and that a National Youth Panel Study should be designed with cohorts of young children and adolescents. They recommended the following domains for indicators of children's well-being: health, socio-emotional status and functioning, moral and ethical attitudes and behavior, intellectual status and functioning, and other capacities such as music, art, mechanical, and athletic. In addition to child well-being indicators, they recommended a separate group of indicators on resources, both within the home and extended family, and outside the home and family.

In the late 1980s, a series of comprehensive reports on indicators of child well-being was produced by Child Trends for the Select Committee on Children, Youth, and Families of the U.S. House of Representatives. The 1989 report, *U.S. Children and Their*

Families: Current Conditions and Recent Trends, contained 125 indicators in the domains of population and residence, family environment, parental employment and child care, income and economic well-being, education, health and health-related behaviors, behavior and attitudes, and a section on selected government programs affecting children.

The Index of Social Health, first published in 1987 (Miringoff, 1990), was created with the goal of viewing the quality of life in America as a whole. The unique focus of the index is that it addresses the ways in which social problems interact to create a social climate instead of focusing on individual problems themselves. The index was formed by gathering social indicator data from government agencies and research centers, and has been refined each year to accommodate changes in society. There were originally 17 indicators (now 16) used to form the index. Those for children include infant mortality, child abuse, children in poverty; and for youth, teen suicide, drug abuse, and high school drop-outs, and these are the components of the sub-index called The Index of the Social Health of Children and Youth, which was released periodically (Miringoff, 2003).

In the early 1990s, researchers and policy makers focusing on children's well-being were involved in a social indicators revival. There were strong signs that social indicators were coming to play an increasingly important role in many aspects of governance, including needs assessment and planning, goal-setting, and accountability (Brown & Corbett, 2003). Forces that appeared to encourage this incipient revival included a shift towards performance-based management techniques (Stagner, 1997); the devolution of political power to the state and local levels; and the revolution in information technology, which substantially lowered the cost of data collection and access (Kingsley, 1998).

A major example of child well-being reporting at the state level began in 1990, when The Annie E. Casey Foundation released its first Kids Count report, presenting data for the nation and all 50 states on 10 indicators of child well-being (The Annie E. Casey Foundation, 1991). The report, produced annually to date, tracks progress and ranks states on low-birth weight babies, infant mortality, child deaths and violent teen deaths, teen births, dropouts, idle youth, secure parental employment, child poverty, and single-parent families, as well as providing background demographic and economic data.

Individual states also produce their own KIDS COUNT reports, providing more detail at the state level. KIDS COUNT has spurred indicator development and reporting on child well-being at the state level, and highlighted data gaps at the state level. In addition, the project has undertaken major analyses of census data on children at the state level.

While the forces driving the use of child and youth indicators were clear and growing stronger, the tools themselves (the indicators) were in important respects inadequate to the task. Many important dimensions of well-being, such as child mental health, lacked any adequate measures appropriate for large-scale surveys; the research base on which many indicator measures were grounded was often thin; and data for even strong measures were often not available except at the national level (Hauser, Brown, & Prosser, 1997). Those involved in the field were concerned that, unless the tools were upgraded in short order, the revival might falter.

In 1994, researchers met to assess the current status of child and youth indicators in the United States, and to make recommendations for their future development. Papers from this conference appeared several years later in the book *Indicators of Children's Well-Being* (Hauser, Brown, and Prosser, 1997). The conference helped to lay the foundation for several important developments at the federal level.

That year, a major initiative at the federal level to coordinate and improve federal data on children and families took place. The Federal Interagency Forum on Child and Family Statistics was founded to foster the coordination and collaboration of the collection and reporting of federal data on children and families. The Forum helped to spur major improvements in data collection and reporting on children and families over the next decade. At the first meeting of the Forum, it was proposed that an index of child well-being be developed; but the members (representing 16 federal agencies) decided on an annual report of 25 key child well-being indicators instead, since they did not feel that indicators were adequate in certain domains, nor that the science needed to underpin the selection and weighting of indicators for such an index was sufficiently developed. In 1997, the Forum released the first official government report on the well-being of American children, cutting across bureaucratic and substantive domains (Federal Interagency Forum on Child and Family Statistics, 1997). *America's Children: Key National Indicators of Well-being* actualized the recommendation of the Social Science

Research Council fifteen years earlier for a federal report on the status of children that would bring together statistics scattered across federal agencies, and also strove for consistent definitions for reporting and tabulation of data, as recommended by the Council. Key child well-being indicators were selected in the domains of: economic security, health, behavior and social environment, and education; and there was a background section on indicators for population and family characteristics. Indicators were selected through a consensus process of the member agencies, in which current research, substantive experts, and stakeholders in the government and the private sector were consulted and the quality of data for each indicator was evaluated. The report has been produced annually since 1997, and as new indicators have been developed, they have been added or have replaced others in the original set. The report also points to data needs in each domain, which has driven priorities for federal data collection on children and families. The *America's Children* report has served as a model for other child well-being indicator efforts at the state and international levels as well, and for other comprehensive indicator efforts at the federal level.

Another parallel, but comprehensive rather than selective federal child well-being indicator report, was developed by the office of Wendell Primus, then Assistant Secretary for Planning and Evaluation at HHS. The idea was to take extant data and the recommendations of the 1994 Indicators Conference and produce something analogous to the book published by the Committee of Ways and Means of the U.S. House of Representatives entitled *Background Material and Data on Programs within the Jurisdiction of the House Committee on Ways and Means*, informally known as “the Green Book”. The first *Trends in the Well-being of America's Children and Youth* (Office of the Assistant Secretary for Planning and Evaluation, 1996) was published in 1996, and annually thereafter until 2004. There were 5 domains of about 80 indicators, including those in the *America's Children* report, and the member agencies of the Forum often reviewed indicators and contributed indicators to the *Trends* report.

During the decade of the 1990s, the social indicators revival did not sputter out but instead gained strength in every dimension including: more and better measures; vastly expanding amounts of data collected at all levels of geography (national, state, and local); greater accessibility of data through reports; Web-based databases and community

GIS data systems; a steadily-growing research base; and tremendous growth in the use of indicators as tools for planning and governance at the national, state, and local levels (Brown & Moore, 2003).

There were a couple of significant developments on international child well-being indicators in the 1990s as well. Previously, there had only been the aforementioned UNICEF reports on the State of the World's Children that reported on indicators of basic survival, such as infant and child mortality and caloric intake. However, in 1990, the Census Bureau produced the first international comparative report on child well-being comparing the U.S. to 15 other developed countries on indicators of child well-being comparable to those found in U.S. state of the child reports (Hobbs and Lippman, 1990). The domains of indicators included family structure, economic status, health, education, youth employment, and family formation. Then, in 1993, an index of the quality life for children was created from 9 variables from the UNICEF reports, called the National Index of Quality of Life. Scores on the index were estimated for 122 countries and regions of the world, and change was calculated from the base year of 1982 to 1992 (Jordan, 1993). The author recommended conceptualizing children's quality of life in future surveys in terms of the themes of play, nutrition, schooling, naming, and discipline within ecological settings. In 1996, an international group of child well-being experts began a project called, *Measuring and Monitoring Child Well-being: Beyond Survival* (Ben-Arieh and Wintersburger, 1987) in response to a perceived need to monitor child well-being internationally because of increased global interdependence, progress in human and children's rights, the development of strengths-based approaches to measuring child well-being, a call for increased accountability for child well-being by communities and government, and the need to advance children's well-being. This project sought to create international indicators of children's quality of life that go beyond the "survival" indicators typically found in UNICEF reports, and address indicators of the child "well-being" from a child's perspective, not just adult oriented "well-becoming" indicators. The domains recommended by the group cut across the traditional education, health and behavioral domains, and include social connectedness, civil life skills, personal life skills, safety and physical status, and children's subculture. An important theme of the group is to measure how children influence their

environments, and indicators created by the groups have children as the unit of analysis, a child's perspective, and positive and negative indicators. Data from international surveys were then gathered for each indicator, where available, but data for some indicators remain unavailable.

In 2001, Child Trends and the NICHD Family and Child Research Network once again brought together many of the nation's leading researchers in child and youth development to identify the progress that had been made since the 1994 conference in the development, collection, dissemination, and use of key social indicators of child and youth well-being, and to identify key opportunities for new indicators development and application in the coming decade. This conference made specific recommendations for improving data collection samples, research methods, and child well-being measurement across domains (Brown, forthcoming).

At that conference, Ken Land and colleagues presented an index of child well-being which tracked changes from 1975 through 1998 (Land, 2001; Land et al 2001). Guided by the domains of quality of life found in subjective well-being studies, Land and colleagues compiled data for 25 indicators from the federal sources used in *America's Children* and the *Trends* report to create an index to monitor children's material well-being, social relationships, health, safety/behavioral concerns, productive activity, place in community, and emotional/spiritual well-being. The intent of the index was to combine the changes that had occurred over time in each of these domains into a single number to represent the relative change over time in a set of social conditions encountered by children and youth. The indicators were equally weighted, and the percentage change computed over the base year to produce equally weighted domain-specific and indicator-specific indices. Land called for better social relationship data and better emotional well-being data, for which time series data did not exist.

Using Land's model, The Annie E. Casey Foundation's KIDS COUNT project created an index from the 10 KIDS COUNT indicators in 2003 (O'Hare and Bramstet 2003). They compared the KIDS COUNT index from 1990 to 2000 to that Land index and a 36-item index based upon the America's Children indicators to gauge how well the KIDS COUNT measures function, and whether they were capturing variation over time in child well-being. Although all of the KIDS COUNT measures are deficit indicators

(see list above), their study showed that the trends were similar to the Land index and the index based upon America's Children, however, the KIDS COUNT index showed sharper improvement over the decade (O'Hare & Bramstedt, 2003).

In 2002, Child Trends launched the ChildTrendsDatabank, a continuously updated on-line resource for 70 initial indicators of child well-being, which has now grown to over 90. Trends and subgroup differences are presented for each indicator, and linkages are provided to state and international data, where available, and to original source data, as well as research on what works programmatically to positively affect change for children and youth in the area addressed by the indicator.

Throughout the 1990s and into the new century, consistent calls for positive indicators of child well-being to balance the plethora of deficit indicators available were made at the federal level through the *America's Children* reports, as well as by those working on state and international indicators, researchers, and particularly programs that work with children and youth (Moore, Lippman, and Brown 2004). In 2003, Child Trends convened 23 researchers working in various domains of positive well-being to present their scales to a wide audience, with the objective of presenting solid research supporting the validity and reliability of the measures so that those conducting child well-being surveys would consider using them more widely (Moore and Lippman, 2005). The conference stimulated a demand for positive measures in large-scale surveys, as well as more research in new domains such as in mental health, as well as interest in creating cut-points for positive indicators. As Pollard and Lee (2003) noted in their review of literature on child well-being, negative indicators are typically one-dimensional, while positive indicators are often presented on a continuum from negative to positive, so the question of how much of a positive measure is considered enough is raised.

Pollard and Lee also noted the need for subjective and objective data using an ecological approach across the commonly-used domains identified by their review—physical, psychological, cognitive, social, and economic well-being. An example of how child well-being indicators are currently being expanded to fill ecological domains of children's lives was *Indicators of Child, Family, and Community Connections* (Office of the Assistant Secretary for Planning and Evaluation, 2004) harking back to the recommendations made by Brim in 1975 as well as others along the way. One

recommendation which emerges from this effort, ironically, is that, while the field has succeeded in making children the unit of analysis in many data sets order to accurately portray children's circumstances, we are now not able to link children adequately in many cases to the behaviors of their parents, or to their communities. The field in that respect has come full circle.

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