SOCIAL INDICATORS RESEARCH SERIES

Volume 27

INDICATORS OF CHILDREN'S WELL-BEING

UNDERSTANDING THEIR ROLE, USAGE AND POLICY INFLUENCE

Edited by ASHER BEN-ARIEH AND ROBERT M. GOERGE





Social Indicators Research Series

Volume 27

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INDICATORS OF CHILDREN'S WELL-BEING

Understanding Their Role, Usage and Policy Influence

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This book is dedicated to our friends and colleagues at the Chapin Hall Center for Children at the University of Chicago and the National Council for the Child in Israel—they taught us the power of research in advocating for child well-being.

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Preface

ROBERT C. GRANGER

William T. Grant Foundation

During the past 10 years or so, a number of researchers, policymakers, and practitioners have made important progress on the identification and use of indicators of children's well-being. The United States federal government, via the Department of Health and Human Services and the National Institutes of Health, as well as such private funders as the Annie E. Casey Foundation, have supported many of these efforts. During this time, the William T. Grant Foundation, who was not a primary funder of such activities, was nevertheless one of the many institutions benefiting from the work

Fortunately, Asher Ben-Arieh, Larry Aber, and Bob Goerge persuaded us to support a working conference on how to assess the effects of indicator usage on policies and programs. This volume is the result of their talents and the clear thinking of many of their colleagues. It is my pleasure to introduce the volume with a few thoughts about its contributions and the questions that remain.

Through the 1990s, the work on social indicators created consensus on several points. For those who are relatively new to this topic, this volume includes chapters that reprise these important areas of consensus, such as the offerings by Tom Corbett, Asher Ben-Arieh and Bob Goerge, and Kristen Moore and Brett Brown. For example, people agreed that indicators could be used in several different ways—to describe the state of children's well-being; to monitor that well-being over time, place, or groups of children; or to serve as a vehicle for accountability and evaluation. This work was important because it asked all involved to consider an indicator's use as an important referent for judging its merits. Indicators are not good or bad in some abstract sense. Rather, specific indicators are more or less useful for particular purposes. Most also agreed that it was productive to have indicators of child strengths and assets in addition to those that indicated problems and needs. Such indicators drew political and practical attention to what we all desire for young people beyond the avoidance of various problems. Further, there was agreement that it was important to consider indicators in multiple child areas (e.g., health and school achievement) simultaneously and to have some indicators for the settings that shape children (e.g., indicators for family and community well-being in addition to indicators for child well-being). Although there was agreement that having too many indicators could be paralyzing, the call for some breadth helped users monitor both planned and unplanned effects of policy changes. Examples might include the need to balance data on welfare case closings with an eye toward avoiding increased rates of child poverty, or monitoring rising educational achievement levels as well as dropout rates.

X PREFACE

Beyond the conceptual work on indicators, the last 10 years have seen significant progress in the use of indicators by practitioners and policymakers. Examples in the U.S. include the Kids Count work supported by the Annie E. Casey Foundation, and the Child Indicators Project led by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) of the U.S. Department of Health and Human Services and coordinated by the Chapin Hall Center for Children at the University of Chicago. Lisa Klein describes the Child Indicators Project in this volume. Her chapter is a clear account of the project's components, the indicators each state focused upon, and lessons learned. Vermont was one of the states involved in this project, and Con Hogan was Secretary of Vermont's Human Services Agency at that time. Con's chapter describes several benefits of using indicators. A major one is the ability of an indicator to mobilize activities and resources across agency and organizational boundaries. For example, many government agencies have a stake in "getting all children ready to succeed in school."

Having such case examples is important as this field moves from a conceptual discussion of potential uses to the implementation of actual efforts in practice. In that vein, the volume also includes examples of the use of indicators for shaping antipoverty policy in England (Jonathan Bradshaw), childcare in the southern U.S. (Sarah Shuptrine), and an examination of the details of cross-cultural comparisons using Canada and Norway (Shelly Phipps). Each of these authors derives lessons from his or her experience using indicators, and in summary, each suggests measuring a few things well and taking the data seriously.

Perhaps because I too have a bias toward parsimony, I particularly liked Tom Little's chapter on how to use indicators effectively with policymakers. Tom's conclusions—that policymakers are very busy, all politics is local, and that advocates working for better social policy should be brief, honest, and build relationships with policymakers—constitute strong advice.

With considerable agreement on the uses of indicators, and some case examples of actual use, it is worth addressing the question of what difference indicators make in advancing child well-being. This was the overarching theme of the conference and several chapters moved my thinking along. Jim McDonell's chapter on the use of indicators in Comprehensive Community Initiatives reminds us that any social intervention is likely to be embedded in a complex social setting, like a city, and is likely to have many moving parts. In such situations, it is never easy to get clear estimates of causal effects. This point is made in different ways in the chapters by Jeff Cappizano and Matt Stagner, and Pamela Morris and Lisa Gennetian. Both chapters begin with a brief discussion of the stages of the policy process: agenda setting, specification of policy alternatives, policy choice, and policy implementation. Then the authors discuss how indicators might affect each stage and how one might design an evaluation to discern such effects. To estimate the effects of an intervention, I always start with the hope for a true experiment. Each of these chapters contains careful thinking about the potential use of both experimental and quasi-experimental evaluation designs. Any readers of this work will come away with a better understanding of the possibilities for various designs for different purposes. But they will also come away somewhat sobered about the ability to use field experiments to determine the effects of indicators.

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As Asher Ben-Arieh and Julian Titler note in their concluding chapter, there are important questions that remain in front of this volume. Because the William T. Grant Foundation wants to understand how to improve policies and programs, I favor more work on the use and effects of indicators. For example, do policymakers and practitioners use indicators to make important choices or are these decisions rarely shaped by data? If "what gets measured, gets done," what are the intended and unintended consequences of using indicators in high-stakes ways? Is it important to assess particular indicators, or is it more important just to measure something? Although the volume does not resolve these issues, it has much to offer those who share these interests.

Section I

General

The Role of Social Indicators in an Era of Human Service Reform in the United States

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If there is a single theme that characterizes the public sector in the 1990s, it is the demand for performance. A mantra has emerged...at all levels of government, that calls for documentation of performance and explicit outcomes of government action.

Beryl Radin (2000, p. 168)

We have long sought to employ social indicators to measure the condition of society and of subpopulations of interest (Hauser *et al.*, 1997; Miringoff, 1993; Miringoff *et al.*, 1999). In recent years, however, developing and using social indicators in ways that substantively shape public policies has emerged as a seminal interest and challenge. Motivating this interest are several concurrent reform movements that, in turn, are reshaping the way human services are organized and delivered in the United States.

These movements are called by various names—policy devolution, government reinvention, welfare transformation, and systems integration. Individually, and as an interrelated whole, these powerful themes are redefining the way we think about the provision of social assistance and about public accountability for disadvantaged and vulnerable populations.

Much attention has been directed toward the devolution and the reinvention movements in government. With respect to the other two movements, the transformation of welfare and service integration, less has been written that, in my opinion, fully captures underlying dynamics and challenges. This chapter pushes our thinking in the following directions. First, it explores some of the ways in which these themes relate to one another. For example, how do the devolution and welfare reform movements refresh our interest in experimentation with integrated human service models around the country?

Second, it explores how some of the policy and management consequences of these themes translate into a renewed interest in using social indicators. For example, can we realistically pursue a strategy for replacing the array of extant categorical programs (or service silos) with more integrated models where case plans are holistic and individualized to family needs if we do not possess advanced capabilities for monitoring the well-being of populations of interest?

Finally, this chapter explores the fine and ever-shifting line between *informing* society about social conditions and *influencing* current policy discussions. It argues that the cause of advancing the social indicator agenda does not operate in a vacuum, but rather is inextricably linked to and shaped by the broader policy context in which it is located. To avoid an overly abstract or detached discourse, the chapter focuses

largely on human services reforms in what traditionally has been thought of as the welfare system (and related programs). In addition, much of the substantive discussion is drawn from examples found in several upper Midwest states, a region long recognized as a laboratory of public sector innovation in the United States. Despite this programmatic and jurisdictional parochialism, the observed lessons and implications are quite universal.

Social Change and Social Indicators

What we broadly think of as *indicators* can be considered a measure of some phenomenon or attribute that taps into something of importance to society (Duncan, 1969). In the economic realm, we have well-developed indicators whose importance is fully reflected in the frequency with which they are reported and the eagerness with which they are anticipated. The most recent inflation and unemployment data are reported out as soon as they become available. The nuances and consequences of the numbers are vetted immediately and endlessly, in part because they might well influence a host of policy levers and decisions made by the Federal Reserve Board, private investment decisions by individuals and firms, and policy in a score of other public agencies and private venues.

Some indicators (e.g., various equity market indicators) have been around for over a century and have always received considerable attention. Today, these measures of economic vitality are ubiquitous. In real time, one can access such data in airports, on cable television channels, on electronic billboards, computer homepage screens, and elsewhere. There is a sense of immediacy and consequence attached to these numbers. For many, being out of touch, even for the briefest period, evokes anxiety and uncertainty.

Social indicators, on the other hand, quantitatively measure key attributes that reflect how society, either people in general or specific subpopulations of interest, is doing (Brown and Moore, 2003). In one sense, virtually all indicators are social in that they reflect, even if indirectly, the well-being of individuals and families. Measures that reveal the extent to which harmful pollutants are emitted into the atmosphere are justified largely on potential health risks to people. Unemployment rates are a direct measure of social hurt if you are the one without a job, and a measure of community health if you are working in a jurisdiction where the rate is unacceptably high. Measures of poverty can certainly be thought of as both economic and social indicators. The poverty measure is considered a reflection of the economic and social health of the larger community because an insufficient command over resources is seen as a proxy for a host of other difficulties affecting families and communities. Still, there does appear to be a conceptual line that distinguishes measures of how institutions are doing from those focusing on how people are doing in some direct and immediate sense.

When considered in the conventional sense as assessments of status, developing and using indicators legitimately can be thought of as primarily a technical or even academic matter. Such a characterization would no longer appear appropriate, however, because, in recent years, the social indicator agenda has assumed a more applied character, with increasing attention to the application of measures to specific governance and management purposes. Moreover, the evolution of policy perspectives and institutional arrangements in turn has heightened the need for better indicators. Not surprisingly, the indicator agenda is increasingly responsive to the policy milieu or "stew" that defines the contemporary era (see Ben-Arieh and Goerge, 2005, this volume).

Four overarching public governance transformations or themes shape contemporary thought and dialogue about social indicators (Corbett, 2002). First, the *policy devolution* (devolution for short) theme constitutes a shift in program authority from more inclusive levels of government to levels closer to the problems intended to be addressed (e.g., from the national government to local communities). Second, the *government reinvention* (reinvention for short) movement shifts public sector management from a focus on process and inputs (activities or investments) to a focus on outcomes (what policies and programs accomplish). Third, the *welfare transformation* (reform for short) theme reflects a shift in traditional welfare programs from an income support strategy to strategies designed to address underlying personal, family, and community contributions to poverty. Finally, the *systems integration* movement (ISM for short) represents a surge of interest at all levels of government in developing integrated social service models where discrete program silos once dominated the service landscape.

To illustrate what these transformations might mean, let us pause briefly at the bottom of this policy food chain, where systems actually interact with people needing help. Integrated service models differ from conventional social welfare programs in important ways. The latter provide specific public goods—such as childcare, food stamps, cash income transfers—to a defined pool of eligible families denoted by their relationship to a standard of need and perhaps a few other variables. It is easy to understand these programs by examining inputs, such as how many families received the intended benefit or how many childcare slots are created. Efforts to hold these programs accountable seldom get beyond crude measures of decision-making accuracy, target efficiency, or population saturation.

Integrated service models (ISMs), on the other hand, shift policy perspectives and operational attention in three new directions (Kusserow, 1991). First, ISMs attempt to reach a broader target population than those reached by conventional programs. By combining existing programs, they expand target populations in an additive fashion by combining target populations and by reaching out to new populations through comprehensive one-stop service centers. In some cases, the new models are even more ambitious, explicitly reaching out to large segments of the low-income community or all job seekers, irrespective of their economic situation. They seek to become (or at least market themselves as) centers for community change, not just places where specific social problems are addressed.

Second, they typically push managers away from a focus on inputs (and throughputs) and toward outcomes. In part, this shift takes place because inputs (and even outputs) become harder to define and measure. More importantly, the best models are organized and managed around discrete outcomes attached to defined target populations.

Third, the core technologies (what a program does or provides) of each participating system are often blended in unique and individualized ways. An axiom often heard from staff members in some of the more ambitious integrated service models is that "we do what it takes" to respond to the difficulties facing at least some client families. In such programs, service plans are individualized with services provided by teams of professionals coordinated by a case manager who can draw on several areas of expertise. There are no set protocols through which the client's experience with the system is pretty much determined at the outset. This makes it harder to merely count specific benefits or services delivered and increases the attractiveness of focusing on what these integrated systems have been organized to accomplish.

These overarching themes drive governments at all levels to rethink what they do for vulnerable families and communities and how they organize themselves. They push policy entrepreneurs to organize and deliver services along lines shaped by the problems and challenges addressed as opposed to some arbitrary way programs happen to be structured and funded at state or federal levels.

Human Services Reform—The Welfare Example

No other human services system better reflects the emerging changes in the character of social assistance in U.S. than what has happened to traditional welfare programs. It has long been noted that the U.S. social assistance system is unduly fragmented and inefficient. In the early 1970s, then Secretary of Health, Education, and Welfare (HEW) (U.S. Department of Health, Education, and Welfare, Social and Rehabilitative Service, 1972) Elliot Richardson characterized the system as suffering from a "hardening of the categories." He, along with many others, noted that federal funding silos, different eligibility and reporting requirements, and conflicting regulations can make it difficult to serve families comprehensively and effectively.

For example, members of the Midwest Welfare Peer Assistance Network (WELPAN), a group of senior welfare officials from the upper Midwest that has been meeting since 1996 to discuss the course of welfare reform and to assist one another in shaping the future of reform, noted the following in early 2002:

Arguably, the federal government thinks about policy in terms of specific programs and categorical funding streams (each, as it were, an independent "silo"). States, on the other hand, increasingly think about how a coherent and seamless service delivery system might better assist disadvantaged families

(Welpan, 2002, p. 2)

The salience of their renewed attention to this policy challenge has been informed by recent struggles to reframe welfare from a program that distributes checks to one that seeks to address individual, family, and community behavioral challenges. To illustrate, the enactment of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, P.L. 104-193 (PWRORA) marked a shift in the fundamental premise of welfare—that families are better off employed than dependent on the state. Through the creation of the Temporary Assistance for Needy

Families program (TANF), the core technology of the new welfare paradigm focused on transforming personal and family behaviors, and not providing income support. Yet, unlike the straightforward provision of welfare payments under the previous Aid to Families with Dependent Children (AFDC) program, successfully putting unskilled people to work can be an elaborate process that often must start with efforts to address a variety of problems, from substance abuse to inadequate childcare.

As a result, contemporary U.S.-styled welfare reform required states to dramatically change their efforts from determining eligibility and issuing cash welfare payments to the development of comprehensive workforce and human service systems designed to support self-sufficiency and strengthen personal and family functioning.

Under the flexibility provided by the 1996 TANF legislation or, in some cases, waiver authority granted earlier, a number of states and localities developed innovative strategies to deliver coordinated and seamless services to facilitate this transformation in the purposes of social assistance. The initial promise of these cross-systems innovations has heightened interest in identifying new opportunities and addressing remaining barriers to such integration.

Since the mid-1990s, it would appear that the states have, overall, been successful in their efforts to meet the challenge of transforming the nation's welfare system. Clearly, there has been a substantial decline in the cash welfare cases throughout the nation. Between August 1996 and March 2003, the total number of cash recipients declined 58.6%, from 12.2 million recipients to just under 5 million recipients (U.S. Department of Health, Education, and Welfare, Social and Rehabilitative Service, 2004). With less demand for cash payments freeing previously committed TANF funds, there had been a significant shift in the purposes for which these funds have been expended. In the later 1990s, for example, the proportion of TANF dollars spent on traditional income support fell from 72% of all expenditures to 30% in several Midwest states (WELPAN, 2000).

The implicit logic embodied in newer thinking about welfare, which—although incorporated in the 1996 law—had been evidenced in reforms as far back as the mid-1980s, has been nicely captured by WELPAN. In thinking about the meaning of reform in 2000, and looking down the road a bit, WELPAN members concluded that future reform could, if permitted by circumstances to evolve, unfold in a series of transformations as suggested in Figure 1 (Corbett, 2002).

The simple dynamic described above suggests that work, while a necessary first step, is not an end in itself. Moving a welfare mother into the labor market inevitably raises issues about keeping her employed. Sustaining employment and moving up a career ladder, an important step toward escaping poverty, typically demands complementary investments in families and communities. Productive workers usually are associated with functioning families and environments. But in the end, even this is not what reform is all about. Rather, when we really focus on what is important, we move the discussion toward an intergenerational perspective—what are we doing for the next generation. Thinking in the long run raises the bar dramatically and forces us to focus on what is really at stake. In short, the reform movement has only just begun.

If states are not spending the majority of resources on cash assistance, where is the money going? Among the WELPAN states, childcare has become the major

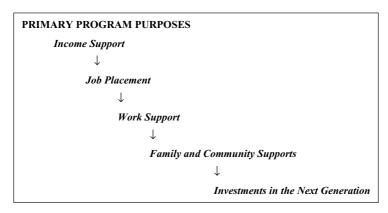


Fig. 1. Primary program purposes.

expenditure item, outranking even cash assistance in importance. Spending on efforts to move recipients into the labor force has also increased, but perhaps less than anticipated. Spending on what the states call *family formation and stability* initiatives evidenced the most dramatic increase, from 6% of all TANF spending in the WELPAN states to about 18% in 2000 and 23% in 2003. This spending category includes a variety of initiatives ranging from home visits to newborns in low-income families through housing stabilization programs to efforts to reduce intrafamily violence and conflict to initiatives to reattach fathers to their children to teen pregnancy programs and efforts to help youth achieve more in school. The emerging principle appears to be that strong families produce better workers and that work helps stabilize families. Some states now invest as much on family-related activities and goals as they do on income assistance.

Second, much of the real action may be outside TANF. Supports for the working poor, at the federal level alone, multiplied some seven- or eightfold in real terms between 1984 and 2000. Although cash welfare reaches fewer families, the EITC, the increased minimum wage, and greatly increased support for childcare suggest that the cash transfer functions of TANF, per se, may not be the best place to look to assess the effects of reform. For example, the minimum wage increased in real terms by 15% between 1989 and 1999; the federal EITC for families with two or more children jumped by more than 200% (Scholz and Levine, 2000).

Moving along this continuum of reform brings tensions between the way some jurisdictions want to pursue the future of social assistance and the current patchwork approach to helping distressed families and communities through distinct categorical programs. Despite numerous attempts to consolidate the federal program silos, separate programs that focus on distinct target populations or on specific helping strategies instead have proliferated over time. Influential constituencies identify problems to be solved. The conventional political response is to create a new program, or new set-asides and regulations within existing programs. These new programs solidify over time, embedding themselves within a confusing, yet interrelated complex of congressional committees, executive agencies, and supportive

stakeholder groups. Typically, the regulatory and oversight process then functions as if the program operates in a vacuum.

The transformation of welfare resulting from the implementation of recent reforms reflects what we might call a *technological imperative* in which the types of services needed to achieve evolving program purposes reshape the institutional arrangements through which social assistance is delivered. Although policy may dictate the central goals of a program, the service technology necessary to implement those goals dictates where and how day-to-day decisions are made. Programs that focus on behavioral change, such as TANF, require an institutional support system different from that required by income transfer programs. Income support programs necessarily emphasize regulatory and procedural uniformity, but human services cannot be definitively prescribed and uniformly implemented for all clients. They place a premium upon flexibility, initiative, and the expertise of social work and other human service professionals.

The structural implications of welfare reform have been well summarized by WELPAN:

The organizational forms in which the workers function are transformed, becoming flatter and less hierarchical. Horizontal communications replace vertical patterns. Agency boundaries become porous as inter-agency agreements and one-stop agency models emerge. Entrepreneurship and outcomeoriented institutional philosophies begin to supplant risk-aversive public monopolies. Discretion at the operational level is replacing traditional command-and-control organizational strategies. Malleable and plastic organizational forms that can respond to new challenges are supplanting traditional welfare organizational forms.

(WELPAN, 2000, p. 2)

If the service technology of a system informs where key policy and management decisions are best located, then the impetus of the reforms also changes the character of the federalism, or devolution, debate. The so-called *devolution revolution* is the second transformation that is motivating the current push for service integration. As the WELPAN members noted, "Under contemporary reform, real decision-making has moved closer to where families and agencies intersect." But this change in turn has placed serious strains upon agency capacities and prompted further rethinking:

The contradictions and redundancies among programs are more apparent, and so is the need to integrate categorical programs into a coherent and comprehensible network that might make sense to consumers and service providers alike. Not surprisingly, we have an explosion of experimentation in one-stop centers, complex community networking, radical secondary devolution, and even virtual agencies.

(WELPAN, 2002, pp. 2-3)

The devolution revolution, where decision making increasingly percolates down toward the operational level of government and responsibility is shared more broadly among stakeholders at the local level, is a complex and controversial dimension of the welfare reform story. Yet, proponents of state flexibility argue that continuing progress in integrating services demands even more frontline innovation

and control. According to this view, states need not only to take better advantage of existing flexibility in federal law, they also require additional flexibility to design and implement initiatives that transform the way business is done.

Consequences of Change for Developing Social Indicators

In the emerging paradigm, the program challenge is to encourage behaviors that are positive and if possible to discourage those that are counterproductive. The new programs have varied and multiple goals (work, marriage, parenting) encompassing multiple targets (parent, child, community). Complex, behavior-focused programs tend to be dynamic and longitudinal, based on change over time. They tend to be so multidimensional that many workers must adopt professional norms that eschew bureaucratic rules.

In turn, the organizational forms in which the workers function are transformed, becoming flatter and less hierarchical. Horizontal communications replace vertical patterns. Agency boundaries become porous as interagency agreements and one-stop models emerge. Entrepreneurship and outcome-based institutional philosophies begin to supplant risk-aversive public monopolies. Discretion at the operational level is replacing traditional command-and-control organizational strategies. Malleable and plastic institutional forms that can respond quickly to new challenges are supplanting traditional set welfare systems.

The new institutional culture of what was the welfare system may well require a different kind of worker. In the past, welfare managers wanted "left-brain" dominant workers, those who excelled at routinized detail work and operated well at linear, unvarying tasks. Suddenly, the need is for "right-brain" dominant workers who can see the big picture and are creative at problem solving. The new management challenge is to continually motivate staff to forget the rules and work on finding solutions to complex family and community problems.

The welfare world has been turned upside down. Individual workers, teams of workers, and institutional partnerships will be tackling society's most difficult problems. They will no longer be functionaries executing policies but professionals creating policies. They will no longer dwell on symptoms but address fundamental cures. And rather than ignoring the most difficult cases, the most troubled families, they will be trying to engage them in creative ways. At least, that is one vision of

The implications of all this change for monitoring, managing, and evaluating the emerging forms of social assistance are profound. Single programs cannot possibly deal with the challenges being taken on by former welfare agencies and their collaborators. Rather, state and local officials are trying to develop coherent systems of service delivery (one-stops and "no wrong door" strategies) so that broad segments of the community can access a range of services. In the future, it may even be difficult to "know" what a case is. The situation is so complex that thinking in traditional silos, the separate programmatic and funding streams that emanate from Washington, is seen by some states and localities as totally dysfunctional.

As the policy and institutional environment continues to evolve, state and local officials increasingly are attracted to the strategy of employing social indicators, particularly those tapping family and child well-being, for a variety of purposes and reasons.

- States are devolving more control to local agencies and communities. Some states
 are hoping that the local planning process can be improved immeasurably by first
 developing goals and measures of those goals. Then the narrative development
 process can begin.
- This is the only way of monitoring performance given the growing ambiguities surrounding caseload, target populations of interest, systems and program boundaries, and the like. It is likely that a wider net must be cast if one wants to appropriately implement the traditional "canary-in-the-mineshaft" function.
- This is one of the best ways of ensuring accountability. Many states want to move
 in the direction of performance-based and/or competitive strategies for governing
 state-local relations. But since the new forms of social assistance are so varied,
 again, developing good indicators is a key.
- Some states want to use social indicators as a way to drive further toward the
 type of cross-systems collaboration they see as necessary if their service systems
 can seriously tackle the difficult family and community problems that reforms are
 beginning to take on.
- Because caseloads and actual service delivery systems are so ambiguous and complex, this is the best way of measuring effects—looking for population-level changes. Here we are spilling over into higher-level functions, employing nonexperimental methods to begin teasing out potential causal impacts.

In short, the evolution of policy and program forms unleashed by PRWORA have brought about changes that make social indicators far more critical to the planning, implementation, monitoring, and understanding of social assistance at both the federal and local levels. At the same time, the classic experiment can no longer be relied upon as the only analytic strategy for determining if welfare reform is working, and why (Corbett and Noyes, 2003). Experiments worked very well under set-piece policy regimes where the federal government controlled the scope and pace of change. This is no longer the case as officials seek to transform the very culture of agencies that serve the poor and to radically alter how individual systems and programs relate to one another. It may no longer be possible to causally link particular policies and programs to defined target populations.

Conceptual, Definitional, and Application Challenges

Even as the need for better social indicators evolves, progress toward developing and implementing social indicators that would influence public policymaking has been modest. Undoubtedly, there are many reasons for this, not all of which we can explore here. In this section, the conceptual ambiguity surrounding indicators and how they are used is examined, on the assumption that some of the reasons for any failure to advance the social indicator agenda lies in this conceptual and

definitional confusion. Achieving greater clarity, or some form of a consensus on a basic vocabulary for social indicators, might well be a good place to start. So, what are some of the steps that anyone interested in using social indicators in the real world should consider?

First, we must sort out populations of concern. Analysts often struggle to define the appropriate level of analysis. Welfare analysts and policymakers alternate their focus among several targets; the individual adult caretaker, the child(ren), the family as a whole (or household, which may be larger than the related family), or even the community. These different levels of analysis can be affected by welfare reform in quite different ways, and the desired outcomes for each will differ. Obviously, labor market outcomes are appropriate for the adult caretaker, but make less sense for children, at least in the intermediate term. For adults the outcomes may be employment, human capital improvements, or measures of family stability and quality of parenting. For a child, the outcomes may be health, school attendance, and academic achievement. For families, they may be reduced homelessness and reduced intrafamily tensions and violence. For neighborhoods, the indicators may include lower crime rates, higher civic participation, and an improved economic climate.

Analysts also make distinctions among larger groups of people. The outcomes most typically measured are those related to welfare clients and their families, who are the direct and obvious concern for reform initiatives. Within this broad population there may also be an interest in determining the differential results for subpopulations of welfare families, such as those who live in rural areas compared to urban areas or members of different minority or disability groups. In addition, there are reasons for tracking outcomes for groups that might only be indirectly affected by specific reforms, or where the connection is tenuous at best. For example, potential welfare clients (low-income heads of families) could be tracked to determine entry rates or (conversely) deterrent effects, and those who were former welfare recipients could be followed to ascertain changes in the rates of reentry into the system.

Second, we must think through the types of measures that can be used. Three different types of measures are often used interchangeably when discussing population attributes—indicators, outcomes, and impacts (see Appendix for a fuller differentiation of types of measures). These are very different measures and are not fungible in all cases.

- 1. Indicators. Indicators typically track the behaviors or situations of broad population groups. These measures can be tracked over time, across groups, or across geographic units. Although tracking the progress of broad population indicators such as out-of-wedlock births or poverty rates is useful, it is important to realize that changes (or differences across population groups) in these indicator data may be the result of many factors. It is typically inappropriate to attribute differences to specific policies or programs. In effect, social indicators are not normally used to establish causality.
- 2. **Outcomes.** These are numerical measures of behaviors or events that are generally believed to be a result of a policy or program of interest. Typically, outcomes

are positive and relate to goals that the program or policy hopes to achieve. Some actual outcomes, however, may be unanticipated, negative, or undesired. In welfare reform, an example of a positive outcome would be an increase in the number of welfare recipients leaving cash assistance and getting jobs. However, outcome data are not always collected in ways that make it possible to say that reforms have definitely caused the positive or negative change in the indicator. Absent a rigorous (often experimental) method for collecting and analyzing data, it may not be possible to determine whether falling caseloads are due to reforms or to changes in the economy, at least to everyone's satisfaction.

3. Impacts. An outcome becomes an impact only if the indicator of interest is collected in such a way that one can confidently assert that it was caused by the program or policy intervention. Researchers generally agree that establishing an "impact" in any scientific sense requires a rigorous evaluation design. The most reliable evaluation is the classic experiment with random assignment of participants to an experimental group (i.e., those who experience the program or policy) or to a control group (i.e., those who do not). For a number of reasons, some of which are growing in importance, it is not always possible or feasible to conduct such an experiment to determine overall program impacts, especially where the intervention is complex, comprehensive, and continuously evolving.

The inappropriate use of indicators, however unintentional, can undermine the credibility placed in data and those who use the data.

Third, we must select measures that meet acceptable standards. (This issue also discussed in the Moore and Brown, 2005, this volume.) Just because something can be measured does not mean it would be a good social indicator. Kris Moore, Executive Director of Child Trends, developed a list of criterion of what constituted a good social indicator in 1997. Below is my slightly modified version of her list (Moore, 1997).

- 1. **Comprehensive coverage.** Indicators should assess well-being across a broad array of outcomes, behavior, and processes.
- 2. **Clear and comprehensible.** Indicators should be readily and easily understood by the public and users.
- 3. **Both positive and negative indicators.** Indicators should assess positive as well as negative indicators.
- 4. **Depth, breadth, and duration.** Indicators are needed that assess dispersion across a given measure of well-being, children's duration in a status, and cumulative risk factors experienced by children.
- 5. **Common interpretation.** Indicators should have common interpretation in various subgroups, or across different jurisdictions, or over time.
- Forward-looking and predictive. Indicators collected in the present should be able to be used to anticipate the future by providing appropriate baseline information against which to judge trends.
- 7. **Rigorous methods.** Coverage of the population or event being monitored should be complete or very high, and data collection methods should be of high quality and consistent over time.

- 8. **Geographically detailed and covering populations of interest.** Indicators must be developed at the state and local level, as well as the national level. They must also cover important groups, such as various age cohorts of children.
- 9. **Cost efficient and feasible.** Strategies to expand and improve the data infrastructure need to be thoughtful, well planned, and cost efficient.
- 10. **Reflective of broader social goals.** At least some indicators should allow us to track salient societal goals at the national, state, and local levels.

Too often, indicators are used because they are available. But all numbers are not equal in relevance or quality. Prudence dictates that great care be taken in the selection of indicators.

Fourth, we must carefully think about how we want to use any social indicators actually chosen. The forms of social assistance that have emerged over the past few years have made distinct demands on the characteristics of the social indicators employed and on the expertise of those who employ them, with different consequences for the policy process. It is important for policymakers to understand the unique features of these uses, and how each relates to the others. Further, it is essential that policymakers develop a common understanding and a common language regarding social indicators, both of which are still not fully developed. The goal of this section is to lay a foundation for this common understanding and common language.

In the final analysis, purpose drives how we think about the data that make up basic indicators and how we think about the use of indicators. Take any single measure, and what you have is data. Give that data meaning and use it for a specific purpose, and you have information. The nature of the purposes to which data are applied really give it meaning. Five purposes were identified by Brown and Corbett (2003):

- 1. **Descriptive functions.** Here, we merely track an indicator for the sake of knowledge. *Trends in the Well-Being of America's Children and Youth*, which reports 80 indicators, is an example of indicators used for descriptive purposes. Little attempt has been made to identify the more important measures, selection being driven more by availability and the quality of data rather than societal importance.
- Monitoring functions. Here, we ratchet up the importance of the indicators chosen. An implicit choice is made based on how well the measures reflect important societal goals. These are indicators to which we should pay more attention.
- 3. **Goal-oriented functions.** Again, we ratchet up the importance of the indicator. Here we actually set performance expectations—numerical aspirations for performance, sometimes between higher and lower levels level of government, and between public and private groups at all levels of government.
- 4. Accountability functions. Now we really get serious. Accountability adds a new dimension to the goal-setting function by attaching rewards and punishments to performance. When incentives are attached, the stakes are made substantially higher. Stakeholders are more likely to question the indicators chosen, the standards set, and the rigor of data collection and interpretation. In short, every aspect of the process of indicator development and use is open to question.

5. Evaluative functions. The end of this function is to determine which programs and policies are effective (or destructive) and, where possible, to shed light on the reasons for success or failure. Here, the objective of establishing new theoretical knowledge and practical understanding of what works demands even more rigorous technical consideration of how data are used and interpreted. Scientific rigor demands that the data are collected in accordance with those protocols, and interpreted according to acceptable analytic standards, if causal conclusions are to be accepted.

These purposes are organized into a typology, structured around progressively exacting demands on each use, which Brett Brown likens to a Russian-doll: description forms the outermost shell, evaluation the core, and the three intermediate levels share some characteristics of those outside in addition to their own particular characteristics.

When there is active interest in some dimension of social well-being, one that might require a governmental response, the task of description becomes one of monitoring. When social indicators become associated with active policies intended specifically to improve social well-being, monitoring becomes goal setting. When there are consequences associated with success or failure in meeting specified goals, goal setting becomes outcomes-based accountability. Finally, when those held accountable are asked to demonstrate scientifically the relation between their activities and the social outcomes they are intended to affect, accountability becomes evaluation. Any single indicator, child poverty for example, can be used for each and every one of these functions. It all depends on how the data are used

Moving from level to level—from describing to monitoring to setting goals—increases the importance of actual numbers or rates under observation (in this case, child poverty) to the policymaking and public management processes. Not surprisingly, the need for high-quality numbers, or indicators, is critical. If child poverty, for example, is used merely in a descriptive sense, flaws in the way it is conceptualized and measured may be of interest but not of great social importance. But when we use an indicator to hold entities responsible and to decide whether programs are useful or not, we had better know what we are measuring and be confident that it is what we think it is (Citro and Michael, 1995).

Consequences of Change for Ensuring Public Accountability

Traditional service delivery systems that deliver specific goods through narrow, categorical programs could legitimately tap individual program data to ensure accountability. How many families received a check? Were the benefits issued in accordance with the rules? How many adults were working, or received training, or obtained the necessary child care? These discrete counting mechanisms seem inadequate to the task of understanding what is happening in the very complex systems that might be constructed if local jurisdictions pursued service integration vigilantly.

ISMs, on the other hand, are assumed to be more than the sum of their parts. Thus, simply adding up the desired outcomes might not measure what is expected of an integrated system. In that case, we have a political dilemma. Whose outcomes are paramount? What do we focus on? Will some component parts of the new system be unfairly assessed, or not have their contribution fully recognized? The list of challenges is exhausting, and complicated. Even when agreement on outcomes is achieved, blending data and the meaning assigned to data can prove problematic. The more ambitious the model, the more unlikely it is that good, unambiguous data will be available for the entire integrated system.

In several workshops and conferences from 2002 to 2004, the author and several colleagues convened representatives from selected state and local ISM initiatives to discuss their successes and failures in attempting to recast social assistance in their communities (Corbett and Noyes, 2004). We called these sites "lighthouses" because they shed considerable illumination on both what was possible, and on what remained as imposing challenges. Often, the discussion among the so-called lighthouse representatives returned to questions of accountability and measurement. The comments generally focused on the need to be accountable to a broad range of stakeholders. One representative noted that the outcome measures chosen must respond to legitimate questions emanating from the broader community, ranging from those responsible for the integrated system itself (e.g., a job center incorporating multiple programs) and to individual programs and systems that had been brought together under one roof (e.g., TANF, food stamps, programs funded under the Workforce Investment Act). Other lighthouse representatives focused on the challenge of measuring outcomes in ways that are understandable to stakeholders, of not becoming entrapped by competing and inconsistent outcomes, or not falling prey to unintended consequences. Although the practitioners saw the need for enhanced accountability strategies, they were fully cognizant of the inherent challenges to doing this well.

Given this, it appears that, in the new integrated systems, individual program data might not suffice in all cases. Managers probably need population data, given the fact that integrated systems might well touch families who are not officially recorded as "cases." Consequently, accountability can probably be better assured by using social indicators to capture the circumstances and well-being of populations of interest. One of the great advantages of social indicators over other research approaches, regardless of the particular purpose for which they are used, is that they can become available quickly for use in informing and improving public policy. For example, recent social indicators showing a decline in the rate of births outside of marriage might be seen as a harbinger of greater family stability, more two-parent families, and better outcomes for children a decade later. Policymakers concerned with promoting and encouraging marriage need to have this type of information, and the sooner, the better.

Using data for accountability purposes can be very threatening to managers of individual programs and lead to significant gaming and manipulation strategies. Another challenge is that we cannot currently realize the potential of using social indicators to ensure accountability because we do not have local population data that is available in anything approaching real time. Therefore, we will need to devote

much more attention and resources to shoring up our data infrastructure if we are to enable communities to embrace service integration while ensuring accountability. Local managers will, for example, need a larger and less arbitrary view of performance: apparent success in one area might result from the rearrangement of clients rather than from real advances. Increased work participation rates under TANF, for example, might be due more to the absorption of multiple-barrier families into SSI than to their more effective engagement in TANF.

Traditionally, the effectiveness of a program can, broadly speaking, be determined by rigorous estimates of its average net effects on an array of significant outcomes among the target population of interest. It is hard to envision how one might operate an experiment involving parallel systems—an integrated service model for experimentals and a counterfactual world where controls would be exposed to the "old" service world of separate programs operating in distinct silos.

There are other difficulties in measuring the effects of integrated programs. For example, specifying the target population and clearly identifying what forms of assistance participants actually receive (i.e., defining the intervention) are not straightforward. Because integrated service models often attempt to respond to multiple client and community needs, it can be difficult to select outcomes by which the effects, if any, might reasonably be attributed to the services delivered. This difficulty can be exacerbated by differences among partners or changes in the participating partners. Each will bring a different perspective on what is important to the table. Finally, as noted earlier, the measurement of management changes and client outcomes is limited by the current primitive state of most information technology systems, which, particularly at the local level, tend to be focused on single programs.

Rigorous protocols for assessing the effects of service integration first require clarity about the character of an intervention. Because the structure of service integration initiatives varies with their objectives (e.g., to support working families; to prepare vulnerable individuals for work; to remedy and/or alleviate such severe disabilities as depression, substance abuse, or mental retardation), it is necessary to arrive at a clear consensus about the purposes and structure of the model. At that point, several measurement issues come into play:

- Confusion about populations. How do we define the population of interest when traditional client groupings are merged, when those who determine eligibility and route clients to the appropriate service (the "gatekeepers") do not necessarily have professional knowledge and training, and when the policy intent is to minimize distinctions within the program and the target population? Often we struggle between competing desires: to move away from the conventional strategy of targeting benefits and services to those in need while simultaneously worrying about whether certain vulnerable groups will then be underserved. To resolve this difficulty, we may want to differentially sample several populations of interest.
- **Confusion about service technology.** What, exactly, are we evaluating? How do we define and classify the intervention or interventions when services might be very specifically tailored to the circumstances of a particular family?

- Confusion about program boundaries. Integrated systems are designed to blur
 the boundaries among participating agencies and professional personnel. If evaluators are unable otherwise to specify the nature of the intervention, they might
 reasonably define participation in a program or programs as the "intervention."
 However, comprehensive service strategies, as we have noted earlier, often permit
 various forms of "engagement" with the system.
- **Confusion about appropriate time frames.** One justification for integrated systems is that they can better address the needs of dysfunctional families with multiple challenges. What timeframes are appropriate for expecting impacts to materialize?
- Confusion about consensus outcomes. In an environment of multiple programs, diverse professional involvement, and individualized treatment modalities, it may be hard to reach consensus on outcomes. If evaluators and policymakers cannot agree on measures of success, assessing effects is impossible.

Finally, we face the fundamental difficulty: a true impact assessment should establish causality. But the complexity of integrated services makes them challenging objects of inquiry. Is it possible to measure any changes in client outcomes that can reasonably be attributed to the experiences of those exposed to an integrated service model? How can we determine causality if classic random-assignment experimental evaluations of these systems prove impracticable or politically insupportable? Are these models so idiosyncratic and unique that we cannot generalize about effectiveness? These are merely illustrations of issues that must be resolved, not insurmountable barriers to assessing effectiveness.

Conclusion

Progress is seldom made because a new idea is inherently good or because it represents good government or sound science. We will never move to a serious system of social indicators, a system that rivals economic indicators in scope or salience, merely because the experts tell us it is needed. Rather, the impetus for change will come from those who do public policy, when practitioners find that measures tapping the status of relevant target populations are exactly what they need to do their jobs.

If we are serious about the reform themes described above, the same demandsupply considerations come into play. Policy practitioners will need population data on populations of interest. They will need that data in real time, and at discrete levels of geographical disaggregation. They will need data that focuses on the family as a whole, cutting across the systems and issues into which we arbitrarily categorize those families. Without such data, the promise of full reform will remain unfulfilled.

In the end, practice and data must complement one another. Technology is not the solution to whatever deficiencies exist in our systems of public help. But technology can support and complement the concepts upon which to create the next generation of social assistance. Increasingly, practitioners believe that we must deliver holistic, individualized services that are preventative in nature and transformational at the family and community levels in vision. To achieve those ends, we must finally invest in a data infrastructure that will fully support a mature system of social indicators.

Appendix: Types of Measures

- **Inputs.** The quantity of resources applied or used—for example, the amount of funds or number of employees.
- **Processes.** Measures of how well internal procedures and policies are operating—e.g., the proportion of successful and appropriate referrals or the proportion of applications completed in timely fashion.
- **Outputs.** Quantity of work activity completed or immediate activities completed. Outputs are expected to lead to desired outcomes but are not, in and of themselves, what we hope to achieve (completion of program activities).
- **Intermediate outcomes.** Events or results that that are expected to lead to the end outcomes but are not themselves "ends." Also include characteristics relating to the quality of the services provided to clients such as accessibility and satisfaction (satisfaction of immediate subsystems purposes).
- **End outcomes/goals.** The consequences or conditions in the target population that the system is intended to change or ameliorate or improve (*social indicators*).
- **Benchmarks.** Preselected values that, by policy consensus or expert opinion, represent standards to be achieved if the integrated system is to be considered successful.
- **Impacts.** Observed outputs and outcomes that can be attributable to the new cross-system innovation and not to dumb luck or fortuitous circumstances.

Note

Based on unpublished data produced by the members of the Midwest Welfare Peer Assistance Network.

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Measuring and Monitoring Children's Well-Being: The Policy Process

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Introduction

Recent years have brought new and growing attention to the field of measuring and monitoring children's well-being (Ben-Arieh and Goerge, 2001), partly as a result of movement toward accountability-based public policy that requires increasing amounts of information to provide more accurate measures of the conditions children face and the outcomes various programs achieve. At the same time, the rapid changes in family life have prompted an increased demand from child development professionals, social scientists, and the public for a clearer picture of children's well-being (Andrews and Ben-Arieh, 1999; Hauser *et al.*, 1997; Lee, 1997).

In part, as a result of this increased activity, the field is changing and is trying to redefine the concept of children's well-being and its measurement (Ben-Arieh, 2000; Bradshaw and Barnes, 1999). An analysis of the field of child well-being indicators based on various state of the child reports (Ben-Arieh and Goerge, 2001; Ben-Arieh *et. al.*, 2001) led in the past to the following conclusion:

The field is undergoing five major shifts (i.e., from survival to well-being, from negative to positive, from well becoming to well being, from traditional to new domains, and from adult reporting to child centered research). These shifts are occurring virtually everywhere—although at different paces in different places.

(Ben-Arieh, 2004)

In this chapter, we argue that yet another change of focus is appropriate. We refer to the role of indicators in shaping policies and services, which requires that indicators be devised and used in ways that would extend their impact beyond building knowledge.

Some indicators and measurements have led to new policies and programs for children, and some have not. Moreover, the same indicator when used in some contexts may lead to desired outcomes, while in other contexts it will not. One good example would be the usage of the child poverty indicators and its changing impact in the U.K. as it is discussed in Bradshaw's paper in this volume. Several questions persist: which are the best indicators of children's well-being? Are there any rules or guidelines for how an indicator should be constructed? How can the knowledge gained from using the indicator be brought to bear on policy-making decisions? Those questions get more complicated in light of the fact that we still lack sufficient

research on which indicators worked better and on which research methods can be best used to answer the question of which indicators have an effect.

The stakes are high. Identifying the most useful indicators and guidelines for constructing them will enable us to measure the state of the child effectively. The mission of this chapter is twofold. We begin by briefly exploring possible research approaches to understanding the effect of indicators (which are discussed further in subsequent chapters). We then describe a number of case studies and the collective knowledge gained through the multinational project "Measuring and Monitoring Children's Well-Being" in a proposal for enhancing the impact of indicators of children well-being on children's lives.

Studying the Use of Children's Well-Being Indicators and Their Impact

This entire volume is an outcome of a meeting of international experts aimed at exploring methods to study the impact of children's well-being indicators on the development of policies and services for children.

Researchers generally agree that additional methods beyond the case study should be explored in order to develop solid knowledge about the impact of information in the formation of policy. However, there is less agreement on the best method for assessing the impact of indicators.

Some studies have used surveys of decision makers to asses the impact of indicators and especially the way they should be delivered (Ben-Arieh, 2002; State Legislative Leaders Foundation, 1995). This method is effective in learning what kind of data and indicators the decision makers want and how they want it delivered. It provides a snapshot of the existing situation and decision makers' thinking. Many efforts to measure the state of children are aimed at changing that state of mind and "forcing" the policymakers to pay attention to children's needs. The pros and cons of such methods are further discussed in later chapters (especially Little's chapter and the one by Stagner and Capizzano, as well as in the commentary on research methods).

Others have suggested studying the impact of indicators using media analysis. Here the rationale would be a perceived positive correlation between media coverage and the impact of data at large and indicators in particular (Kunkel *et al.*, 2002). Although this might indeed be the case in many instances, it is possible that presenting indicators in the media might create a backlash against some of the strategies aimed at improving the well-being of children. In that regard we do have findings showing that in some cases a "quiet" nonmedia-covered approach is preferred by the policymakers (Appelbaum *et al.*, 2004). Finally, in other cases, the media coverage or its absence just did not make a difference. The larger issue of media coverage of children's issues and specific data and indicators in particular is further discussed in Kunkel *et al.*'s chapter of this volume.

A fourth possible method to study the impact of indicators would be controlled experiments. A thorough description of this method and its relation to children's well-being indicators is presented in the chapter by Morris and Gennetian. Indeed,

randomized experiments could be used to test the effects of indicators. However, it is not clear that the information from such studies could be fully exploited because of concerns about the control group contamination in studies in the real world, or the applicability of survey-based responses in "lab" experiments. Given the effort involved in these kinds of studies, it may make more sense to use randomized experiments for the kinds of tests they are best suited—to test the effects of social policies and programs on individuals in order to identify the best way to address problems identified by the examination of indicators.

How to Enhance the Impact of Children's Well-Being Indicators

Based on five case studies on the use of indicators of child poverty and family economic well-being to change social policies (in Ireland, South Africa, France, Israel, and the United States), as well as on the knowledge gained from the multinational project participants' experience, we have identified appropriate goals and subgoals for an effective measuring and monitoring effort. Furthermore, we developed criteria for indicators of children's well-being that will enhance their policy utility. Finally, we attempted to study the conditions that foster or obstruct the use of such indicators for the making of policy.

Thus, this section is divided into four sections. First, we discuss the desired goals and subgoals and the process of development of any effort to use indicators for influencing the making of policies. Next, we present the criteria for indicators of children's well-being that will enhance the utility of the indicators for policymakers. We then discuss the conditions which should accompany any such effort.

Goals, Subgoals and the Process of Development

Belief in the value of children's well-being indicators as a means for improving children's lives should not remain an unsupported declaration. If the indicators are truly to be used for policymaking, specific goals and subgoals for the process of measuring and monitoring children well-being are necessary.

We suggest that any such effort should aspire to the following overall goal: To influence in a positive way public and private actions on behalf of children's well-being.

Furthermore, we suggest the following sub-goals:

- Alert society to the current status of children and to past and emerging trends
- Identify subgroups in which children's well-being has specific characteristics
- Point to causal factors of changes in children's well-being as policy relevant
- Identify intervention points
- Evaluate policy interventions in terms of their effect on children's well-being
- Consider the broader consequences on children's well-being

It is our belief that when such goals are established at the beginning of an effort to measure and monitor the well-being of children, they increase the chances of those indicators being used for making a positive change. It is also clear from

the case studies we examined that such goals are crucial for influencing policies. The positive experience of UNICEF and the World Summit for Children, which began with clearly stated goals, provide evidence of the need for these crucial steps (Grant, Adamson, and UNICEF, 1979–1995).

But, stating clear policy-oriented goals is not enough. We further suggest two additional steps:

- 1. **Planning must be based on and rooted in the experience of children from all population groups.** To develop accurate indicators that yield persuasive results, one must make sure the indicators are relevant. We found that the best way to assure relevancy is to base the development of the indicators on the experience of children. We draw this conclusion from our case studies, particularly from the analysis of poverty indicators, which established the relevance of the experiences of the poor for developing effective child poverty indicators (Habib, 1997; Tardieu *et al.*, 1998). Furthermore, in order to be relevant to all children, the indicator-development process must be rooted in the experience of all children, particularly on the experience of poor children and children from other disadvantaged groups (Andrews and Ben-Arieh, 1999).
- 2. **Planning must be based on and rooted in the public debate.** Beyond ensuring the relevance of the indicators for children's well-being, it is essential to establish their relevance to policymaking. In order to do so, the indicators-development process must be rooted in the existing public debate. The indicators would more successfully become a part of the public debate if studies emerge from existing public debates and then feed back into the public debates their results.

Criteria for Indicators

Any list of indicators will have to be tested and approved before it is used to monitor and measure children's well-being. Beyond establishing that they are theoretically sound, indicators also need to be validated. In the case of indicators of children's well-being, disputes continue over such basic issues as the definition of well-being and its critical domains (Ben-Arieh *et. al.*, 2001). We suggest a two-stage review process. First the indicators would be checked to determine validity and relevance. Second, indicators would be reviewed for their potential to influence policymaking.

Validity and Relevance Criteria for Indicators of Children's Well-Being

A number of sets of guidelines or criteria for reviewing indicators of children's well-being have been suggested (Moore, 1997; Raphael *et al.*, 1996). They all share the goal of suggesting ways to develop better indicators to measure and monitor children's well-being. Based on earlier work and the mutual experience and knowledge of our international group we came up with the following criteria. We have not tried to rank them in order of importance because they all are relevant and need to be considered:

• Significance for the well-being of children. A set of indicators of children's well-being should not only be valid, but also comprehensive in its coverage

of well-being issues, and related to significant consequences for the children's well-being.

- Conceptually valid. Any indicator for children's well-being should be based on solid conceptual grounds. This is especially important due to the lack of consensus on the meaning of well-being and the lack of agreement on a single theoretical framework.
- Accurate. It is crucial to have accurate indicators. Given the disputes about definitions and domains of children's well-being, we must avoid any lack of accuracy that might diminish our efforts. Furthermore, the indicators should accurately reflect the importance of the status of children's well-being and not accept a vague and oversimplified estimations as a compromise.
- Clearly interpretable and understandable. We cannot expect professionals, policymakers, and the general public to spend time trying to understand complex statistical measures of children's well-being. If we want the indicators to gain credibility, they must be clearly, easily, and readily understood.
- **Provides bases for appreciating the consequences.** A valid and good indicator would not only measure the current status of children's well-being. Monitoring the *trends* is also important. Building a base for monitoring future trends and thus analyzing consequences of existing policies or programs is crucial.
- **Relate to causes and outcomes.** A good indicator would relate both to the causes of the current status of children and to the likely outcomes for children of existing policies and programs.
- **Robust to criticism.** For any indicator to be taken seriously, it must be perceived by critics in the research community and by decision makers across the political spectrum as fair, accurate, and unbiased. If not, debate is likely to focus on the indicator rather than the conclusions of the study and what should be done.

We believe that if such criteria are used to evaluate children's well-being indicators, those indicators will be valid and useful for dramatically improving our knowledge about children's lives and well-being.

The focus of this chapter, however, is on the contribution of those indicators to the making of policies. As mentioned before, we propose an additional set of criteria that will enhance the policy utility of the indicators. One list of criteria should not be used without the other, thus the policy-oriented list would be a waste of time if the basic criteria are not applied as well. Similarly, if the basic criteria are used alone, the effort will result in a valid list of indicators that would have little utility in affecting the making of policy.

Policy Utility Criteria for Indicators of Children's Well-Being

- **Relevant to policy variables.** We propose that the basic criteria for making an indicator policy-oriented would be its relevance to recognized policy variables.
- Compelling to media and to advocacy groups. If we want our indicators to be
 used to influence policies, they must be understandable by and compelling to the
 media and to advocacy groups. This will ensure that the data collected will enter
 into the public debate.

- Persuasive to policymakers. Furthermore, policy-oriented indicators should be compelling to policymakers on all levels and across social and political institutions.
- Collectible and accessible by operational units. If the indicators are to be used, then the data cannot be collected for geographic areas that are not politically important. It must be collected by and be available to responsible agencies in the public and private sectors and at all levels. If we want those who are working with children to use the indicators for their work and planning, they must be able to access the indicators themselves. The Internet offers a tremendous opportunity in this regard, although we acknowledge that access around the world is still quite limited.
- Challenges stereotypes that were obstacles to action. We know that stereotypes are an obstacle to changing policies. For example, assumptions that the poor are lazy and neglect their children can prevent action for improving poor children's well-being. If we want to change policies, our indicators must challenge uninformed beliefs and stereotypes that are known to be obstacles to action.

Finally we suggest this three-part validity check for children's well-being indicators.

- Face Validity. Indicators must be clearly understandable to and interpretable by the educated lay public (at a minimum) and the general public (ideally).
- **Predictive validity.** Indicators should be constructed in a way that changes in the indicator measurements could be used to discuss changes in the well-being of children, youth, and society in the future.
- Postdictive validity. Similarly indicators should be constructed so that changes in social, economic and/or policies factors would predict change in the measured indicator.

It is our belief that when such criteria are used to review any given list of indicators of children's well-being, the result will not only be better and more robust indicators but also that indicators will have a greater potential of making a difference in children's lives. Finally, it is evident that various associated conditions affect the prospects of using indicators of children's well-being for the making of policies. The next section explores this issue.

Associated Facilitating Conditions

It is evident that there are a number of associated conditions and forces that interact with the indicators and their usage (Aber, 1997; Frazer, 1998; Habib, 1997; Tardieu *et al.*, 1998). It is therefore our intention in the following section to describe such conditions and to suggest how they can be used to facilitate improvements in children's well-being.

• Agents of change as mediators. We found that when agents of change, such as advocacy groups, opinion leaders, or high-ranking bureaucrats, are involved in

the process of measuring and monitoring children's well-being, they tend to act as mediators between the producers of the data and decision makers. When placing themselves as mediators they are making a commitment not only for the cause but also for making good use of the power of information.

- Accompany the indicator with analysis and data relevant to appropriate responses. When releasing data, one should be ready to make use of the opportunity to capture the public attention and put forward appropriate responses to the current situation as reflected by the use of the indicator. Too many times, those who use the indicator make a strong case using their data but are not successful at explaining and arguing for appropriate policy changes. On the other hand, making recommendations not based on the indicators can call an entire effort into questions. Making use of the release of data to recommend policy reforms will enhance the likelihood that policymakers will include the data in the policy-making process.
- Accompany the indicator with efforts to address criticisms and doubts about
 its validity. In a similar way, when an indicator is used to measure and monitor
 children's well-being, a natural and expected response would be criticism of the
 indicator. If we want to have an impact, we must be ready to defend the indicators'
 validity.
- Consensus about how to respond. Too often, we establish widespread agreement on the status of children's well-being, but disagree on the appropriate strategies for improving that status. If consensus is formed around how to proceed in the making of policies, the likelihood that the data will have an impact will be enhanced.
- Integrated strategic communications campaign. Influencing the making of policies requires sophisticated strategies. Just as we cannot be careless in our efforts to construct the best indicators for children's well-being, we cannot be careless in our efforts to make the most of the indicators. We must plan an integrated strategic campaign that makes use of the knowledge of child advocacy groups about how to make best use of media connections.
- Preparedness for long-term sustained efforts (at least 5–10 years). Finding good and accurate indicators for children's well-being is a long and tedious process. Influencing policies and making a difference in children's well-being is likely to be an even longer and certainly more frustrating process. If we want to make a difference, we must be prepared for a long-term effort.
- Interested political forces. Even when all the criteria and conditions appear
 favorable for making a desired change in children's lives, such change is not
 assured. The political arena, where the policy-making process takes place, is
 complicated by various interests and players. Building an alliance of concerned
 political groups is an important step for the effective use of children's well-being
 indicators.

We are struck by how influential local the politics are around the well-being of children. In many countries, one must focus at the subnational level in order to have an impact on those groups of children that are at most risk.

Favorable economic conditions and ideological atmosphere. Policymaking is
always contingent on the existing economic conditions. We know that when resources are scarce, the chances of influencing policies are lower, even with very

persuasive indicators and data. On the other hand, when resources are abundant, the same data can be very useful for changing policies. Similarly, ideological conditions can foster or impede the use of good indicators and data to influence policies.

Finally, there are three additional questions about the impact of children's well-being indicators on policies.

How important are international comparisons? Data on this issue are mixed. We know that in a number of important areas international comparisons were found to be extremely useful in bringing about change (Bottani, 1994; Gottschalk and Smeeding, 1995; Smeeding and Gottschalk, 1995). In other cases, international comparisons appear not to make a difference. It seems that especially in the United States, international comparisons have not proved significant (Aber, 1997).

How much information is needed? In some cases, too much information may desensitize the public. The paradox is that we are in a period when the public is educated and able to accumulate large amounts of sophisticated information. But, because the information is presented in a fragmented and dramatized way (usually by the media), good, reliable, and useful information is in short supply.

Are indicators universal and timeless, or time- and place-specific? Once again, this is probably a question of avoiding the extremes. We have argued for indicators that can be used consistently and would enable the monitoring of trends. We have also argued for indicators rooted in the policy arena and within the particular political context. This issue is related to the perspective, duration, and the desired impact of the indicator, and the answer lies in the specific indicator, the context, and the expected use.

Conclusion

Indeed, case studies have served us well in the effort to construct a set of guidelines and criteria for developing indicators of children well-being that will have an impact. However, the set of guidelines and criteria presented above, as any other set mentioned in the literature, are all lacking a multimethodology perspective.

Personal and collective experience as well as through analysis of case studies are of proven contribution to our knowledge. Furthermore, when carefully administrated, case studies were found (in additional case studies) to have an impact on the overall outcome for children. And yet we refer to our opening remarks and the discomfort among researchers and policymakers regarding the usefulness of indicators in the policymaking process.

We would argue that social science has a clear role in dismantling this discomfort. Additional methods should be implied to study the usage and influence of children's well-being indicators.

We would further argue that, in the meantime, advocates, researchers, and policymakers who are concerned with promoting children's well-being must make the most of the existing knowledge. The vulnerability of the case studies method

should not serve as a rationale for unplanned or unguided efforts of using indicators of children's well-being to influence policy.

We stand behind the collective wisdom and experience that formulated the guidelines described above and we urge their usage in a manner that will further enable the study of their importance and usefulness in the ultimate goal of promoting children's well-being.

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Section II

Using the Indicators

Indicator Measurement in Comprehensive Community Initiatives

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Introduction

Practitioners, policymakers, and researchers are all too familiar with the challenges of measuring change in comprehensive community initiatives. The breadth and scope of these interventions, the multifaceted contexts for implementation, the elusiveness of outcome specificity, the vast array of potentially confounding factors, and the limited availability of appropriate and sensitive indicator measures can easily overwhelm even the most dedicated researchers and bring a well-crafted research design to a halt. It is altogether too tempting to run for the hills at the very thought of such an undertaking.

These challenges are particularly acute when it comes to measuring program effects on child well-being. Debate swirls around the conceptual lens through which to view children and their environments, muddying the waters of measurement. Additionally, the use of experimental procedures often seems especially cold-hearted when children are involved, although as Morris and Gennetian (2005, this volume) point out, there are many good reasons for using experimental designs in indicator research. Then, children may not be easy to reach. Very young children are not in school, and other settings may only serve very small numbers of young children. For good reasons, settings for young children are generally well protected, and researchers may find it hard to get access to collect data. It is no wonder that many evaluators adopt the strategy of broad indicator tracking rather than more rigorous methodologies.

Yet, growing interest in large-scale interventions to change the most pressing issues affecting the well-being of children and their families demands that these challenges be met full on and resolved. Great care must be taken in doing so, however. Typically, comprehensive community initiatives seek to change the fundamental tenets and processes guiding community life, with profound implications for the well-being of children. In light of this, researchers have a responsibility to assure that the interests and needs of children and their families are taken into account, that the findings benefit program planners and managers for this and future interventions, and that the findings and recommendations are made available to policymakers.

The core challenges in measuring child well-being in community intervention research fall imprecisely into three general areas. The first concerns defining community in a way that reasonably captures the depth, breadth, and multidimensionality

of community settings for children and their families while still satisfying the methodological need for boundaries. The second challenge is found in the complexity and dynamic character of a given community setting and the intervention model employed. Finally, there is the challenge of determining the type, level, and approach to measurement that best captures well-being outcomes for children and their families.

The simplicity of these statements belies the enormity of the challenges and their profound implications for effectively gauging success in improving the well-being of children and their families in large-scale, complex community interventions. Fortunately, there are a growing number of researchers willing to go "once more unto the breach" to expand the knowledge and tools needed in such a complex endeavor. It is well worth the time to review the state of the art to see what directions have been taken.

Defining Community

In a broad sense, community may be understood both as a physical place and as content and process, or sets of activities within and across sectors of the community, and the norms, values, and beliefs guiding the activity. Within bounded space, each sector of the community is responsive to residents' particular needs and interests while sharing responsibility for the well-being of the community as a whole. Thus, a healthy community is one in which the sectors of the community are well integrated and collaborative, and coordinate and share resources to resolve challenges to child, family, and community well-being (Centers for Disease Control [CDC], 2000).

Jurisdictions of local authority (e.g., town, ward, school district) or statistical subdivisions (e.g., census block groups, tracts, block numbering areas) are the most straightforward approach to defining the physical community. Researchers have typically relied on statistical subdivisions as proxies for community, primarily because of the wealth of available data. Although using census enumeration units does provide rich information on population and housing characteristics, these are not how residents would define their community. As a result, researchers often miss residents' experiences in relating to various sectors of the community within mutually defined physical space. Efforts to define community based on resident perceptions, however, have yielded highly variable results (Rupa, 2003).

Within the geographic community lies a multiplicity of processes reflecting the social, political, economic, and institutional/organizational life of the community. The social community is found in the more or less stable patterns of social interaction among people sharing common interests (Bidulph *et al.*, 2003). This is the heart of community life. Neighbor-to-neighbor social interaction and mutual support is critical to building neighborhood social capital (Burt, 2000). The social community is also found in resident involvement in civic clubs, churches, neighborhood associations, and other local institutions where common interests and bonds of trust lead to collective action on important issues for the community (Sampson *et al.*, 1999).

In broad terms, political community emerges as residents actively support and participate in local governance. In some measure, participation depends on the spatial identity of residents, their commitment to local social and cultural norms, values, and beliefs, and their desire to defend the community against encroachment from without (Best and Strüver, 2000). The vibrancy of the political community reflects residents' collective efficacy, the belief that residents can influence important community issues, and their willingness to take action on those issues. The typical avenue for residents' political participation is through neighborhood associations, advocacy groups, and other mediating structures.

The institutional/organizational community includes churches, civic organizations, health and social service providers, local governments, schools, and a host of other public and private entities. Just as do neighborhood associations and advocacy groups, these organizations often serve as vehicles for participation in the civic life of the community. Although participation varies as a function of the quantity and quality of community institutions, the value of participation lies in institutionalizing civic responsibility, mediating between local residents and the larger institutional world, and in holding institutions accountable for meeting local needs (Kaylor, 2001).

Community residents also play a vital role in the local economy by contributing labor capital and trading in goods and services. The scale of a global perspective tends to relegate local activity to the background of the overall economic picture. However, this does not do justice to the importance of local spending patterns in creating and maintaining jobs in the community (Osada, 1997). Resident investment in the community through home owning, participation in local financial institutions, and the like, builds the wealth of the community and plays a significant role in attracting new businesses and social institutions (U.S. Department of Housing and Urban Development, 2001).

How community is defined bears on child well-being, and consequently its measurement, in several ways. For one, adults typically design community settings for children, often with little consideration to children's needs and interests, and mediate children's experiences of the community (Bartlett, 1999; Thompson and Philo, 2004). Yet, there is strong evidence for the impact of community settings on children's growth and development and in support of child-friendly community design and development to improve child well-being (Bunker-Hellmich, 2003; Duncan and Raudenbush, 2001; National Research Council and Institute of Medicine, 2000).

Children have a unique view of their community. Unlike adults' utilitarian viewpoint, children see the community as an arena for play, to the consternation of adults who insist on driving their cars through the children's hockey rink. Too, while adults often think of play as doing something, children may define it as just being with their friends. As a result, children may opt to shun play spaces provided by adults in favor of areas more suited to their own purposes (Thompson and Philo, 2004). Often, the areas where children come together are carved out of settings dominated by adults, potentially setting up clashes over the proper use of a given space (Al-Zoabi, 2002). Shopping malls and parking lots are notable examples.

Children play significant roles in the various sectors of community as well, although the influence children have in shaping the community is often overlooked. Children's social relationships, for example, often transcend

neighborhood boundaries due to the location of their school, and this may have the effect of expanding the bounded community for the family as a whole. Children participate in a variety of institutional and organizational settings, including schools, recreation centers, day care and after-school programs, and the like. Families' need for these programs and services may profoundly influence the political community. Finally, young people have become a major economic force. In the U.S., children age 4–12 spend approximately \$40 billion a year, and influence some \$600 billion in family spending (National Institute on Media and the Family, 2002) and consumer spending by young people is growing elsewhere, especially in the emerging economies of Asia (Asia Pacific Management Forum, 2000). Marketing directly to children has become a \$2 billion a year industry in the U.S. (Alexander and Dichter, 2004), and concern is growing over the effect of food marketing to children on childhood nutrition and obesity worldwide (Dalmeny *et al.*, 2003).

The Challenge of Change

Community settings are not only intricate but highly fluid as well, as the many facets of the community's makeup are in a constant state of flux. Geographic boundaries change as larger municipalities swallow up bedroom communities; zoning changes alter land-use patterns; people move into or out of the community; children grow up and adults grow older; neighborhoods and commercial districts deteriorate and are revitalized, and new neighborhoods and commercial districts are built; local economies rise and fall with the fortunes of regional, national, and global economies; and leadership changes bring attention to new economic and social priorities.

In a very real sense, then, the unit of analysis is a moving target. These changes affect comprehensive community interventions in myriad ways. Demand for intervention services may increase or decrease and new needs may emerge in the target population. The availability of local resources may change. Project partners may come and go, and those remaining may not be able to meet their commitments to the project. Too, political and policy support for the project may shift, depending on political winds and the local economy. In any event, the intervention model must be continuously tweaked in order to stay current and relevant. This is in addition to the myriad ad hoc adjustments that project staff members make in response to contingencies that arise during implementation.

Community change also effects children's well-being. Children who move frequently may perform less well academically and socially than do their more stable peers (Biddulph *et al.*, 2003); Klein (2005, this volume) points to a number of surveys showing concern over school readiness among early childhood educators. Children's activity level is significantly influenced by their perceptions of resources and barriers in the community in which they live, although these effects are still not well understood (Hume *et al.*, 2004), with implications for children's health. Changes in the local economy may have the effect of expanding or contracting the availability of adult role models for children and opportunities for collectively monitoring children's safety (Pebley and Sastry, 2003).

The net effect of the dynamics of the intervention context and the intervention itself is likely to be felt in both the process and outcomes of evaluation. This suggests that the research design has to constantly adapt to keep pace with the shifting intervention and intervention context. In the best of circumstances, this is merely the constant fine-tuning of the design typical of field research, but under the most daunting circumstances, the design may need to undergo major revision, with grave consequences for the integrity of the study.

The research design, then, needs to account for the kinds of changes noted. This means tracking significant changes in various sectors of the community so that, at the very least, the timing of changes may be taken into account when interpreting the research findings and, at the very most, to modify the research design in accordance with the changes noted. It also means systematically tracking changes in the intervention and adjusting the research design accordingly. Finally, it means working with program staff members to capture data on the normative adjustments made in implementing the intervention, noting the contingent circumstances within which these adaptations occur.

This is especially important when the outcomes of interest concern child-well being. The children who may be of most interest to an intervention program may be the least accessible, either due to the high mobility of the family, gatekeeping in typical children's settings, and other factors. Too, the broader community may not pay much attention to children beyond the need for education, child protection, and basic health care, leaving gaps in the kinds of indicator data that could be used to monitor child well-being. Finally, children are frequently overlooked as sources of information, as many evaluators find it much easier and cost effective to measure adult perceptions of children rather than children's perceptions of themselves.

Measurement

Obviously, the complex character of community, the equally complex nature of comprehensive community interventions, and the dynamics of change introduce a fair amount of uncertainty to selecting robust measures of child well-being at appropriate levels of analysis. Typically, measurement has been handled in one or both of two ways. First, since large-scale community interventions are generally intended to affect the quality of life for children and members of their families, measuring change at the individual level is logical and appropriate. In this case, data is collected from a sample of children and/or caregivers using measures appropriate to the outcomes under consideration. Depending on the rigor of sampling, these measures may also be aggregated to reflect a sense of community residents as a whole. In some instances, this has been the limit of measurement, and community-wide effects are essentially inferred from aggregated individual-level indicator data.

In other instances, measuring child well-being has been carried out using macrolevel or community structural indicators, a common strategy among governmental organizations accountable for tracking the effects of social policies across a large target population (Corbett, 2005, this volume). These might include a range of social, economic, educational, or health indicators drawn from databases maintained

by various community institutions or units of government, or available from other local, state, or national data sources. These are data typically collected on individuals but from across a broader segment of the community, which, in aggregate, reflect selected areas of child well-being. Moreover, macrolevel structural data may be meaningfully combined to form indices of well-being for the community as a whole.

Considerable progress has been made in developing valid and reliable macrolevel indices, with applicability to child well-being. The Neighborhood Distress Index (Coulton *et al.*, 1995), for example, has shown a connection between neighborhood distress and child abuse rates at the census block group level in a metropolitan area. There is also a growing body of research using individual-level measures to assess child well-being (Biddulph *et al.*, 2003; Foundation for Child Development, 2004; Salvaris, 2001; UNICEF, 1998). This work continues to refine relevant constructs and measures, characterize risk and resiliency across a variety of concerns and community typologies, and validate effective methods of data collection. An increasing number of such studies use a combination of individual- and community-level indicators to assess child well-being, but it is far more common that individual-level data are aggregated as a proxy indicator of community-level constructs.

While lauding work on community- and individual-level measures of child well-being, it is important to recognize their limitations. Macrolevel indicators, for example, are often at too general a level of abstraction to say much about variability within communities. This may be addressed in part, at least in the U.S., through new Census Bureau technology allowing one to define smaller geographies using any latitude and longitude centroid and culling out data at a given distance. In addition, macrolevel child well-being indicators are stripped of the contextual variables that enrich an understanding of the normative experiences of the people who live there.

Individual-level measures, on the other hand, may effectively capture children's contexts, but have to cover a lot of territory to do so. As a result, they are often overly intrusive and taxing to those willing to complete them, especially when children are being surveyed directly. Researchers are all too well aware of the risk for deterioration of data quality in long surveys and item refusal rates on sensitive content measures (Bogan, 1997; Shoemaker *et al.*, 2002). Clearly, there is a need to develop viable alternatives to individual-level measures, if not as a total replacement, then as a supplement and means of reducing the extent to which community intervention research unnecessarily intrudes into the lives of residents.

One promising means of indicating child well-being without being too invasive is through observations of the physical and social characteristics of neighborhoods and of children's interactions. Ground-level observer ratings of factors bearing on child well-being avoid to some extent the abstractness of macrolevel measures and the intrusiveness of individual-level surveys. At the same time, they provide a rich means of characterizing the context of the everyday experiences of children and afford opportunities to see children doing the things they naturally do. There is, unfortunately, little work on developing such measures. An observational study of metropolitan neighborhoods by Caughy *et al.* (2001) and a study now underway to develop a ground-level measure of neighborhood distress in rural communities in the South are exceptions.

A vastly overlooked means of assessing the effect of community interventions on child well-being is through the application of geographic information systems technology. The ability to spatially represent social observations significantly extends assessments of child well-being outcomes in community interventions, particularly by opening access to a range of other useful spatial data. A recent study, for example, found a relationship between level and type of neighborhood distress, spatial dispersion, and educational outcomes for young people with severe emotional disturbances in a rural southern community (McDonell and McNabb, 2003).

Another potentially fruitful area of inquiry is in examining the nature of relationships among primary community institutions as they promote child well-being (Ferman and Kaylor, 2001). The challenge in this regard lies in identifying and operationally defining the key constructs characterizing those relationships. Although there is general agreement that strengthening the connections among community institutions is a good thing for children, there is a lack of agreement as to what constitutes strengthened connections. What, for example, are the content and process differences among coordination, partnership, and collaboration? At what level—case-centered, program, or policy—does collaboration exist, and what interactions across levels within institutions and between institutions and their policy environment influence the nature of collaboration?

Finally, two additional issues regarding measurement should be noted. First is the challenge of identifying child well-being indicators sensitive enough to show change in outcomes having low base rates, particularly when examined at small levels of geography. One potential approach to this dilemma is to use multiple markers thought indicative of the expected outcome, such as using ICD-9 coded child injuries, 911 call data, observations of teachers, and other data points to compute an index of child maltreatment. This is consistent with the assertion by Moore and Brown (2005, this volume) that child well-being is best measured across multiple domains.

Second, policymakers and funding bodies are often interested in a limited number of narrowly constructed indicators of child well-being without consideration to the range of proxy indicators that may be more sensitive to change and that are known to bear on the outcomes of interest. This effort to reduce complex child outcomes to a simpler equation in the interest of accountability runs counter to the wealth of indicators that must necessarily be considered in order to meaningfully detect change in a complex intervention setting. This suggests the need for researchers and program planners to educate these stakeholders as to the breadth and depth of the challenges inherent in comprehensive community interventions, proposing research and presenting findings in a way that is persuasive to policymakers (Ben-Arieh and Goerge, 2005, this volume).

Conclusions

There is clearly much to overcome to effectively measure program effects on indicators of child well-being in comprehensive community interventions. These are

complex interventions taking place in highly intricate and dynamic settings, where the targets for change are woven into the very fabric of the community. As with any tapestry, close examination will reveal the individual threads but it is easy to lose one's place while trying to trace any one thread. Too, it is difficult to fully appreciate the value of a single thread in isolation from the whole.

In a nutshell, the dilemma in assessing child well-being in comprehensive community interventions is that the research is characterized by reductionism when it is the very complexity of the setting and the intervention that may be of more interest and value. The issues often targeted by large-scale interventions lie at the intersections of the social, economic, political, and institutional communities within more or less bounded space. The question, then, is how to form a manageable research plan without losing too much of the essence of community?

There is no single answer and more than likely some among the range of answers would seem contradictory or ill suited to a particular context, type of intervention, or the child well-being indicators of interest. However, this review and experience with large-scale intervention research suggest some general guidelines for strengthening the indicator research:

- Track indicators of change across spatial boundaries of the community. Program
 effects on child well-being are unlikely to stay contained and the physical definition of community may need to be broadened to account for observations lying
 outside the target area, particularly given that children's activities often transcend
 bounded space.
- Relevant process and outcome indicators need to be measured across all sectors
 of the community. These are essentially social interventions, and there is a tendency to focus measurement on social outcomes for children without considering
 the value of measuring indicators in the economic, political, and organizational
 sectors of the community as they impact children's lives.
- Tracking significant community events and broad changes in the process and structure of community life is important for statistical control and to document the need for changes in the course and direction of the intervention.
- Tracking ad hoc modifications to the intervention effected by program staff members in implementing the intervention in the community is critical to fully assessing intervention effects on child well-being.
- Indications of child well-being are best measured using multiple approaches reflecting the varying levels of the unit of analysis. Individual-level data collected through quantitative and qualitative means, macrolevel data drawn from national, state, and local sources, and structured observations of the community are all useful and appropriate mechanisms.
- Specific attention should be given to the nature of relationships among primary
 community institutions as they promote child well-being, especially given the
 important role of many community institutions for children. This is a murky area
 when it comes to identifying and operationally defining key constructs, but there
 is undeniable value in characterizing the kinds of collaborations that strengthen
 community support for children and families.

 There is tremendous value in the geospatial analysis of indicators of child well-being. Geographic information systems technology not only permits the representation of social observations in geographic space but offers a range of tools to model social data in geospatial terms.

There are several important methodological issues having a bearing on child well-being indicator measurement in comprehensive community initiatives that have not been included in this discussion. Issues such as the use of comparison groups, random assignment, and pre- and posttest designs, among others, are excellently reviewed elsewhere.

To conclude, there is considerable work going on in the area of child well-being indicator measurement in comprehensive community initiatives. The experiences of researchers in a variety of settings and with a range of exciting projects will inevitably lead to new tools and new methods to improve outcome measurement in large-scale projects. In the long run, improved measurement will lead to strong projects with even greater impact on the social issues of greatest concern among community residents.

Note

1. William Shakespeare, Henry V, Act 3, scene 1.

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The Power of Regional Indicators in Achieving Action: The Southern Regional Initiative on Child Care

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Introduction and Background

This chapter describes the impact of regional indicators through presentation of a case study that demonstrates how effective use of regional data can be a powerful strategy to achieve action on behalf of children and families. The Southern Institute on Children and Families envisioned and led the project. The Southern Institute has a record of effectively using regional data to raise awareness, build public/private sector action partnerships, and motivate public policymakers and administrators to improve the way government benefit programs are set forth in policy and implemented in reality.

The case study presented in this chapter is a multistate approach utilizing regional indicators to improve access to high quality, affordable early care and education for lower-income children and families in the South. The case study describes a policy-level collaboration initiative to examine early care and education policies and systems in the southern region of the United States. It provides information on the creation and implementation of the Southern Regional Initiative on Child Care, specifically the work of the Southern Regional Task Force on Child Care. The case study illustrates the far-reaching impact of regional indicators in developing and implementing a comprehensive plan of action. Ultimately, the material presented here supports the concept that regional indicators can serve as a catalyst for improving conditions for children and families.

The Southern Regional Initiative on Child Care evolved from pioneering research by the Southern Institute that identified the barriers families face when attempting to apply for and retain child care financial assistance in the southern states. The Southern Institute is a nonprofit public policy organization founded in 1990 to improve the well-being of children and families through knowledge, leadership, and action. The Southern Institute educates through research of policies, systems, and practices; generates greater awareness among community and business leaders and policymakers; and equips them with knowledge to make informed decisions.

The geographic focus of the Southern Institute is 17 southern states and the District of Columbia where child well-being indicators present a compelling case for public and private sector action. It also administers national programs that are consistent with its mission. The programs directed by the Southern Institute are the following¹:

1) Covering Kids and Families

- 2) Supporting Families After Welfare Reform
- 3) Southern Regional Initiative on Child Care
- 4) Southern Business Leadership Council
- 5) Carolina Nutrition Alliance

The Southern Regional Initiative on Child Care

The Southern Regional Initiative on Child Care, which is supported by The David and Lucile Packard Foundation, is guided by a 24-member Task Force appointed by the governors of 17 southern states, the mayor of the District of Columbia, the Southern Growth Policies Board, and the Southern Institute on Children and Families. The Southern Institute is the lead organization for the initiative and was assisted by a Staff Work Group composed of program and policy experts from around the southern region.

The Task Force conducted regional surveys to provide the data needed to clarify the issues related to the accessibility of child care subsidies and to develop action strategies to address them. The gubernatorial appointments provided highlevel visibility and were a key factor in garnering the support of state administrators during the data survey process. Utilizing the new regional data and information from published studies by project consultants and other researchers, the Task Force developed two southern regional action plans. The purpose of the action plans was to provide a blueprint for public and private leaders to enact policies and processes that promote the accessibility of affordable, high-quality child care and early education programs. The first action plan was focused on improving access to child care financial aid and the second action plan was focused on improving the quality of early care and education. The development and implementation of the financial aid and quality action plans and the regional data approach are discussed below. Both the financial aid and quality action plans are presented in Appendices A and B, respectively. Annual implementation surveys to track the status of states' progress on implementing the action plans are conducted by the Southern Institute. The annual implementation surveys served as an important accountability mechanism that was supported and valued by states participating in the initiative.²

Action Plan to Improve Access to Child Care Assistance for Low-Income Families in the South

The Action Plan to Improve Access to Child Care Assistance for Low-Income Families in the South sets forth the position of the Southern Regional Task Force on Child Care that bold action is needed to make child care financial aid available and accessible for lower-income parents who need and seek it. This action plan contains 10 goals and 52 action steps that provide a blueprint for how southern states can improve access to child care financial aid.

The chart displayed below was developed by the Southern Institute in 2001 from previously published data. The southern states' display of the data is used to raise awareness of the cost of child care for parents in their early earning years.

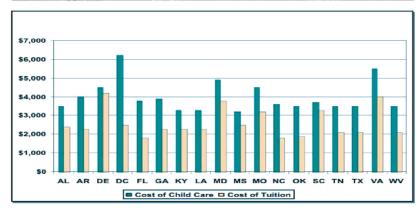
Presenting it in a state-by-state format is a powerful way to get the message over that in every southern state, it costs more to send one 4-year-old to a child care center for a year than it costs to pay public college tuition for one child. In presentations of this chart, the point was always made that public college tuition was not inexpensive as compared to child care, but that it is highly subsidized—unlike child care expenses. When the chart was displayed during the Southern Institute site visits, which were hosted by Task Force members in 13 southern states, the specific state's data were highlighted to increase the impact of the information. The state of Mississippi is highlighted in the chart below to illustrate the presentation.



Child Care Is Costly

Child Care Costs More Than Public College Tuition In All Southern States

State	Average Annual Cost of Public College Tuition	Average Annual Cost of Child Care For a Four Year Old
Mississippi	\$2,497	\$3,172



Source: Child Care Challenges, Children's Defense Fund, May 1998. Data for District of Columbia provided by Center for Applied Research and Urban Policy, University of the District of Columbia, 2001.

During the development of its report the Task Force held four meetings around the southern region and received testimony from parents, policymakers, and professionals. The *Action Plan to Improve Access to Child Care Assistance for Low-Income Families in the South* was released in December 2000 at the National Press Club in Washington, DC. Task Force members from several of the states represented on the Southern Regional Task Force on Child Care were present and provided first-hand examples of issues and actions taken by their states as a result of the action plan.

The first goal in the action plan calls on state and federal leaders to support significant increases in child care resources. The action plan calls upon state leaders to enact eligibility simplification and outreach, improve customer services, implement tax strategies, and create employer partnerships.

State-by-state data was collected by the Southern Institute to inform the work of the Task Force as it developed the action plan. All states cooperated in the state survey process. The survey was primarily focused on gathering data on state policies and services.

"At the time the Task Force was formed, Tennessee was in the midst of a top to bottom evaluation of its child care program...It provide a structured approach to gather information from other states and to identify areas of improvement." Natasha Metcalf, Former Commissioner, Tennessee Department of Human Services, Task Force member.

In presentations on the action plan, the regional data are illustrated in two formats. One format is in alphabetical order by state and the other illustrates states according to how they addressed the action step by indicator category. The second format is used to highlight more clearly where specific states stand on implementation of the financial aid policies and practices set forth in the action plan. This format is more assertive in pointing out which states are lagging in specific areas, and it is more likely to generate discussion and calls for action. Goal 2, Action Step 2.1 is used to illustrate both methods. Goal 2 states that all southern states should establish child care subsidy co-payments that do not exceed 10% of family gross income. Table 1 provides data by state in alphabetical order and Table 2 provides data arranging states within an indicator category.

Within 2 years of completion of the Action Plan to Improve Access to Child Care Assistance for Low-Income Families in the South, southern states had taken significant action toward implementation of the action plan.³ In the example of the co-payment policy discussed previously, six southern states took action since the beginning of the Initiative to reform their policies to lower the child care subsidy co-payment to below 10% of family gross income, bringing their policy in line with the action plan recommendation. Below are examples of how states in the region are making improvements in accordance with the action plan goals and action steps since the Initiative began, as reported during the 2001, 2002, and 2003 implementation status report state surveys conducted by the Southern Institute.

- Sixteen states reported taking action toward completion of Action Step 1.4 to increase state funding for child care subsidies to all eligible families who seek child care assistance.
- Eleven states reported they had completed Action Step 4.1 or taken action toward completion of Action Step 4.1 to simplify the applications for child care assistance.
- Eight states reported they had completed Action Step 4.7 or had taken action toward completion of Action Step 4.7 to eliminate the face-to-face interview to apply for child care assistance.

Table 1. Southern regional initiative on child care action plan to improve access to child care assistance for low-income families in the south

State	Co-payment at the federal poverty level	Co-payment at the state income eligibility ceiling
Alabama	11%	12%
Arkansas	0%	27%
Delaware	16%	30%
District of Columbia	6%	20%
Florida	9%	9%
Georgia	3%	13%
Kentucky	8%	10%
Louisiana	16%	20%
Maryland	1%	23%
Mississippi	5%	8%
Missouri	7%	12%
North Carolina	9%	9%
Oklahoma	6%	11%
South Carolina	5%	4%
Tennessee	6%	12%
Texas	11%	11%
West Virginia	4%	7%

Note: Goal 2—State eligibility policy. Co-payment as percentage of gross family income. Data assume family of three with one infant and one 4-year-old in full-time, center-based care. Federal poverty level (FPL) annual income for family of three = \$14,150 for year 2000. Each year the FPL is adjusted upward to account for inflation by the U.S. Department of Health and Human Services.

Source: Southern Institute on Children and Families, December 2000, derived from data in Access to Child Care Assistance: A Survey of 16 Southern States and the District of Columbia. Stoney Associates, September 2000.

- Seven states reported they had completed Action Step 4.9 or had taken action toward the completion of Action Step 4.9 to establish a 12-month redetermination period when there are no changes in income or job status.
- Eight states reported they had completed Action Step 5.1 or had taken action toward completion of Action Step 5.1 to establish a seamless eligibility system that would eliminate the need for families to reapply when eligibility categories changes.

Southern Regional Action Plan to Improve the Quality of Early Care and Education

The second action plan, Southern Regional Action Plan to Improve the Quality of Early Care and Education, contains 7 goals and 39 action steps. The action plan is a comprehensive blueprint for all southern states as they strive to improve quality.

Table 2. Southern regional initiative on child care action plan to improve access to child care assistance for low-income families in the south

Federal poverty level		State child care subsidy income eligibility ceiling		
Co-payment at or below 10%	Co-payment above 10%	Co-payment at or below 10%	Co-payment above 10%	
Arkansas	Alabama	Florida	Alabama	
District of	Delaware	Kentucky	Arkansas	
Columbia	Louisiana	Mississippi	Delaware	
Florida	Texas	North Carolina	District of	
Georgia		South Carolina	Columbia	
Kentucky		West Virginia	Georgia	
Maryland			Louisiana	
Mississippi			Maryland	
Missouri			Missouri	
North Carolina			Oklahoma	
Oklahoma			Tennessee	
South Carolina Tennessee West Virginia			Texas	

Note: Goal 2—State eligibility policy. Co-payment as percentage of gross family income. Data assume family of three with one infant and one 4-year-old in full-time, center-based care. Federal poverty level (FPL) annual income for family of three = \$14,150 for year 2000. Each year the FPL is adjusted upward to account for inflation by the U.S. Department of Health and Human Services.

Source: Southern Institute on Children and Families, December 2000, derived from data in Access to Child Care Assistance: A Survey of 16 Southern States and the District of Columbia. Stoney Associates, September 2000.

After considerable deliberation, the Task Force determined that high-quality child care includes: (1) nurturing, responsive, and developmentally appropriate care and education; (2) consistent, educated, trained, and professionally compensated early childhood education teachers; (3) a safe and stimulating environment; and (4) age-appropriate staff-child ratios and group sizes.

The strategy utilized by the Southern Institute in the first action plan was repeated in the development and presentation of the second action plan. The Task Force members were highly supportive of the methodology and they wanted to replicate it in preparing the regional action plan on quality. To their credit, it should be noted that Task Force members were fully aware that some states would look better than others in the data displays. However, their quest was to better understand their programs and to identify areas where improvements could be made. The Task Force decided to design the state survey to collect and compare state standards with accreditation standards developed by the National Association for the Education of Young Children (NAEYC). Comparing their respective state with other southern

Table 3. State regulatory policies and practices related to child care facility monitoring visits

State	Number of monitoring visits per year	Periodic monitoring visit is unannounced
Alabama	0.5	Yes
Arkansas	3	Yes
District of Columbia	1	Yes
Florida ^a	3	No
Georgia	1	No
Kentucky	1	No
Louisiana	1	Yes
Maryland ^b	1	Yes
Mississippi	2	Yes
Missouri	2	Yes
North Carolina	1	Yes
Oklahoma	3	Yes
South Carolina	2	No
Tennessee ^c	7	Yes
Texas	1	No
Virginia ^d	2	Yes
West Virginia	1	No

^aFamily day care receives two monitoring visits per year.

states was considered by Task Force members to be an effective and useful strategy and one that motivated action in their states.

The Southern Regional Action Plan to Improve the Quality of Early Care and Education was released in October 2002 at the Southern Regional Forum on Child Care held in Charleston, South Carolina. The Forum was attended by Task Force members and other leaders from across the seventeen southern states and the District of Columbia.

"There is still much to do to fully implement our vision of a system of child care that is safe, developmentally appropriate and accessible to all. I am confident that with the leadership of the Southern Institute, we will continue our progress towards that goal." Linda Heisner, Executive Director, Child Care Administration, Maryland, Task Force member.

Tables 3 and 4 illustrate two of the quality indicators included in the action plan. Again, one table is presented in alphabetical order by state and the other displays the states by indicator categories.

Within 10 months of completing the quality action plan, states had taken action. Below are examples of how states across the southern region are making

^b20% of centers selected randomly for unannounced inspection each year. 100% of homes receive an unannounced inspection every other year.

^cOnly the first of seven visits is announced.

^dThree visits per year for Family Day System Homes.

Table 4. Southern regional initiative on child care action plan to improve the quality of early care and education

Less than 3 monitoring	3 or more monitoring visits per year	Periodic monitoring visit is unannounced	
visits per year		Yes	No
Alabama	Arkansas	Alabama	Florida
District of Columbia	Florida	Arkansas	Georgia
Georgia	Oklahoma	District of	Kentucky
		Columbia	
Kentucky	Tennessee	Louisiana	South Carolina
Louisiana		Maryland	Texas
Maryland		Mississippi	West Virginia
Mississippi		Missouri	
Missouri		North Carolina	
North Carolina		Oklahoma	
South Carolina		Tennessee	
Texas		Virginia	
Virginia		-	
West Virginia			

Note: Goal 2—Licensing and regulatory processes state regulatory policies and practices related to child care facility monitoring visits.

Source: Southern Institute on Children and Families, December 2001, derived from data in State Survey on Quality Child Care (Child Care Licensing Administrator). Survey requested information as of July 1, 2001.

improvements in accordance with the goals and action steps in the quality action plan, as reported in the 2003 state implementation survey responses.

- Eight states reported taking action toward completion of Action Step 2.6 to train staff on fulfilling their roles in protecting children from abuse and neglect.
- Nine states report working on Action Step 2.7 to obtain a well-trained regulatory workforce with average caseloads between 50 and 75 per staff person and a system capable of providing technical assistance.
- Fourteen states reported completion or steps toward completion of Action Step 3.1 to provide all early care and education providers with resources to help them improve the quality of care and education they deliver, such as technical assistance and training, accreditation support, grants to meet health and safety requirements, and grants to support family child care home networks.
- Twelve states report taking steps toward completion of Action Step 3.5 to use a formal mechanism to seek parental input in program evaluations and to use that information in making policy decisions related to early care and education programs.
- Twelve states took action toward completion of Action Step 4.3 to provide universally available, comprehensive scholarships to early care and education providers who are pursuing a Child Development Associate or 2-or 4-year degree in child development, early childhood education, early childhood special education, or

child care administration. Scholarships must address the costs of tuition, fees, and books and will support components such as travel costs, paid release time, and child care.

Conclusion

The Southern Institute strategy of engaging policy-level public and private sector partners from states across the region in the collection, analysis, and dissemination of southern regional data has had an impact. The composition of the Task Force, primarily gubernatorial appointees, and the action plans/implementation status reports strategy have been a catalyst for change in improving access to child care and early education. The Southern Institute places a high priority on bringing the right people to the table and supporting them in their efforts to make sound public policy decisions by giving them access to easy to understand data on key indicators to improve policies and systems. Having data on a regional basis adds significant momentum across the states or other geographic boundaries. The Southern Institute's strategy of achieving accountability through periodic status reports adds accountability by keeping the spotlight on the action steps, and it provides significant impetus that maintains momentum over several years, thus improving the opportunities for sustained progress. The overarching goal of improving child well-being is significantly enhanced through leadership initiatives, such as the Southern Regional Initiative on Child Care, that take a practical approach to collecting relevant, credible data on which to support identification of action steps and identification of entities that need to take the actions.

Collection and analysis of state-by-state data has its challenges. The Southern Institute was able to achieve results through the cooperation and support of governors, Task Force members, Staff Work Group members, state child care directors, state licensing officials and other state officials. This cooperation is essential to assure that once published the data is not challenged, a development that would have negative impact on the achievement of results.

From a data perspective, the regional indicator strategy used by the Southern Institute can be replicated in other regions. It can also be applied across a specific set of cities or counties or in another configuration that has policy relevance. Leadership is critical to the success of a regional indicators initiative. The leadership to pull such an initiative together in other multistate regions in the United States will have to be developed. However, collecting and analyzing data for regions within states or other geopolitical areas would likely be more easily attainable with the existence of organizations that could provide the leadership. This type of initiative can have a similar impact if collaboration is achieved and the results are effectively used to advocate for action.

All references to the action plans and state implementation surveys can be found in the following reports:

Southern Regional Initiative on Child Care. Status Report on State Implementation Efforts: Action Plan to Improve Access to Child Care Assistance for Low-Income *Families in the South.* Columbia, SC: Southern Institute on Children and Families, January 2004.

Southern Regional Initiative on Child Care. Status Report on State Implementation Efforts: Southern Regional Action Plan to Improve the Quality of Early Care and Education. Columbia, SC: Southern Institute on Children and Families, January 2004.

Southern Regional Initiative on Child Care. *Final Project Report*. Columbia, SC: Southern Institute on Children and Families, April 2004.

Appendix A: Action Plan to Improve Access to Child Care Assistance for Low-Income Families in the South

Goal 1

Federal, state, local, and private funds should be sufficient to meet 100% of need for direct child care assistance based on initial eligibility levels at 85% of the state median income. Redetermination levels should allow families to retain child care assistance until they reach 100% of the state median income.

Action steps

- 1.1. Educate federal and state policymakers on the need for action.
- 1.2. Educate the business community on the need for leadership in achieving state, federal and community resources to meet 100% of need.
- 1.3. Increase federal funding for the Child Care Development Fund to fulfill current policy allowing federal matching funds for child care assistance up to 85% of the state median income.
- 1.4. Increase state funding to provide child care subsidies to all eligible families who seek child care assistance.
- 1.5. Mobilize federal, state, and community resources in support of families who need child care assistance.

Goal 2

States and communities should broaden their child care eligibility and subsidy policies to meet the economic, work, and education needs of families.

- 2.1. Establish co-payments not to exceed 10% of gross family income.
- 2.2. Provide child care assistance to students who qualify under the income guidelines.
- 2.3. Explore broad use of income exemptions to address affordability of child care.
- 2.4. Eliminate asset testing, e.g. automobile, savings, from criteria for child assistance.
- 2.5. Index income eligibility levels for inflation.

Outreach initiatives should be designed and aggressively implemented to assure that families have accessible and easy-to-understand information on child care assistance and are provided assistance in applying.

Action steps

- 3.1. Provide information on child care subsidies through multiple sources, venues, and the media.
- 3.2. Ensure that information is accurate, family friendly, employer friendly, culturally sensitive, and provided in multiple languages, as appropriate.
- 3.3. Present information in a manner that would remove the stigma associated with receiving subsidies.
- 3.4. Provide literature and assistance to help parents make informed provider choices.
- 3.5. Coordinate ongoing and strategic outreach activities among common organizations and providers.
- 3.6. Offer cross training and information to providers, community organizations, faith organizations, and state agencies to inform them about child care assistance programs and how to assist families in filing applications.

Goal 4

The child care application and redetermination processes should be uncomplicated and family friendly.

- 4.1. Simplify applications for child care assistance.
- 4.2. Allow filing by mail, phone, fax, or Internet.
- 4.3. Minimize requests for documentation at initial application and utilize documents already on file.
- 4.4. Provide application availability at multiple sites.
- 4.5. Offer nonconventional hours of operation for eligibility offices and provide toll free lines to include evening and weekend hours.
- 4.6. Explore presumptive eligibility or otherwise provide immediate eligibility contingent upon final approval.
- 4.7. Eliminate requirement for a face-to-face interview both for initial application and for redetermination.
- 4.8. Provide consultation on making appropriate choices when excessive requests for provider changes are filed.
- 4.9. Establish a 12-month redetermination period where there are no changes in income or job status.
- 4.10. Continue eligibility for full subsidy for 12 weeks if family loses employment but can document job search is underway.

Establish a coordinated, seamless eligibility system so that funding sources are invisible to families and support continuity of child care.

Action steps

- 5.1. Eliminate the need for families to reapply when eligibility categories change by automatically searching to exhaust all eligibility categories before closing cases
- 5.2. Explore the potential for policy and procedural changes to achieve linkages with or combined applications for child care assistance, Head Start and Pre-K and Title I.
- 5.3. Continue eligibility in programs with multiple funding sources to assure continuity of care in the event that eligibility has expired or terminated in one program.
- 5.4. Work collaboratively with all public and private programs and funding sources to assure that children receive stable and consistent early child care services.

Goal 6

Establish customer service outcome goals and set standards to ensure that all families are treated with dignity and respect and are served in an efficient manner.

Action steps

- 6.1. Provide professional and well-trained eligibility staff who are culturally and linguistically sensitive.
- 6.2. Facilitate quick eligibility determination through reasonable caseloads and/or administrative structure.
- 6.3. Conduct periodic, independent and thorough consumer satisfaction assessments, assuring the confidentiality of information collected.
- 6.4. Provide adequate support for child care resource and referral services.

Goal 7

Design the subsidy system so that rate structures assure that families receiving child care assistance have access to all types of child care and disallow charges above established co-payments.

- 7.1. States should cap reimbursement rates at no less than the 75th percentile based on a market rate survey conducted every 2 years that accurately reflects the price of all types of care in communities across the state.
- 7.2. Establish and evaluate reimbursement policies that encourage provider participation and are responsive to family needs.
- 7.3. Prohibit providers from charging above the established co-payments.

Create partnerships with employers to expand child care assistance for working families.

Action steps

- 8.1. Educate employers about the bottom line benefits associated with public and private child care assistance.
- 8.2. Enlist business leaders to champion the involvement of southern businesses and to serve as mentors to other businesses.
- 8.3. Provide information to employers on all available tax benefits related to child care assistance, including deductions for donations to tax-exempt child care organizations, capital costs for constructing a child care center, and establishing a pretax dependent care assistance plan.
- 8.4. Facilitate collaborative initiatives that enable employers to share ideas as well as pool their resources to address child care needs.
- 8.5. Provide matching funds or other tax or financial incentives for employers to invest in child care.
- 8.6. Establish incentives for employers to create child care benefit programs for their employees or to contribute to child care purchasing pools in their state or community.
- 8.7. Reduce the administrative burden on employers participating in any joint public/private child care assistance program.
- 8.8. Educate employers on the Earned Income Tax Credit advance as a potential funding source to help families pay for child care.

Goal 9

Provide child care assistance to working families through federal and state tax laws.

Action steps

- 9.1. Make the federal child and dependent care tax credit refundable.
- 9.2. Establish refundable child and dependent care tax credits in states with income taxes.
- 9.3. Raise federal and state child care expense limits to accurately reflect the price of quality care.
- 9.4. Index for inflation the state and federal child and dependent care tax credit income eligibility and expense limits.
- 9.5. Ensure that the child and dependent care tax credits are clearly identified and easy to claim by filers using either the short or long form.
- 9.6. Encourage the use of effective state tax strategies to provide financial support for the child care.

Goal 10

States should have effective, coordinated systems to guide child care and early childhood policy decisions and direct use of resources.

Action steps

- 10.1. Facilitate greater coordination in eligibility policies across child care and early childhood education programs at state and local levels.
- 10.2. All southern states and the District of Columbia should participate in a collaborative effort to develop and collect common data elements across states.

Appendix B: Southern Regional Action Plan to Improve the Quality of Early Care and Education

VISION STATEMENT: ALL CHILDREN WHO ARE IN EARLY CARE AND EDUCATION PROGRAMS WILL BE IN ENVIRONMENTS THAT ARE SAFE, NURTURING, AND ENCOURAGE THEIR DEVELOPMENT.

Goal 1

All children and families will have the benefit of a quality, comprehensive and coordinated early care and education system.

Action steps

- 1.1. Public policy at the federal, state, and local level will require planning and coordination across major systems to improve quality, including Head Start, state prekindergarten, subsidized child care, and licensing.
- 1.2. Public policy at the federal, state, and local level will support families by linking early care and education programs to health coverage, physical and mental health care, nutrition, economic support, transportation, and parenting education services.
- 1.3. Federal, state, and local policies and systems will ensure coordinated, seamless transitions for children moving among early care and education programs and into kindergarten.

Goal 2

Rigorous licensing requirements and/or regulatory processes will be enacted to ensure that children are adequately protected in all early care and education settings.

- 2.1. States will establish staff-child ratios and maximum group sizes for centers and homes that meet NAEYC, NAFCC, or APHA/AAP national standards.
- 2.2. States will develop and enforce health, fire and safety requirements for all early care and education settings that reflect standards set forth by the APHA and the AAP.
- 2.3. State law will require strict enforcement of licensing requirements. States will use a range of sanctions that will include license revocation when a provider is unable or unwilling to meet requirements.

- 2.4. States will conduct at least three unannounced monitoring visits per year to verify compliance with requirements.
- 2.5. States will require that child care providers, early childhood teachers, and others who have regular access to children in early childhood settings have federal and state background checks using fingerprinting and screening against the state child abuse registry.
- 2.6. States will ensure that all licensing and early care and education staff are educated in recognizing signs of child abuse and are trained in the state's child abuse reporting laws.
- 2.7. States will have a well-trained regulatory workforce with average caseloads between 50 and 75 per staff person and a system capable of providing technical assistance.
- 2.8. States will ensure parental right of access to their child's early care and education facilities.

States will support development of quality early care and education programs for all children.

Action steps

- 3.1. States will provide all early care and education providers with resources to help them improve the quality of care and education they deliver, such as technical assistance and training, accreditation support, grants to meet health and safety requirements, and grants to support family child care home networks.
- 3.2. States will have Child Care Resource and Referral networks to deliver quality early care and education enhancement support services to providers, such as outreach, training, and technical assistance.
- 3.3. States will implement a rating system to recognize providers for incremental levels of quality.
- 3.4. States will implement tax and other incentives to develop and expand early care and education programs that demonstrate a higher level of quality.
- 3.5. States will use a formal mechanism to seek parental input in program evaluations and will use that information in making policy decisions related to early care and education programs.
- 3.6. States will identify and support the use of effective research based curricula.

Goal 4

Staff in early care and education settings will be appropriately credentialed and adequately compensated.

Action steps

4.1. States will maintain a professional development system that ensures, at a minimum, providers in early care and education settings meet standards set forth by APHA/AAP, NAEYC, or NAFCC.

- 4.2. States will require approved ongoing annual professional development for staff, appropriate to their education levels and job requirements, as specified in APHA/AAP. States will provide and implement a professional development system that verifies trainers, approves training, and tracks the training of participants.
- 4.3. The federal government and states will provide universally available, comprehensive scholarships to early care and education providers who are pursuing a CDA or 2- or 4-year degree in child development, early childhood education, early childhood special education, or child care administration. Scholarships will address the costs of tuition, fees, and books and will support components such as travel costs, paid release time, and child care.
- 4.4. States will work with educational institutions to ensure that coursework is accessible in order to meet the early care and education workforce training needs, such as courses offered at night, on weekends, in accelerated formats, on-line, and in various languages. Courses will address the varying educational levels of the workforce.
- 4.5. The federal government and states will provide financial incentives that reward completion of approved levels of professional development.
- 4.6. The federal government and states will provide college loan forgiveness programs for persons earning an approved degree who work for a specified period of time in early care and education programs.
- 4.7. States will work toward a system whereby staff with approved degrees or credentials will receive employment benefits and compensation at comparable levels to the state's public education system.
- 4.8. States will ensure meaningful agreements and processes to enable the transfer of credits between and among approved 2- and 4-year degree programs.

Families will have the information to make well-informed decisions about the quality of their child's care and education and to be actively involved in their child's care and education.

Action steps

- 5.1. States will support Child Care Resource and Referral networks that are easily accessible to parents and that provide information on child development, quality indicators, provider choices, vacancies, and linkages to additional information.
- 5.1. States will support early care and education providers in promoting parental involvement and in seeking parental input into the development and improvement of their programs.

Goal 6

Quality early care and education programs will be financially accessible to all children.

Action steps

- 6.1. Federal and state governments will adjust the child care tax credit expense limits to accurately reflect the cost of quality care.
- 6.2. States with income taxes will establish refundable child and dependent care tax credits.
- 6.3. State and federal child and dependent care tax credit income-eligibility and expense limits will be indexed for inflation.
- 6.4. Federal, state, local, and private funds will be sufficient to meet 100% of the need for direct early care and education financial aid, based on initial eligibility levels at 85% of the state median income. Federal law will allow and states will implement redetermination policies that allow families to retain early care and education financial aid until they reach 100% of state median income.
- 6.5. Federal and state governments should develop policies and systems to ensure families receiving financial aid pay no more than 10% of their gross income for early care and education.
- 6.6. States will set payment rates at no less than the 75th percentile based on a market rate survey conducted every 2 years for each level and type of care. Annual inflation adjustments to payment rates will be made between market surveys.
- 6.7. States will implement payments to providers commensurate with the quality-rating level achieved by the early care and education programs.
- 6.8. States will examine the financing of quality early care and education in their state and work toward providing payment rates that recognize the cost commensurate with the standards set forth in this action plan.
- 6.9. States will design and aggressively implement outreach initiatives to provide families with easy-to-understand early care and education financial aid information and application assistance.

Goal 7

States will ensure that accountability is built into all systems, programs, and activities undertaken to achieve the goals of this action plan.

- 7.1. States will convene appropriate stakeholders to develop written strategic plans for improving the quality of early care and education programs in the state. These plans will include key goals, quantifiable measures of progress, and program outcomes for all quality enhancement activities.
- 7.2. States will collect and analyze data and produce written annual reports on progress toward identified goals. Reports will be made readily available to the public.
- 7.3. States will use data and annual reports to make continuous policy improvements and evaluate quality enhancement activities.

Notes

- 1. Information on all of these programs as well as the reports mentioned in this chapter is available on the Southern Institute website at www.thesoutherninstitute.org.
- 2. Results are available at www.thesoutherninstitute.org/child_care.asp.
- 3. For further details on the status of the implementation of the *Action Plan to Improve Access to Child Care Assistance for Low-Income Families in the South* see the Southern Regional Initiative on Child Care *Final Project Report (April 2004)*. State-by-state responses to the implementation surveys can be found at www.thesoutherninstitute.org/child_care.asp.
- 4. For further details on the status of the implementation of the *Southern Regional Action Plan to Improve the Quality of Early Care and Education,* please see the Southern Regional Initiative on Child Care *Final Project Report (April 2004)*. State-by-state responses to the implementation surveys can be found at www.thesoutherninstitute.org/child_care.asp.

The Use of Indicators of Child Well-Being in the United Kingdom and the European Union

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Background

In March 1999, British Prime Minister Tony Blair announced "Our historic aim, that ours is the first generation to end child poverty forever. . . . It's a 20-year mission but I believe it can be done." Over the previous 20 years under successive Conservative Governments, relative child poverty as measured by the proportion of children living in families with equivalent income less than 60% of the contemporary median had increased nearly threefold from 14% in 1979 to 34% in 1997. When Blair made his announcement, he also said that it was the Government's intention to monitor progress toward ending child poverty. In this chapter, I shall review the progress that has been made and the indicators that have been used.

At about the same time the institutions of the European Union were engaging with the issue of social inclusion. At the Lisbon summit in 2000, the European Council agreed to adopt an "open method of coordination" in order to make a decisive impact on the eradication of poverty and social exclusion by 2010. Member states then adopted common objectives at the Nice European Council, and all member states drew up National Action Plans against poverty and social exclusion (NAPs/inclusion). The first UK National Action Plan on Social Inclusion 2001–2003 was published in July 2001 (Department for Work and Pensions (DWP), 2001). As part of this process, a set of primary and secondary indicators were adopted to monitor progress, and in addition national governments were encouraged to adopt tertiary indicators of their own. In this chapter, those that refer to children are reviewed.

The Indicators Used in the UK

Poverty and social exclusion are important factors in influencing the well-being of children, and the indicators used to monitor them will be discussed in this chapter. But they are not all of what we understand as well-being (see, for example, the comments on the issue in following chapters, especially those by Phipps and those by Moore and Brown). In addition to the attempts to monitor the poverty and social exclusion of children, there have been examples of attempts to represent the notion of child well-being in the UK. We at the University of York have published reviews of the well-being of children in the UK (Bradshaw, 2002; Bradshaw and Mayhew, 2005). Also the Children and Young People's Unit in the Department for Education and Skills has been working on an "outcomes framework" based on indicators of child well-being, and these will be reviewed in this paper¹.

Relative Income Poverty Still the Headline Indicator

In the UK, subsequent to the Prime Minister's announcement to end child poverty in a generation, the Treasury set out more detail on the objectives: to eradicate child poverty by 2020, to halve it by 2010

To reduce the number of children in low-income households by at least a quarter by 2004.... Low-income households are defined as households with income below 60% of the median as reported in the *Households below average income* (HBAI) statistics... Progress will be measured against the 1998/9 baseline figures and methodology.

(HM Treasury, 2002)

Thus, a relative measure of child poverty became the headline target at least for the first 5 years.

Figure 1 shows how child poverty in Britain increased after 1979, and how since 1996/97 it has begun to decline. Table 1 shows progress toward the goal of a 25% reduction in child poverty by 2004. Between 1998/9 and 2003/4 (the latest date available), there has been a fall in the relative child poverty rate after housing costs of 15% and before housing costs of 16%. Sutherland *et al.* (2003) concluded on the basis of simulations that the Government is on target to meet its objectives.



Source: Households below average income (DWP, 2005)

Fig. 1. % children in households with equivalent income less than 60% of the median.

Table 1. % children living in households with equivalent income less than 60% of the median, including the self-employed.

	Before housing costs. % of children	After housing costs. % of children
1996/7	26	34
1997/8	25	33
1998/9	24	33
1999/00	23	32
2000/01	21	31
2001/02	21	30
2002/03	21	28
2003/04	21	28
% reduction (in numbers) 1998/9–2003/04	16	15

Source: DWP (2005).

This was also the view of the House of Commons Work and Pensions Committee (2004) Inquiry on child poverty. However, the most recent year's results are very disappointing, and it now looks as though the Government will be hard-pressed to reach the 5-year target.

The UK Government has become dissatisfied with this headline measure of child poverty, and the DWP (2002) consulted on an alternative. The consultation document outlined four alternative approaches:

- the multidimensional approach (like Opportunity for All see below)
- an index of headline indicators
- a measure of "consistent poverty" based on a method adopted by Ireland
- a core set of indicators and a measure of "consistent poverty"

The Government published preliminary conclusions from its consultation on the medium- to long-term measurement of child poverty (DWP, 2003a), concluding that there was no consensus, and further work was needed to investigate a tiered approach and the place of relative income in any measure. A Technical Experts Group was appointed to advise on that work, and the Department's conclusions were published in December 2003 (Department of Work and Pensions, 2003b).

The Government's main proposal is to adopt a tiered approach to monitor progress on child poverty in the UK over the long term. Three indicators have been adopted:

- **Absolute poverty**—the number of children living in households with equivalent incomes below 60% of the median in 1996/97, a threshold that is adjusted only for inflation
- **Relative low income**—the number of children living in households with incomes below 60% of the median contemporary equivalent income

• Material deprivation and low income combined—the number of children living in households that have incomes below 70% of the contemporary median and who are materially deprived (lacking certain goods and services)

The Government needs to be careful that it will not be accused of "moving the goal-posts." In the evidence the DWP Committee received, there were the following four concerns:

1. What is the target?

It is still not clear from the *Measuring Child Poverty* report what the Government's target is going to be beyond 2004/5. The report says it will be making progress when all three indicators are moving in the same direction. Does that mean they will have achieved their target of reducing child poverty by a half by 2010 when all three measures have fallen by a further quarter between 2004/5 and 2010 or any one or two? This absence of clarity is further complicated by the suggestion in the Secretary of State's Foreword to the report:

Whereas in 1997 Britain's child poverty record was placed amongst the worst in Europe, I am clear that in order to achieve our ambitions we must strive toward being amongst the best.

(DWP, 2003b, iii)

"Amongst the best" suggests (in 2001) a child poverty rate of 5% in Denmark, 6% in Finland and 10% in Sweden, compared with the UK figure of 24%. However Denmark, Finland, and Sweden are not content with these much lower child poverty rates and a child poverty rate around these levels seems very different from the ambition to *eradicate* child poverty in a generation. The Secretary of State himself defined eradicate as "pluck by the roots and obliterate" (House of Commons Work and Pensions Committee, 2004, Q470).

2. Housing costs

Whether the target to reduce child poverty by a quarter by 2004/5 was before or after housing costs (BHC or AHC) was never specified by the Government. HBAI and *Opportunities for All* have published child poverty rates estimated both before and after housing costs. In its proposals, the Government has now decided to adopt the BHC measure, on the grounds that that is the practice in the Laeken/EU primary indicators. However with the child poverty rate in 2003/4 at 21% BHC and 28% AHC, the BHC threshold is an easier target. The Work and Pensions Committee recommended retaining the after housing costs measure.

3. Change in the equivalence scale

The Department has decided to change from using the McClements equivalence scale (used to adapt income to family or household size) to the modified OECD scale. The justification given for this is that it brings the UK into line with the usage in the EU and the Laeken indicators. This change will actually *increase* the number of children defined as in poverty, because the modified OECD scale gives a higher weighting than the McClements scale to the needs of young children.

4. The poverty threshold

The income thresholds proposed for the new three-tier measures are arbitrary and unrelated to any standard of need or adequacy. The Work and Pensions Committee

recommended that budget standards should be used to inform judgments about poverty thresholds.

Opportunity for All. In addition to the headline income measure, Opportunity for All is the main vehicle that "monitors our progress towards the Government's goal of a fairer, more inclusive society where nobody is held back by disadvantage or lack of opportunity" (DWP, 2004, vii). As well as reviewing policy, the report includes a set of indicators covering children and young people, people of working age, older people, and communities. The indicators covering children and young people (see Table 2) reproduce the measures of low income from the HBAI, but also cover children in workless families, teenage pregnancy, school attainment, infant mortality, child injuries, smoking, child protection, and housing standards. The latest report shows that on most of the indicators for which there is trend data available, the indicators were moving in the right direction or were static. The exceptions were childhood obesity and homelessness—both indicators included for the first time in this edition. The indicators in Opportunity for All cover Great Britain or England. The Scottish Executive has produced its own Social Justice Reports.

The DWP organized a consultation when they first began to publish these indicators and account was taken of some of the early criticisms—in particular, some health indicators were added. They are still changing the indicators from time to time; for example, in the latest version a measure of child homelessness has been added.

It should be acknowledged that this is a brave attempt to take us beyond measures based purely on indicators of income poverty, but there are still some criticisms to be made:

- The series combines indicators of current well-being and future well-becoming without any coherent justification.
- Some are based on survey data that takes too long to become available (i.e., the home decency threshold).
- Some are inputs (i.e., hospital admissions) rather than outcomes.
- The indicators might have included more up-to-date administrative data—for example the proportion of children living on social assistance.²
- It is also possible to use administrative data to derive an indicator of the spatial concentration of poor children. Indeed one is published (Office of the Deputy Prime Minister, 2004).
- There is no attempt to make comparisons with other countries.

The EU Primary and Secondary Indicators of Social Exclusion

In December 2001, the Laeken European Council endorsed a set of 18 commonly agreed primary and secondary statistical indicators for social inclusion that had been developed by a working party led by Atkinson (Atkinson *et al.*, 2002). These indicators are useful for EU comparison purposes because they are mainly based on the European Community Household Panel and the Eurostat Labour Force Survey and are therefore consistent between countries.

 Table 2.
 Opportunity for All indicators for children and young people.

% children living in workless households (Great Britain	18.5 (1997)	18.5 (1998)	18.0 (1999)	16.4 (2000)	16.1 (2001)	16.7 (2002)	16.1 (2003)	15.9 (2004)
% children living in households with income below 60% of the contemporary median	25 (1996/97)	25 (1997/98)	24 (1998/99)	23 (1999/00)	21 (2000/01)	21 (2001/02)	21 (2002/03)	21 (2003/04)
before housing costs (GB) % children living in households with income below 60% of the median after housing	34 (1996/97)	33 (1997/98)	33 (1998/99)	32 (1999/00)	31 (2000/01)	30 (2001/02)	28 (2002/03)	28 (2003/04)
costs (GB) % children living in households with income below 60% of the 1996/97 median held	25 (1996/97)	24 (1997/98)	22 (1998/99)	19 (1999/00)	16 (2000/01)	12 (2001/02)	12 (2002/03)	11 (2003/04)
Constant in real terms octore housing costs (GB) % children living in households with income below 60% of the 1996/97 median held	34 (1996/97)	32 (1997/98)	31 (1998/99)	28 (1999/00)	24 (2000/01)	20 (2001/02)	18 (2002/03)	17 (2003/04)
constant in real terms after housing costs (GB) % of children experiencing persistent low income—below 60% median household income in at least 3 out of 4 years (GB)	20 (1991/94)	16 (1994/97)	17 (1995/98)	16 (1996/99)	16 (1997/00)	15 (1998/01)	16 (1999/02)	

	77	(2004)	74	(2004)	52.9	(2003)	76.1	(2003)	03.7	(20020/3)	,		(cont.)
26 (1999/02) 54.6 75.1 (2003)	75	(2003)	73	(2003)	51.6	(2002)	74.8	(2002)	03.0	(2001/02)			
25 (1998/01)	75	(2002)	73	(2002)	50.0	(2001)	74.8	(2001)	7 60	(2000/01)	30 (2001)		
26 (1997/00)	75	(2001)	71	(2001)	49.2	(2000)	75.3	(2000)	93.7	(1999/00)			
27 (1996/99)	75	(7000)	72	(2000)	47.9	(1999)	74.9	(1999)	979	(1998/99)			
28 (1995/98)	71	(1999)	69	(1999)	46.3	(1998)	73.9	(1998)	7 60	(1997/98)	,		
28 (1994/97)	65	(1998)	59	(1998)	45.1	(1997)	72.3	(1997)	92 8	(1996/97)			
29 (1991/94)	63	(1997)	62	(1997)	44.5	(1996)	7.67	(1996)	92.4	(1995/96)	43	(1996)	
% children experiencing persistent low income—below 70% median household income—in at least 3 out of 4 years (GB) % of 5-year-old children in Sure Start areas achieving appropriate levels of development at the end of the Foundation Stage (England) CLL AOL of 24+ PSE AOL of 18+	% of 11-year-olds achieving	Level 4 or above in Key Stage 2 tests for English (England)	% of 11-year-olds achieving	Level 4 or above in Key Stage 2 tests for maths (England)	% of 16-year-olds with at least	one GCSE A*-C (England)	% of 19-year-olds with at least a	Level 2 qualification or	equivalent (England) % attendances in schools	(England)	% of children who live in a	home which falls below the	set standard of decency

Table 2. (Continued)

64,340 (2004)		75.5 (2003)	
53,070 (2003)	0.94 (2002/03)	74.7 (2002) 8.5 (2002/03) 32 (2003)	42.6 (2002)
39,810 (2002)	0.95 (2001/02)	74.9a (2001) 7.5 (2001/02) 29 (2002)	42.3 (2001)
	0.94 (2001/01)	75.4 (2000)	43.8 (2000)
	1.04 (1999/00)	75.4 (1999) 7.3 (1999/00)	45.3 (1999)
	1.03 (1998/99)	74.8 (1998)	47.0 (1998)
	1.14 (1997/98)	74.9 (1997)	45.8 (1997)
	1.22 (1996/97)	76.3 (1996)	45.9 (1996)
Number of homeless families with dependent children in temporary accommodation (England)	Admission rates (per 1000) to hospital as a result of an unintentional injury resulting in a stay of longer than 3 days for children aged under 16	(England) % of 16–18-year-olds in learning (England) % of young people leaving care with at least 5 GCSEs (grade A*-C) or equivalent (England) Reduction in the proportion of care-leavers who are not in education, employment, or training (Findland)	Under-18 conception rates per 1000 aged 15–17 (England)

% of teenage mothers in education, employment or training (England)			23.1 (1997/99)	28.2 (1998/00)	27.0 (1999/01)	29.4 (2000/02)	27.7 (2001/03)	29.7 (2000/04)
% under-18s reregistered on the child protection register		19 (1997/98)	15 (1998/99)	14 (1999/00)	14 (2001/02)	13 (2002/03)		
(England) Ratio of infant mortality rates per 1000 live births in England and Wales of routine and manual	1.15 (1994/96)	1.14 (1995/97)	1.12 (1996/98)	1.13 (1997/99)	1.14 (1998/00)	1.17 (1999/01)	1.16 (2000/02)	
groups/all (England and Wales) Smoking rates during pregnancy Among children 11–15	23 (1995)		11 (1998)	9 (1999)	19 (2000)	10 (2001)	10 (2002)	9 (2003)
Obesity trends among children 2–15 Boys Girls	(1996) 10.4 11.4 (1995)	11.6 12.0 (1996)	12.8 12.2 (1997)	13.2 13.5 (1998)	(2000) 15.6 14.1 (1999/00)	14.6 14.0 (2001)	16.6 16.7 (2002)	

^a2001 onward not comparable with previous years.

Primary indicators

- 1a: Low-income rate after transfers—by age and gender
- 1b: Low-income rate after transfers—by most frequent activity
- 1c: Low-income rate after transfers—by household type
- 1d: Low-income rate after transfers—by tenure status
- 1e: Low-income threshold (illustrative values)
- 2: Distribution of income
- 3: Persistence of low income
- 4: Relative median low-income gap
- 5: Regional cohesion (dispersion of regional employment rates)
- 6: Long-term unemployment rate
- 7: Persons living in jobless households

Secondary indicators

- 8: Early school leavers not in education or training
- 9: Life expectancy at birth
- 10: Self-defined health status by income level
- 11: Dispersion around the low-income threshold
- 12: Low-income rate anchored at a moment in time
- 13: Low-income rate before transfers
- 14: Gini coefficient
- 15: Persistence of low income (below 50% of median income)
- 16: Long-term unemployment share
- 17: Very long-term unemployment rate

It is interesting that only a few of these indicators are directly relevant to children. Indicator 8 is one of these, but there is as yet no data available for that on a comparable basis. Indicator 1a is based on the ECHP and the latest child poverty numbers from that source, for 2001, indicate that child poverty in the UK was no longer the highest in the EU out of 15 (see Figure 2).

The Luxembourg Income Study is an alternative source for similar data on child poverty. At the time of writing only 23 countries participating in LIS had data beyond the mid-1990s. Figure 3 below gives the child poverty rates for these countries and shows Norway had the lowest child poverty rates and the UK came fourth-highest after Russia, the U.S., and Mexico.

The OECD also undertakes comparisons of poverty between countries using harmonised questionnaires for national governments, but their latest effort is the situation around 2000 (for example, Mira d'Ercole and Forster, 2005).

Tertiary Indicators and Targets

In addition to primary and secondary indicators, member countries were encouraged to develop tertiary indicators in order to provide more depth. In the UK National Action Plan on Social Inclusion 2003–2005 (DWP, 2003c) an Annex adopted a set of tertiary indicators and reported trend data from national sources that are more

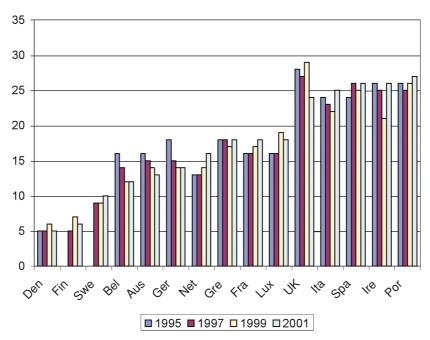
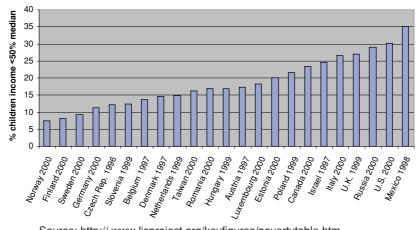


Fig. 2. % children 0–15 living in households with equivalent income less than 60% of the median before housing costs (ECHP).

up-to-date than the primary and secondary indicators. The majority of these indicators were moving in the right direction. Out of a total of 28 indicators covering children, and including direct indicators of poverty, indicators of risk of social exclusion, and indicators of help for the most vulnerable:



Source: http://www.lisproject.org/keyfigures/povertytable.htm

Fig. 3. Child poverty rates: Luxembourg Income Study. Circa 2000.

- seventeen have moved in the right direction,
- five show no significant movement,
- one has moved in the wrong direction, and
- for five, there is insufficient data to determine a trend

The Government also presented a list of Targets—mainly those relevant to social exclusion—that already form the UK Government Public Service Agreements or local PSAs, or targets set by the devolved administrations that do not follow the PSA methodology.

The Well-Being of Children in the UK

The United Kingdom has never produced a regular, comprehensive analysis of the well-being of children. Even before the introduction of devolved administrations in Scotland, Wales, and Northern Ireland, there was no Ministry for Children (or the Family) in the UK. In the past, there had been no body required to publish information on the impact of government policies on children. Of course there had been official sources of data on children's well-being, and the Central Statistical Office published a Social Focus on Children in 1994 (Central Statistical Office, 1994) and the Office of National Statistics published Social Focus on Young People in 2000. However, things have begun to change (for a description of similar changes around the globe see the chapter by Ben-Arieh and Goerge). In 2000 in England, the Children and Young Person's Unit (CYPU) was established in the Department for Education and Skills with responsibility for policy coordination and for running the Children's Fund. The CYPU began work to develop a framework for monitoring outcomes for children and young people and in Building a Strategy for Children and Young People proposed that it will produce a regular State of the Nation's Children and Young Person's Report. In 2003, the Government appointed the first Minister of Children and Young People in the Department for Education and Skills. The Minister took over the work of the CYPU, which was closed down. At the same time, it was announced that there would be a Commissioner for Children in England. In Scotland, Wales, and Northern Ireland there are already Commissioners for Children. An Office of the Children's Rights Commissioner for London has also been established, which produced an excellent The State of London's Children Report (Hood, 2001).

As well as the government commitment to produce an annual report on its progress in reducing child poverty, the New Policy Institute, with the support of the Joseph Rowntree Foundation, has published reports, which included children's indicators (see, for example, Rahman *et al.*, 2001). The Department of Social Security and the Department for Work and Pensions have also now published six *Opportunity for All* reports (reviewed above).

At the University of York, we have been engaged in research on the well-being of children since we were commissioned by UNICEF to write the UK report (Bradshaw, 1997) for its comparative study of the well-being of children in industrialised countries (Cornia and Danziger, 1996). We had originally worked on the UNICEF report as a subcontractor of the National Children's Bureau (NCB) and the NCB

funded an update of that review (Kumar, 1995). Then, as part of the ESRC Programme on Children 5–16, we were funded to undertake *Poverty: The Outcomes for Children* (Bradshaw, 2001). One of the conclusions of that work was that there was a strong case for a routinely produced and comprehensive national report on the state of children in the UK. We had thought that the Office for National Statistics might undertake this work, or perhaps a coalition of voluntary bodies. But we were approached by Save the Children and commissioned to undertake this work.

In the books that we produced (Bradshaw, 2002; Bradshaw and Mayhew, 2005), well-being was understood and represented in physical, cognitive, behavioral, and mental/emotional domains. We did not seek to identify a selection of key or representative indicators of well-being such as those published by the Department for Work and Pensions in the *Opportunity for All* reports or the Policy Research Institute in its reports, or the comparative indicators that the *International Comparative Study of Child Well-being* is seeking to produce. The main focus was on *outcomes* for children. We eschewed as far as possible the description of policy inputs or the evaluation of services. The work consisted of a critical, scholarly review of the evidence including administrative statistics, the findings of surveys, and both academic and official, and more qualitative studies of children.

Our strategy was to search for evidence on the well-being of children in the UK, how it varied over time, how it varied between the countries in the UK, and between the UK and other countries, and how it varied by social class, income, gender, ethnicity, and other socioeconomic circumstances of families. We tried to be critical of the evidence. Thus, for example, the only evidence on the numbers of children maltreated over time is that derived from social services department registers. Those greedy for evidence on whether child maltreatment is increasing or decreasing are forced to rely on this source. It presents, however, a flawed picture—one that has more to do with administrative practice, legislative categories, and fashion than the reality of maltreatment of children. We tried not to reject such evidence, but to give warnings about its reliability and validity. However although there is a considerable body of evidence on the well-being of children, too often the data is just not there. That is why we concluded that there was a need for a purpose-built survey of the well-being of children, which would go some way to filling the gap in evidence that exists.

Well-Being and Well-Becoming

At the same time as we were working on the well-being book, the Children and Young People's Unit began to work on monitoring the outcomes of the Government's strategy. As part of this work, some very interesting and useful work was done on indicators, including an extensive exercise to consult children and young people themselves, as well as parents, carers, and professionals.

The consultation established agreement that five broad outcome areas really mattered to children's and young people's well-being:

• **Economic well being**—having sufficient income and material comfort to be able to take advantage of opportunities

- Being healthy—enjoying good physical and mental health and living a healthy lifestyle
- Staying safe—being protected from harm and neglect and growing up able to look after themselves
- Enjoying and achieving—getting the most out of life and developing broad skills for adulthood
- Making a positive contribution—developing the skills and attitudes to contribute to the society in which they live

The exercise then established outcomes for each of the five broad areas that are summarized in the Appendix to this chapter.

Discussion

From a poverty base, which was historically and comparatively dire in the mid-990s, most of the key indicators of child poverty and social exclusion have been moving in the right direction in the UK. Much of this has to do with the performance of the UK economy, and particularly increasing employment and falling unemployment. Some of it is the result of tax and benefit polices introduced after the Labor Government came to power in 1997. The public expenditure settlement announced in 2002 will from 2003/4 lead to substantial increases in public expenditure on transport, education, and health; there are programs embedded in the health and education budgets (but arguably not transport) that are geared to tackle child poverty and social exclusion directly and in the long term.

However, progress in reducing relative poverty has been slower than expected. In part this is because inequalities in the income distribution in the UK increased until 2002/3. The Government has some way to go in order to meet its main headline objective—to reduce child poverty by a quarter by 2004. Although much of the treatment has been right, the dose has so far been inadequate to reduce relative poverty more. Even if the labor market remains as buoyant as it is, further redistributive policies will be required. There are also concerns about the extent to which the attack on poverty and social exclusion is being mainstreamed across government departments, the devolved administrations, and in regional and local government.

There is can be no doubt that indicators have played an important part in this strategy.

- It was national and international indicators that led the Government to recognize the seriousness of the problem of child poverty in the UK.
- Indicators have been employed extensively to monitor the progress of the antichildpoverty strategy.
- Neither the Government nor the policy community are entirely content with the indicators being used, particularly those based on a measure of relative income.
- The European Union, through the social inclusion strategy, has also become a key actor in the field developing its own portfolio of indicators—but too few of them focus on children.

• The heart of the problem is that the evidence base is too thin. Without a regular survey of children and young people that enables them to express their views about their aspirations, attitudes, beliefs, feelings, and perceptions, we have to rely on crude measures of family income, public health records, administrative statistics, and survey data based on adults. Although in these, the focus of children is better than nothing, it is not good enough.

Appendix: Children and Young People's Outcome Framework

Economic Well-Being

These outcomes cover the material circumstances in which children and young people live and their prospects for breaking out of poverty.

Strategic outcome. Children's and young people's opportunities are not limited by material circumstances

Contributory outcomes

Related to current Government programmes and targets

- Children and young people live in households with a secure satisfactory income
- Children and young people live in households fit for habitation
- Young people from disadvantaged backgrounds do as well in higher education as their better-off peers

Potential future indicators of success

- Children and young people live in households that have an income through employment
- Children and young people live in permanent accommodation
- Children and young live in households with sufficient space for privacy and the pursuit of individual interests.

Being Healthy

These outcomes cover the health and emotional well-being of our children and young people and how likely they are to enjoy a healthy and good life as adults.

Strategic outcome. Children and young people are healthy and feel good about themselves.

Contributory outcomes

Related to current Government programs and targets

- Infants have long life expectancies
- Children and young people choose not to smoke
- Children and young people avoid infectious illnesses that can be prevented by immunization

- Young people choose to become parents at a time that will offer the best life for themselves and their babies
- Children and young people engage in regular exercise

Potential future indicators of success

- Children and young people are hospitalized only for conditions that cannot be dealt with in primary care
- Young people choose sexual behavior that keeps them healthy
- Mothers choose to breastfeed their babies
- Children and young people eat food that is good for them
- Children and young people stay within normal weight limits

Otherwise important to childhood

- Children and young people express positive attitudes about their lives
- Children and young people say that they feel fit and healthy

Staying Safe

These outcomes cover how safe our children and young people are and how well they are growing up able to protect themselves from avoidable harm.

Strategic outcome. Children live in safety

Contributory outcomes

Related to current Government programs and targets

- Children and young people are safe from traffic
- Children and young people chose to avoid drug taking and substance abuse
- Children and young people choose to attend school
- Young people choose to drink alcohol at no more than the recommended safe levels
- Children and young people are safe from crime on the streets

Potential future measures of success

- Children and young people are not maltreated, neglected, or sexually exploited
- Children and young people are safe from accidents in their homes
- Children and young people live in households free from violence
- Children and young people choose not to bully, or racially or sexually harass other children and young people

Otherwise important to childhood

 Children and young people have trusted adults to whom they can turn to for advice.

Enjoying and Achieving

These outcomes cover how enjoyable and satisfying children and young people find their lives and how well they are developing toward adulthood in terms of educational attainment, personal and social skills, and employability.

Strategic outcome. Children and young people enjoy their childhoods while laying sound foundations for the rest of their life.

Contributory outcomes

Related to current Government programs and targets

- Parents or carers have access to good quality child care
- Children and young people have the opportunity to take part in sporting, social, or creative activities
- Children and young people reach minimum standards of literacy and numeracy
- Children and young people achieve improved educational standards
- Young people aged 16–19 engage in education, training, or employment
- Children and young people attend sports, arts, and entertainment events
- Children and young people develop skills through play or leisure activities
- Children and young people use information technology

Potential future measures of success

- Children and young people enjoy school and have a sense of achievement
- Children and young people to achieve in sports, the arts, and social skills

Otherwise important to childhood

- Parents and carers provide emotional support and guidance
- Children and young people have trusted friends
- Children and young people have "somewhere to go" where they can safely enjoy themselves on their own terms
- 19-year-olds are achieving the goals they set for themselves at 16.

Making a Positive Contribution

These outcomes cover how positively children and young people engage with the formal and informal communities in which they live and how well they are developing positive social skills, knowledge, and attitudes.

Strategic outcome. Children and young people make a positive contribution to the communities in which they live

Contributory outcomes

Related to current Government programs and targets

- Children and young people help family, friends, and the wider community
- Children choose not to offend or indulge in and antisocial behavior
- Older members of the community enjoy children and young people being around them
- Children develop socially in their early years so that they are ready for school *Potential future indicators of success*
 - Young people choose to vote (in local, general, and European elections)
 - Young people learn life and social skills

- Young people avoid periods in custody
- Children and young people participate in making decisions that affect them *Otherwise important to childhood*
 - Physical punishment is not used as a method of discipline.

Notes

- These draw on the ideas of the multinational indicators project http://multinationalindicators.chapinhall.org.
- 2. Children in families receiving income support, November of each year (1000s).

	Children
1997	
1998	2336
1999	2334
2000	2286
2001	2247
2002	2212
2003(May)	2230

Source: DWP (2003 a/b/c) Income Support Quarterly Statistical Enquiry.

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Using Indicators of Child Well-Being at the International Level

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I have, for many years, used quantitative data to compare the well-being of children across countries. This research includes, for example, international comparisons of child poverty and inequality using the Luxembourg Income Study (e.g., Phipps, 1999) as well as international comparisons of children's health and well-being (e.g., overall health status, obesity, asthma, anxiety, hyperactivity, overall "success at school") using a variety of reasonably comparable microdata surveys such as the Statistics Canada National Longitudinal Survey of Children and Youth, the US National Longitudinal Survey of Youth, Mother/Child Supplement, the Health Survey for England and the Norwegian Health Survey (e.g., Phipps, 2001, 2002, 2004).

However, I have never formally studied and am not aware of existing scientific research on how to make indicators "work," the topic of our recent meeting and this book. In fact, it is worth pausing to consider from the beginning what exactly we might mean by the word "work" in this context. Personally, in common with most other authors in this volume (e.g., Titler and Ben-Arieh), I would regard an indicator of child well-being as working if its use resulted in improved lives for at least some children. Concretely, though, how could quantitative data on outcomes for children actually achieve such an objective?

Since I can in no way claim to know how best to use indicators of child well-being at the international level, in what follows I simply provide some reflections based on my own experiences in this area. That is, I attempt to organize some thoughts about cases in which my work with quantitative measures of child outcomes was well received by other scholars, by policymakers, and/or by the general public, and other situations in which I encountered resistance. It is probably important to note at the outset that I am a Canadian academic and that my experiences are very much situated within the Canadian policy context.

How then, can international indicators of child well-being have an impact on children's lives? Two general roles come to mind. First, indicators may help improve knowledge or understanding; second, indicators may help persuade.

Consider how indicators can help to increase understanding (see also Moore and Brown, 2005, this volume, who describe a hierarchy of uses for indicators). First, one extremely useful function of quantitative indicators as a means for understanding child outcomes is that the use of indicators forces a certain precision of definition so that everyone can see (in the computer code, if need be), *exactly* what is meant by otherwise potentially somewhat vague, though very important, constructs such

as the *Social Inclusion of a Child* (see Atkinson, 2005). Then, even if there is disagreement among researchers and/or policymakers about the best definitions, everyone can at least know exactly what others mean.

Second, such data can help us to understand how "well-off" our children are. Within a country, it is hard to know what constitutes good performance in any absolute sense. What rate of child poverty or child obesity (higher than zero) would constitute an acceptable level; what even should be the target level? By comparing indicators of child outcomes across countries, it is possible to benchmark internal performance. That is, we do not have to choose any particular absolute standard, but can gauge performance by comparison with that apparent in other similarly affluent countries. For example, are national rates of child poverty higher or lower than in a reasonable set of comparator countries? Do our children have more accidents or chronic health problems?

Choosing which indicators to use as benchmarks depends upon social values—which aspects of child well-being do we regard as most important? Such choices will also depend upon our objectives—do we want a global comparison of child well-being in Canada (or some other country) with that of children living elsewhere, or do we have a more narrowly defined problem (e.g., child obesity) we wish to study? Finally, there will inevitably be an element of pragmatism to any choice of indicators—which data are available for the countries against which we want to benchmark outcomes for our own children?

It follows that another important use for international comparisons of indicators of child well-being is to identify both policy problems and potential solutions. If we find that our record is significantly worse in some dimension (e.g., child obesity) than is true in most other similarly affluent countries, we have identified a problem. Hopefully, if the indicators are effective, drawing attention to the problem will help direct resources toward finding a solution. And, indicator research can sometimes also help suggest fruitful directions for policy change in order to improve child outcomes. For example, if we find that child outcomes are better in countries which spend more on some program (e.g., child benefits) or spend resources in different ways (e.g., on public medical care), this can suggest ways to modify policy within a country. Thus, it is useful to provide indicators not just of child outcomes but also of resource/program inputs. Of course, such indications of possible associations between differences in programs/expenditures and child outcomes would be very informal, but it can nonetheless be helpful in suggesting areas for more in-depth (and potentially expensive) analysis of causation (e.g., through random assignment experiments—see Morris and Gennetian, 2005, this volume). Looking across countries often expands the range of child outcomes and policy choices far beyond what would be observed within a single country, even over time.

The discussion above has been implicitly static—are domestic outcomes for children currently better/worse than for children elsewhere? But, indicators can also be extremely effective in charting progress across time—are our children becoming worse off while children elsewhere are becoming better off? If so, are policies changing in different directions domestically than they are internationally? A related point is that indicators can sometimes be used effectively to set policy targets. Bradshaw (2005, this volume), for example, discusses how effectively the

1999 British target of eliminating child poverty over the next 20 years has been used to direct resources to children. Unfortunately, a Canadian all-party resolution in 1989 to end child poverty by the year 2000 proved highly ineffective (child poverty rates actually climbed over the period), leading to some discouragement and disillusion

In thinking about how indicators can make a difference, it is also useful to think about who could be affected and how indicator research would be brought to their attention. Potential audiences include academics/researchers, policymakers, the media, and the general public. Each is likely to be influenced in a different way. Academics and other researchers will read peer-reviewed articles and/or see conference presentations; the general public and politicians are more likely to find out about indicators of child well-being through the various news media. And, not only will the source of information about child indicators vary across audiences, but the style of presentation that is likely to be most effective/persuasive will differ dramatically. For academics and other researchers, in addition to being socially relevant, indicator research must be perceived as rigorous and technically sophisticated if it is to gain credibility (the emphasis on technical sophistication may be particularly true of my fellow economists). On the other hand, complicated econometric analyses will not be effective in a newspaper article or television interview unless the material is explained in a clear and *nontechnical manner*. Thus, answers to the question "Which indicators work?" will depend upon the audience. But, a general theme regardless of audience is that credibility of presentation is critical.

Within Canada, my experience has been that it can be extremely persuasive to both politicians and nonacademic policy audiences to compare indicators of Canadian child outcomes with indicators of outcomes for children in other affluent countries, especially the United States. Research results of this kind seem to catch media attention very readily and, presumably as a result, the attention of both the general public and politicians. Canadians are always very concerned if Canadian children are not doing as well as those elsewhere; they relish the idea that Canadian children fare better. Either way, there is often much attention paid to international comparisons.

But, the interest in international comparisons notwithstanding, credibility is critical here. It is very hard to move people from their prior assumptions, even using apparently objective indicators such as the incidence of child poverty. Canadians prefer to believe that child outcomes will be better in Canada than in most other countries. There seems to be a bias toward accepting without question results that indicate that fewer Canadian children are poor or unhealthy than children in the U.S. or elsewhere; Canadians are more likely to be defensive, critical, and suspicious about findings if the indicator research suggests that this is *not* the case. Audiences at all levels will question the data, the definition of poverty, the definition of income, the estimation technique, in hopes of explaining away the results, and this is particularly true of politicians who would not wish to be "blamed" for poor child outcomes or required to find additional scarce resources to help solve a problem identified. (Although I use the Canadian example as one I know well, it seems unlikely to me that such reactions would be unique to Canada.) Although we presumably all, as

researchers, take every care to be certain our results are correct, it is also important, when presenting an indicator which might be taken as negative, that great effort is made to persuade audiences that results are credible, which is a somewhat different thing.

How, then, can we make indicators as credible as possible? My experience with this has been that it is easiest to use *objective indicators*. Even in this case, as noted above with respect to the example of child poverty, many questions can arise. Thus, it is best, insofar as possible, to anticipate and forestall questions (e.g., is poverty comparably and appropriately defined?) by presenting relevant material in advance. It can also be useful to lead readers or audiences to results which they may find unpalatable (for example, by first presenting information about labor market conditions and/or levels of spending on transfers for families with children and then showing rates of child poverty).

An important point to make at this stage, however, is that a lack of coordination of national health surveys, for example, can cause troubles for researchers wishing to compare indicators of child well-being across countries. Because each country typically designs/implements its surveys independently and according to national needs, there can be differences in questions asked and in the exact wording of questions for apparently similar content. For example, Canadian parents responding to the Statistics Canada National Longitudinal Survey of Children and Youth or NLSCY are asked: "Has your child ever had asthma that was diagnosed by a health professional?" whereas Norwegian parents responding to the Norwegian Health Survey are asked: "Is he/she, or has he/she ever been bothered by asthma?" Thus, the Canadian question makes reference simply to diagnosis and mentions a health professional. The Norwegian question talks about being bothered by asthma; it is quite possible that children with diagnosed asthma are not bothered by the condition if it is properly managed. Thus, if Canadian asthma rates are higher than Norwegian (as they are 15.0 versus 8.7%—see Phipps, 2004), there is definitely room for Canadian audiences to question the validity of the comparison. On top of all the subtle word differences, the two questions would have been asked in different languages. Thus, although asthma prevalence would seem to be a fairly objective indicator, a researcher may have some difficulty in persuading Canadian audiences that asthma rates are really higher in Canada.

I have found it even harder to move to more subjective indicators of child well-being. Issues of interpretation and language are added to problems of difference of phrasing for apparently similar content. For example, parents in both Canada and Norway are asked to assess their children's overall happiness. This would seem to be an extremely fundamental indicator of child well-being. Yet, problems of making the comparison and making it persuasive to either academic or other audiences were essentially insurmountable with given data resources. For example, in Canada, parents were asked: "Would you describe (your child) as being usually: (1) happy and interested in life? (2) somewhat happy? (3) somewhat unhappy? (4) unhappy with little interest in life? (5) so unhappy that life isn't worthwhile." In Norway, the English translation of the question asked of parents is: "How much of the time during the past 14 days has she/he been happy and satisfied? "(1) all the time (2) most of the time/a large part of the time (3) some of the time (4) none of the

time." Thus, Canadian parents make their assessments on a five-point scale while Norwegian parents must refer to a four-point scale. The reference time period is the past 14 days in Norway, while time frame is left unspecified in the Canadian question. The Norwegian parents are asked to assess how much of the time the children are happy while the Canadian parents are asked to pick the best description of the child's most "usual" emotional state. Then, we must add to this list of difficulties the fact that parents are making a subjective assessment that must, of course, be relative to what they know. If other children in the neighborhood (or city or state) appear equally miserable (or badly behaved or unhealthy), then parents might regard this as normal and not perceive a problem. Similarly, if all children appear to have very high levels of well-being, then, by comparison, their own may appear normal or perhaps even less well-off. In summary, it has been my experience that the more it is possible for any sort of audience to raise issues of interpretation, the less well-accepted will be the indicator. This suggests a potentially important tension between an indicator that might be extremely meaningful at the conceptual level and one that will be more widely credible. Difficult choices may have to be made.

However, such difficulties could be reduced if more truly comparable data were available at the international level. Of course, organizations such as the World Health Organization (WHO) or the United Nations (UN) do already publish extremely useful indicators of child well-being in a limited number of domains (e.g., infant and child mortality rates, incidence of low-weight births). Unfortunately, these are often only available at the aggregate level (e.g., child mortality for the nation). To advance our understanding of the determinants of child well-being across countries, it is important for researchers to have access to data at the micro level so that differences in outcomes by socioeconomic or marital status, for example, can be assessed. For example, what is the relationship between socioeconomic status and child health in country A compared to country B? It is also particularly useful to have data for the *same child* across a variety of domains so that we can understand not just how many children in a population experience a particular advantage/disadvantage but whether the same children experience multiple advantages/disadvantages.

One model for how this could be achieved is the Luxembourg Income Study² (LIS), which has advanced comparative analysis of child poverty tremendously. Although data are collected by individual country statistical offices, so direct comparability is not built into the data collection process, staff at LIS are in most cases able to recode to achieve comparability of, for example, income definition (what is counted as market income, transfer income, personal taxes, or payroll taxes, etc). The LIS has gained widespread recognition and credibility, which has enhanced the capacity of researchers to make useful international comparisons of child financial well-being.

Another useful model for how to improve the comparability of international microdata resources is the Programme for International Student Assessment (PISA), which is an international collaboration coordinated by the OECD with partners in each country designed to provide cross-nationally comparable indicators of the achievements of 15-year-old students in reading, mathematics, and science. The advantage of a PISA-style project is that comparability begins at the stage of data collection. A similar development with respect to other aspects of child well-being

(e.g., health status) would be of enormous benefit to anyone wishing to compare indicators of child outcomes across countries, particularly if such an effort were coordinated by a well-respected agency (e.g., the WHO or the UN).³

Thus, to develop high-quality indicators of child well-being at an international level, a key first step would be to enhance the comparability of existing surveys (i.e., the LIS model) or perhaps even to generate new coordinated multicountry surveys (i.e., the PISA model), though the second option would be a much larger and more daunting task. Coordinating national surveys obviously requires the involvement and support of key figures from national statistical organizations. But, because it would not be possible to harmonize all content of all surveys, agreement on a subset of important indicators of child well-being about which information could be collected in as comparable a fashion as possible would be critical. And, it would be helpful if indicators could be published by widely respected bodies and/or widely disseminated via publication in many well-respected journals.

Given high-quality, comparable data, making indicators work requires effective dissemination. Senior government bureaucrats are one important audience. In the Canadian context, there has been a longstanding tradition of *partnership research* between government branches and academics. For example, bureaucrats identify priority research questions (ideally, following discussion with the research community) and commission research by academics to address these questions. There is thus input by the government officials about what should be studied, and ongoing participation through review/feedback during the research process. It is my impression that the eventual findings of research carried out in this way are taken more seriously by government branches, often resulting in the briefing of senior elected politicians, for example, than might be the case if the same article simply "appeared" in an academic journal.

Dissemination directly to the general public and politicians is also vital if indicators are to be effective both in drawing attention to problems and garnering support to take action to solve problems. As noted by Moore and Brown (2005, this volume), academic researchers may not be the most ideally suited messengers for this type of dissemination. Not only are tenure/promotion committees likely to disregard television appearances, radio interviews, and/or newspaper columns, most academics are not trained to carry out this style of communication and many are reasonably introverted individuals who may dread being interviewed on television or radio, for example.

Nonetheless, to the extent that dissemination does fall to the academic researcher who hopes to use indicators to "make a difference" in children's lives, my experiences with this form of communication suggests that it is important for indicators to be presented as simply as possible. For example, it is much easier for nonspecialists to be presented with the ratio of income received by a child in the richest 10% of the income distribution to the income received by a child in the poorest 10% of the income distribution (a simple measure of economic distance) than it is for nonspecialists to understand a gini coefficient or an index of generalized entropy (more sophisticated measures of inequality). This need not and indeed should not mean that the simpler measure is chosen at all costs—for

example, even if it conveys information that is misleading or only partially correct. An example from the literature on child poverty is that for years policy studies have focused only on the incidence of poverty (i.e., percentage of children from any particular group who have incomes less than a designated poverty threshold), while academic researchers have been developing sophisticated indices of poverty that pay attention not only to incidence, but also to depth of poverty as well as extent of inequality among the poor. Unfortunately, these measures are very complicated and largely unintelligible to nonspecialists. However, a way has recently been found (see Osberg, 2000; Osberg and Xu, 2000) to present child poverty in a simple "box" with incidence on one axis and depth on another. The essence of the more complicated measures is preserved, but in a way that is meaningful outside the academic world

As another general point, nonspecialists often seem to find summary or composite indices less intuitive than individual indicators reported separately. Even if summaries are constructed, it is a good idea to report individual indicators separately as well so that different audiences can pull out outcomes of interest or understand how particular policies affect different outcomes (e.g., health care expenditures and physical health status).

Concluding Thoughts

It seems vital to reach all audiences—academics and the research community more generally, policymakers and politicians, as well as the general public. Having a scholarly article in a peer-reviewed journal can both reach academic audiences and increase acceptance of a finding by nonacademics (even if they never read it) insofar as it enhances the scholarly reputation of the researcher and hence the perceived legitimacy of the research. In the Canadian context at least (and this may reflect the "smallness" of the Canadian world), the development of longstanding relationships between senior civil servants and academic researchers can facilitate two-way communication flows, which can help disseminate information about child indicators to policymakers. Finally, although many scholars have limited experience with engaging the media, this does provide a way to reach a large audience and, hopefully, put issues of child well-being on the policy agenda so that we might have the chance to improve the lives of children—presumably the ultimate goal of any such project.

Notes

- It is entirely possible that U.S. audiences are much less interested in comparing outcomes with those evident in Canada.
- 2. See http://www.lisproject.org.
- 3. To achieve credibility among academic researchers, it would be particularly important that such an exercise pay close attention to issues of sample design, response rates, etc.

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Section III

The Policy Perspective

Preparing Indicators for Policymakers and Advocates

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Indicators are the focus of intense interest in the policy community, particularly economic indicators. For example, indicators about the state of the economy, such as the unemployment rate, the poverty rate, housing starts, and inflation, are not only tracked over time but are awaited with anticipation and urgency and reported in headline stories in the media. The state of the economy affects the outcomes of elections, and the decisions made by government, including decisions made by the Federal Reserve, Congress, and the executive branch. Moreover, the data available for economic indicators are very up-to-date—for example, unemployment in the preceding month.

Many citizens and policymakers would argue, though, that the state of the economy is not the only marker of a successful society (Hauser *et al.*, 1997). The well-being of children would also rank high among the factors that signal the health and future prospects of a society. Indeed, we would suggest that indicators of child well-being represent an important and complementary strategy for monitoring the success of a society.

Though not as fully evolved or up-to-date as economic indicators, the field of child and youth well-being indicators has come a long way in recent years. For example, the United States Federal Interagency Forum on Child and Family Statistics (2001) produces an annual report, *America's Children: Key National Indicators of Well-being*, and the Annie E. Casey Foundation has produced *Kids Count* to provide data at the state level for more than a decade. Given this progress, it is valuable to consider how indicators can be used correctly and effectively to inform public policy and program development by policymakers and advocates, as well as by the public.

In the following sections, we highlight five hierarchical purposes of indicators and discuss the benefits and risks of using indicators for each of these purposes. We also suggest a number of criteria for using indicators so that they are both accurate and understandable, and briefly identify some presentation strategies that might help to communicate indicators of child well-being to policymakers.

The Uses of Indicators

Despite their popularity and wide use, indicators are easily misunderstood and can be misused. It is critical to know the purposes of indicators and to use them appropriately. Brown and Corbett (2003) have defined five purposes:

- 1. Description
- 2. Monitoring

- 3. Goal setting
- 4. Accountability
- 5. Evaluation

Description

Indicators enhance our understanding of what children's worlds are like. For example, what proportion of children eats a healthy diet and what proportion is obese? What proportion of children has mental health problems? What proportion engages in binge drinking, and what proportion attends religious services regularly?

Descriptive information provided by such indicators can represent crucial background information for planning. For example, officials in the state of Kentucky conducted a census of all of the children in foster care. One of the many important findings from this work was the high incidence of mental health problems among both children and caregivers. This information made state officials think differently about, not just the needs of children in foster care, but about whether their Kentucky university system is preparing enough, and the right kinds of, mental health professionals to address the needs of children in foster care.

This kind of descriptive information is very useful to policymakers who benefit from knowing about the level of performance or need overall or within particular subgroups or geographic areas.

Monitoring

Indicators can also be used to assess and track need. Using indicators for the purpose of monitoring takes indicators up a notch from simple description. Here the goal is to track trends in indicators over time. Monitoring helps policymakers or advocates answer the question: Are things getting better or worse or staying the same?

When they know trends in the level of need, policymakers and advocates can identify the resources they might require to address the need, or the resources saved because trends are getting better.

Trends in economic indicators, such as the unemployment rate or the inflation rate, are obviously extremely important to policymakers and citizens. Economic trends can decide elections and precipitate changes in public policies. These data are relevant to policy discussions, though, primarily to the extent that they are up-to-date and objective. They provide a critical and common platform for policy discussions. Policymakers may not agree about policy directions; but they share a set of economic indicators that are generally accepted measures of trends.

The public health field has also done an excellent job of developing and monitoring indicators. The Centers for Disease Control and Prevention see indicators as surveillance tools, and work to provide up-to-date state and local indicator data, which is crucial for monitoring the nation's health. For example, CDC's disease surveillance systems track SARS, HIV/AIDS, West Nile disease, hepatitis, and other diseases, and public officials at the national, state, and local levels act upon this information to deploy resources and address public health issues. Indeed, the reaction is often very rapid because the public health system actually

uses data to inform decision making and resource allocation. As a result, we are all healthier.

Indicators of child well-being have not yet attained a similar level of impact. However, only recently have data been regularly available at the national level, much less the state or local level; and many of the trend lines are fairly short. In addition, lags in data availability mean that data are often stale before they are available to policymakers and the public. For example, data on sexual, contraceptive, and fertility behavior among Americans is provided by the National Survey of Family Growth. These surveys have been conducted in 1988, 1995, and 2002, meaning that data on important topics such as teen risky sexual behavior, abstinence, and the use of new contraceptives such as Depo Provera are only intermittently available. Moreover, after the survey is done, the data are not available for several years. For example, the 2002 NSFG data reports were released in December 2004, and the data file was released in February 2005. But progress is being made: teen childbearing, child abuse and neglect, math and reading achievement are being tracked regularly, and the data, even though they may be a couple of years old, are used to inform decision making.

Goal Setting

The business community often sets goals, and this is happening increasingly at the federal level and among state and local governments. Having an *explicit target* can be remarkably powerful. It defines what is desired, and it brings people together around a very concrete goal, while allowing for different approaches to achieving the goal.

For example, the county of Tillamook, Oregon, set itself a goal to substantially reduce the teen birth rate. They deliberately did not attempt to agree on a single strategy to achieve their goal. Obviously, people disagree pretty profoundly about how to prevent teen pregnancy—whether abstinence or contraception or both are to be preferred. However, instead of fighting over the strategy, the people of Tillamook County decided to set a goal and then work to achieve that goal however they could contribute. Many and varied groups and approaches worked on this issue, and they were very successful in reducing their teen birth rate within a few years. (The chapter by C. Hogan provides additional discussion of community indicators.)

The success of the people of Tillamook, Oregon illustrates the surprising reality that indicators can sometimes be "magical." Simply setting goals and empowering people to work toward the goal can be surprisingly powerful. Part of the reason may be that the means to reach the goal are not generally prescribed, allowing a flowering of creativity and perhaps minimizing losses of time and resources to conflict over strategies.

An example of using indicators for goals would be Healthy People 2010, a comprehensive effort in the United States to improve the health of all Americans. It identifies 467 health objectives for the decade and sets specific, reachable goals for each one. Indicators of progress are tracked through existing health surveys and administrative data sources. Government agencies and private health organizations at all geographic levels are encouraged to incorporate some of these goals in their own planning. (See http://healthypeople.gov for more details.)

Accountability

The accountability movement has changed how success is assessed. Instead of measuring "inputs" or services, managers are now held accountable for achieving outcomes. This can be a valuable innovation if the outcome is actually within the control of the person or persons being held accountable. However, if people are being held accountable for things they cannot achieve, attaching sanctions to indicators for the purposes of accountability can backfire.

For example, a project to develop indicators of child well-being for children in the foster care system initially ran into a roadblock (Child Trends, 2003). There was considerable interest, but substantial skepticism as well. Specifically, staff in foster care and child protection agencies did not want to be held accountable for outcomes for children with serious problems who were often in foster care for only a short time. They didn't feel they had the time or the means to change outcomes for these children and were therefore understandably reluctant to be held accountable. Accountability is a demanding level for the use of indicators.

However, participants were willing to use indicators for descriptive information about children in foster care and in the child welfare system. They could see the value of indicators that were descriptive. In fact, they volunteered to define some indicators as relevant for monitoring and they put several indicators at the level of goal setting. They even moved several indicators up to the level of "accountability." However, they wanted to be very careful that the outcomes for which they were held accountable were reasonably within their grasp. For example, immunizations were selected as an outcome wherein they felt they had control and should be held accountable.

As this example illustrates, for policy and program purposes, one should be quite cautious about using indicators for the purpose of accountability.

This is even more true for the fifth use of indicators—evaluation.

Evaluation

Random assignment studies are widely recognized to be the gold standard for evaluation (Hollister and Hill, 1995). Indicators in such studies can serve as the dependent variables that are examined for individuals or organizations in the experimental group compared with those in the control group.

Using indicators in any other sense as evaluation tools needs to be approached extremely cautiously. In particular, drawing causal conclusions on the basis of indicators is almost always unwarranted. However, it is possible to do model-based "evaluations," where indicators are used in a logic model that relates program activities systematically to intermediate and long-term outcomes the program seeks to produce for its participants. Some indicators may be intervening variables and others may be outcome variables. As a scientific evaluation, this does not allow for causal conclusions. As a management tool for reflective practice, however, indicators can provide very useful information to program managers seeking to monitor and refine their programs to ensure the best results.

This hierarchy of uses holds important lessons for policymakers and advocators. Indicators need to be used appropriately and thoughtfully, with a clear sense of the purpose for and level at which they are to be used (Moore *et al.*, 2003).

Beyond using indicators appropriately, however, it is also important to have a strong set of indicator measures for use in the policy process. As in any other field, initial efforts to measure child well-being began by using measures that were already available. Over time, however, a stronger set of measures has become available. One way to continue to strengthen the field is to have a sense of the criteria that might help drive the development of indicators. (See Moore, 1997, for a more detailed discussion.)

Criteria for Using Indicators

Indicators Need to Be Readily Understood

Given limited time and interest, the public and policymakers need indicators with face validity, like the infant mortality rate and the death rate. These rates assess concrete, understandable, and important outcomes. The same is true for teen child-bearing. In fact, we suspect that one reason that the teen birth rate is monitored so closely (apart from its importance) is the fact that it is so clear and concrete and tangible. A female who is a teenager has a baby.

Other outcomes, like the behavior problems index (BPI), for example, are not as intuitive to the public or to policymakers. They do not resonate to the pronouncement that the BPI fell from 11.6 to 9.4. The meaning is not clear or inductive.

Of course, this may simply reflect the need for more time for such indices to become better understood, as the poverty rate and the unemployment rate have over a period of decades. But it is important for researchers to keep in mind as they develop indicators that indicators need to be understandable to potential users.

Indicators Need to Be Timely

After a presentation on trends in teen childbearing that was hosted in the offices of a stockbroker, one of the organizers provided a tour of the brokerage firm. Pointing out a computer monitor with ongoing stock updates, he commented that this is what the financial field considers up-to-date data. Trend data that are years old just do not claim the same attention as fresh information.

Despite progress, timeliness remains an ongoing concern. As described above, data about children are generally several years old, while data on unemployment are available each month. For policy purposes, timely data are essential.

Indicators Need to Be Available Over Time

Data are needed on a regular basis so that policymakers and advocates can monitor trends. For example, it is not only important to know the level of school

performance but whether, over time, the level of performance is getting better or worse. It may not be necessary to have annual updates, but regular updates using the same data collection methodology to support the tracking of trends over time is essential.

Information on Subgroups Is Needed

Although overall levels and trends are important, sometimes the story is hidden within subgroups. For example, there has been considerable focus on the rate of nonmarital childbearing during the 1990s and into the current decade. However, the real story is in age-specific subgroups (National Center for Health Statistics, 2003). When the trend is examined by age, it emerges that the trend differs for teens compared with older unmarried women. Rates of teen childbearing peaked in 1991 and fell all decade, while rates of nonmarital childbearing rose slightly after welfare reform among women in their 20s. These two trends offset one another in the overall data.

Clearly, this subgroup difference in the trend has implications for the assessment of the success of welfare reform. Teen childbearing rates started to decline before the Personal Responsibility and Work Opportunity Act law was passed in 1996, while nonmarital childbearing rates among women in their 20s (the prime age group for nonmarital childbearing) have not declined since the law was passed.

State-Specific Data Are Crucial

Because many public policies regarding children and families are formed at the state level (if not the local level), it is crucial to have the capacity to examine trends at the state level. This means that large and representative samples are needed for states. The newly available National Survey of Child Health represents an important resource for policymakers and advocates who seek state-level information. Data were collected by telephone about children's health and well-being, as well as about their families, neighborhoods, and services, for approximately 2000 children in every state. These large samples will support analyses within state and comparisons across states.

Indicators Should Be Grounded in Science—and in Social Values

These criteria need to be discussed together, because it is necessary to mesh the two.

By "science," we are referring to conceptual, methodological, and psychometric issues. Our measures of child outcomes need to draw upon scientific findings—for example, the understanding that children's readiness for school is not simply measured by scores on tests of cognitive achievement (Child Trends, 2001), but also reflects children's health, behavior, and approaches to learning.

Measures of child outcomes also need to be psychometrically sound, with reliability and validity established broadly and for critical social and economic

subgroups. If trends are to be monitored over time, it is important that outcomes be measured with the same items and the same methods across time.

It is difficult to obtain funding for psychometric work; but using child outcome measures to monitor child well-being across places and over time is high-stakes work. Mistakes in the calculation of the unemployment rate or the poverty rate would matter. The same level of scientific and methodological rigor is needed for the assessment of child outcomes.

However, in addition to solid science, outcome measures need to reflect social values. Policymakers and the public seem to care a great deal about welfare caseloads and teen childbearing, making these valuable social indicators. Despite research indicating their importance, we don't see similar levels of policy concern for family process measures or positive outcomes among children. This implies that the scientific community needs to better communicate research findings regarding the importance of strong families and the importance of positive child development (such as positive parent—child relationships), not just welfare caseload decline and teen childbearing. At the same time, the importance of measuring outcomes that are important to policymakers, program providers, advocates, and the public must be kept in mind.

Indicators Need to Be Amenable to Change

When indicators are monitored over time or used for goal setting and accountability, it is important that they be amenable to change, or they will not be of much interest or use to the policy community. For example, childhood obesity has increased dramatically in recent years and it will be important to monitor whether efforts to affect obesity are reflected in changing trends.

Indicators Are Needed Across Domains

It would be simpler to have just one global indicator of child well-being; however, recent trends are varying across outcome domain (Land *et al.*, 2001). For example, teen violent crime rates are down; but obesity has risen over time. Combining indicators into a single measure hides these distinctive trends. In addition, it is important not to simply rely on a single measure, such as academic test scores; rather indicators should be described and tracked across domains of child development. The specifics of how the domains are defined are less important than recognizing the need for breadth, so policymakers, advocates, and citizens are able to monitor varied aspects of child outcomes. One of the simplest approaches to describing child outcome domains is the following categorization:

- · Child health and safety
- · Educational achievement and cognitive attainment
- Socioemotional development, including behavior

In addition to assessing varied child outcomes, information on children's family, peer, school, and community context is also helpful to policymakers seeking insight into potential explanations for patterns and trends.

Assess Well-Being and Well-Becoming

To use a phrase introduced by Orville Brim (Brim, 1975) and popularized by Asher Ben-Arieh, it is important to assess well-being and well-becoming. By well-being we mean the current life happiness, health, functioning, success, and enjoyment of children. Well-becoming shifts the emphasis to the future and refers to future accomplishments and success. Policymakers often favor outcome measures that predict to future outcomes, such as self-sufficiency as adults. However, for reasons of conceptual and policy balance, we contend that both current well-being and future well-becoming need to be assessed.

Positive Outcomes Need to Be Measured

It is essential, of course, to continue to monitor problem behaviors such as teen childbearing, drug use, violence, and school dropout. However, as Karen Pittman has said, "Problem-free does not mean fully prepared" (Pittman and Irby, 1996).

Parents, program providers and citizens generally have goals for children that go beyond squelching negative behaviors. They care about outcomes such as "character," volunteering, and strong parent—child relationships. Policymakers seem to focus more on preventing the negative than on monitoring and promoting positive outcomes. We suggest, however, that as a nation it is important to consider what we want for children and adolescents, rather than simply what we do *not* want. This implies conceptualizing and developing measures of positive outcomes to augment the current set of negative indicators. This work seems urgent because polls conducted together with the Annie E. Casey Foundation (Guzman *et al.*, 2003) indicate that the public greatly overestimates the problems of children and is unaware of positive trends. Given that the news is full of negative stories, these perceptions are not so surprising. Good news is currently defined as a decline in a negative outcome. Such measures need to be supplemented by data on positive outcomes, wherein good news would be an increase in a positive outcome.

Many researchers, along with practitioners, have begun to address this challenge (Moore and Lippman, 2005); but it will take time to get a robust set of positive measures that is incorporated into the statistical system and reported on a regular basis.

Indicators Need to Be Accessible

Policymakers, journalists, television reporters, and advocates need information that is readily available, up-to-date, and user friendly. This need led Child Trends to develop the DataBank (www.childtrendsdatabank.org). The DataBank provides the latest in trend data and research on over 95 indicators of child and youth well-being, with new indicators added on a regular basis and existing indicators updated within a week of the release of new data. The information is offered in plain English, with data presented in attractive figures and tables that are easily downloaded for use in presentations and publications.

Even the best and most accessible data will not be used if it is not presented in an engaging and effective manner. The views of nonresearchers, such as public relations specialists and media advisors, need to add to this discussion; but a few suggestions regarding how information are presented in the next section based on our experience sharing data and research over the years with users who are not themselves researchers.

Presentation

To communicate about indicators with nonresearchers (as also discussed in the chapter by T. Little), it is helpful to have a story line. That is, it is useful to think through the message rather than to toss out random, unconnected facts. The public's attention is quite limited—witness the polling data that indicate that the public is not aware that the welfare rolls are down (Guzman *et al.*, 2003), even though welfare reform was a major domestic focus during the 1990s. This suggests that it is not sufficient to provide disembodied facts and expect journalists, policymakers, advocates, or the public to absorb them and understand their implications. This is not a recommendation, however, to spin or distort the data. Rather, it is a recommendation to explain indicator patterns and trends and their implications coherently and clearly.

Presentation represents a related issue. Because journalists, policymakers, and advocates are not typically quantitative researchers, it is necessary to use graphs and figures and to share information in clear language. Graphs are a more intuitive way to absorb indicators than tables of rates and percentages. In addition, it is useful to accompany the data with simple, straightforward text. Furthermore, as noted by Thomas Little, it is valuable to be brief. Nonresearchers have only a limited appetite for data, no matter how important or interesting researchers find the results, making it essential to tell the story accurately and succinctly.

In addition, it is necessary to repeat the facts. Researchers often seem to feel that publishing something in a peer-reviewed journal is sufficient. Others feel that a press release is sufficient. However, neither seems to be sufficient. We have found that it is necessary to repeat messages numerous times in multiple venues, even though this often feels boring to researchers. For example, though the teen birth rate peaked in 1991 and had declined every year since then, a poll conducted in 2002 found that most Americans (74%) were not aware of this decline (Guzman *et al.*, 2003).

Finally, the messengers are important. There are researchers and statisticians who produce the data and understand it. Then there are communicators who can communicate clearly, compellingly, and honestly. However, the number of people who can do both is very small.

In our experience, most researchers tend to be introverted, and they neither desire to be spokespersons to the media, nor are they very good at it. On the other hand, skilled and facile communicators tend to be advocates who have a cause to promote. They may neither understand completely nor care about the statistical and methodological issues that underlie good research.

If we are to make accurate, objective, scientifically based indicators of child well-being an element of public policy, we need to develop people and organizations

that can communicate the information in ways that are not only accurate and objective but also compelling and clear and even interesting!

Conclusion

Indicators of child and youth well-being can be an important element in a larger effort to increase the public focus on children and youth and how they are doing. Preparing and disseminating indicators has proven to be a challenging task, however—from conceptualizing a broad and complete set of constructs, to developing concrete measures, to explaining them to potential users, to assuring that they are not used inappropriately. Given the complexity of this work, numerous people in the U.S. and in other countries have chosen to make this topic a major focus of their work, and considerable progress has been achieved in producing indicators. Another ongoing task is increasing their usefulness and accessibility to policymakers and advocates, and this work will also require considerable collaboration over time.

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Using Indicators of School Readiness to Improve Public Policy for Young Children

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Summary Abstract

Research has shown that children are most successful as they enter school when they have developed the emotional capability to manage their feelings and behavior and when they have a base of strong academic and social skills. The research base also shows that children experience the greatest success in the early elementary years when families are involved in their children's education, when teachers understand healthy child development, and when communities offer support that helps children and families grow and thrive.

This multidimensional view of school readiness set the context for a 3-year, 17-state initiative supported by the David and Lucille Packard Foundation, the Kauffman Foundation, and the Ford Foundation. *School Readiness Indicators: Making Progress for Young Children* (SRI) helps state teams identify, monitor, and use indicators of child, family, school, and community conditions to influence policies for young children and families.

This paper describes the SRI and reports on how 17 states identified indicators tied to policies on school readiness and early school success. Priority school readiness indicators from each state are provided. In addition, a core set of indicators that evolved over the life of the initiative across all seventeen states is provided. A third set of indicators, identified as emerging indicators that are as important to school readiness as the core set but at this time are difficult to measure and track at the state and local level, is also included. Finally, key lessons learned by the project grantees and partners are outlined.

Introduction

Scientific evidence reported by the National Academy of Sciences in a review of child development research provides clear, compelling evidence that brain development occurs faster during the first three years of life than at any other period and that early learning lays the foundation for later school success. (Shonkoff and Phillips, 2000).

This message is getting out to the public and to policymakers. Public opinion polling has measured the public's knowledge of the importance of early education. A poll of more than 3000 voters conducted by Republican pollster Peter D. Hart showed

that 87% believe states should provide funding for high-quality public preschool as a way of improving performance in elementary school and ensuring later school success (National Institute for Early Education Research, 2002).

Despite a growing knowledge base and public awareness, in challenging economic times, policymakers are demanding increasing evidence and spending proposals for support of early childhood programs.

School Readiness

Across the United States, reports indicate that anywhere between 22 and 49% of children do not enter school prepared to succeed, depending on what is being measured. Several surveys of kindergarten and elementary school teachers reveal that too many children do not have the academic and social skills needed to be successful in the classroom. In addition, there is an achievement gap that exists between middle-class children and minority and low-income children, and the gap persists throughout school (U.S. Department of Education, 2003).

In April 2002, the Bush administration announced a national early childhood initiative: Good Start, Grow Smart as part of the federal No Child Left Behind (NCLB) Act. The purpose of NCLB Act is to address the achievement gap to help children begin school with an equal chance at achievement. Good Start, Grow Smart encourages states to set up voluntary early learning guidelines in math, language, and literacy in all early education settings to help accomplish the overall goal.

Clearly, now more than ever, policymakers at the national, state, and local levels are focused on the school readiness of young children as a public policy goal. As a result, over three-quarters of the states have been or are in the process of developing early learning standards (Scott-Little *et al.*, 2003). In a time of decreasing revenues and higher stakes for student achievement, it is more important than ever for governors, legislators, and private funders to know whether their investments are making a difference in terms of preparing our youngest citizens to be successful in school.

School readiness has become a common buzzword; however, the definition and approaches to increasing readiness vary widely. Beginning with the work of the National Education Goals Panel and Technical Planning Group (1991), school readiness has been viewed as five-dimensional, including family, community, and school conditions that support readiness.

A Focus on Indicators

According to Child Trends (2001), an indicator is "a measure of a behavior, condition, or status that can be tracked over time across people and/or geographical units." Regular reporting and tracking of indicators can help policymakers and opinion leaders identify areas needing intervention and justify investments in programs and policies. The strength of indicators tracking progress toward the goal of school readiness is the ability to signal whether things are moving in the right direction and to help target programs, policies, and funds accordingly.

In 1998, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) of the U.S. Department of Health and Human Services (DHHS), in conjunction with the Administration for Children and Families and the David and Lucile Packard Foundation, implemented a Child Indicators Project. The objective was to support 14 states in their efforts to develop, monitor, and use indicators of the health and well-being of children of all ages. School readiness was a central goal for many of these states. The Chapin Hall Center for Children at the University of Chicago facilitated peer-to-peer learning among the states. Rhode Island Kids Count served as host for a New England Forum on School Readiness and Child Care Indicators. The result was a toolkit of indicators by state that fit their local situations, goals, and interests (Reidy and Moorehouse, 2000).

Creation of the School Readiness Indicator and Policy Initiative (SRI)

Despite growing attention to the power of indicators, the nation lacks a comprehensive set that measures school readiness during the early childhood years and the years of transition from early childhood to elementary school (from birth to age 8).

In October 2001, the David and Lucile Packard Foundation, the Kauffman Foundation, and the Ford Foundation formed a funding partnership to launch a national initiative, School Readiness Indicators: Making Progress for Young Children (SRI). The total project budget over 3 years was approximately \$4 million. There was consensus among the three funders that the measure of success for the SRI would be enhancing school readiness and success by linking indicator data with specific advocacy and policy goals. The initiative creators were well aware of the ASPE project. They also knew that several lists of school readiness indicators were readily available, including those developed through the Annie E. Casey Kids Count Initiative. What did not exist was a full set of school readiness indicators targeting children birth through grade 4 that was directly tied to public policy issues affecting young children. The assumption was that if indicators and relevant policies were aligned, there would be a greater probability of making a positive impact on the school readiness and success of young children.

The seventeen states that participated in the initiative were Arizona, Arkansas, California, Colorado, Connecticut, Kansas, Kentucky, Maine, Massachusetts, Missouri, New Hampshire, New Jersey, Ohio, Rhode Island, Vermont, Virginia, and Wisconsin.

A school readiness equation was developed and serves as the framework for the SRI:

Families Ready for Children + Schools Ready for Children + Communities Ready for Children = Children Ready for School

SRI Goals

The SRI worked on two levels: an individual state level and a multistate approach across all seventeen states. Four specific goals to increase readiness and early school success were identified:

- Create a set of measurable indicators in individual states that define school readiness and can be tracked over time at the state and local levels
- Use indicators to fill gaps in data availability, monitor trend data, and report findings to policymakers and the general public
- Use indicator trends to stimulate policy, program, and advocacy so all children in the state are prepared to enter kindergarten successfully and to read at grade level by the end of 3rd grade
- Identify a common, core set of school readiness indicators that evolves across the seventeen states and can be used to inform a national school readiness and early school success policy agenda.

Rhode Island Kids Count

Rhode Island Kids Count, based in Providence, was selected as the lead grantee to manage the SRI indicator work. They had a history of tracking indicators in Rhode Island and experience with the ASPE project. Their approach focused on identifying indicators, communicating indicator trends, and using the data to influence targeted policies.

In theory, there were five key purposes for using indicators, much like those specified by Moore and Brown in this same volume. They describe the uses of indicators as description, monitoring, goal setting, accountability, and evaluation (Ben-Arieh and Goerge, 2005, this volume). The specific purposes identified by the SRI were to

- describe child, family, and community conditions,
- measure progress toward improving child outcomes,
- improve programs for children and families,
- inform state and local planning and policymaking, and
- monitor the impact of investments to sustain positive policy changes.

In addition, indicators were selected based on three specified criteria:

relevance (policymakers must care about the issue the indicator assesses); measurability (it must be possible to measure changes in the indicator); communication power (changes in the indicator can be used to tell enough of a compelling story to influence policy).

Rhode Island began tracking indicators after noticing an alarmingly high percentage of children were entering kindergarten with elevated levels of lead in their bloodstreams. A community-wide effort to improve lead poisoning screening was launched. As a result, new programs and policies were put in place and have led to a dramatic decrease in childhood lead poisoning. Similarly, indicator data also showed that the number of child care slots in the state would be insufficient to accommodate the growing number of parents with young children making the transition from welfare to work. The Rhode Island Department of Health and Human Services used the trend data to secure a significant increase in state funding for subsidized child care, exemplifying the link between indicators and policy.

State Teams

The work of the SRI is largely conducted through individual state teams. Though the members of each state team are uniquely selected to fit the context of each state, all seventeen teams are comprised of representatives from both the public and private sectors. They generally include heads of the departments of education, health, social or human services, legislators from both sides of the aisle, business and civic leaders, child advocates, and researchers.

As Corbett asserts elsewhere in this same publication, devolution from the federal government to the states represents a major shift in the way government operates in the United States today (Ben-Arieh and Goerge, 2005, this volume). Recognizing this trend, the SRI mandated at the outset that the governors of each state agree to support the SRI agenda. Some states had the governor, first lady, or a key staffer participate on the team. The intention behind the teams was to secure ownership of the SRI at the highest level of state government, to build in a sustainability mechanism across state departments, and to leverage the strengths of government, business, and the not-for-profit communities.

To do their work, the state teams were responsible for identifying

- a definition of school readiness that fit their state political, social, and economic
- policies to enhance school readiness of children from birth to the beginning for
- indicators that could be tracked annually at the state and local levels and be used to show progress in achieving outcomes related to the school readiness policy goals,
- measurement and tracking systems to ensure that indicator data would be available at the state and local levels.

Members of the state teams traveled to national meetings. They served as one key workgroup and coordinating body for a much broader group of individuals and organizations working on school readiness issues in the states. Ultimately, each state created a communication product to disseminate the indicators and to be used by decision makers within the states.

In order to facilitate learning between meetings, Rhode Island Kids Count created a Web site, www.gettingready.org, to share information about best practices as the SRI evolved. Participating states and any other interested parties can access the Web site and find examples of indicators, measures, tracking methods, updates on state progress in affecting policy change, and links to both materials and resources shared at national meetings and residency roundtables.

In addition, a listsery was created strictly for members of the seventeen state teams. This allowed participants the opportunity to post questions, comments, and stories about their experiences. The listsery was another resource for problem solving and information sharing throughout the initiative.

National Meetings

Five national meetings were held, with the kickoff meeting in October 2001 and the final meeting in May 2004. Presentations by national organizations and experts on a variety of topics related to school readiness were a part of each national meeting agenda. Rhode Island Kids Count facilitated peer-to-peer learning and support sessions on indicator development, data and technology, measurement, and communication strategies. Policy, communication, and media experts presented at the meetings as well. Each meeting also included panels in which state teams presented case study examples of successes and challenges.

Residency Roundtables

Four residency roundtables were convened during the course of the SRI. Many states were already tracking the physical health of young children. On the other hand, state team members agreed that, in other areas, it was more challenging to identify much less track indicators. The residency roundtables provided a forum devoted to the more challenging areas and provided in-depth technical assistance and knowledge sharing among members of the state teams.

For example, the area of physical development did not require a residency roundtable. The following issues corresponding to child development and school readiness were addressed in roundtable meetings:

- · Social and Emotional Development
- · Language and Literacy
- · Cognition and Approaches to Learning
- Birth to Three (Infant and Toddler Development)

The State Early Childhood Policy Technical Assistance Network (SECPTAN)

policymakers face the challenge of making decisions under time and resource constraints in areas in which they don't often have direct experience or expertise. For school readiness, the question is how to get them the best available information about effective policies and practices to have a positive impact on the ability of young children to be successful when they enter and as they continue in school.

The funding partners that created the SRI were struck by three factors in particular when considering how to most effectively use indicator data to influence policymaking:

- Information would need to cover the wide range of issues related to school readiness:
- The information must be considered bipartisan and objective;
- To be useful, assistance would need to be available to states in the most timely manner.

In January 2002, a second grant was made to create the State Early Childhood Policy Technical Assistance Network (SECPTAN). The network would provide specific, timely, and targeted technical assistance (TA) to states as they linked indicators directly to policies. Charles Bruner, Executive Director of the Child and Family Policy Center in Des Moines, Iowa, manages SECPTAN. Together with three

senior policy analysts, SECPTAN works closely with Rhode Island Kids Count to provide TA as states use their indicator data to influence policy change.

Thomas Little's description of the world of policymakers serves as a good justification for the creation of SECPTAN (Ben-Arieh and Goerge, 2005, this volume). SECPTAN serves as a resource by responding to requests for assistance from states that is

- in keeping with executive and legislative time frames and deadlines,
- draws connections between evidence and policy and budget options,
- consumer-driven, focusing on issues that policy and decision makers identify as important,
- evidenced-based and grounded in the best available research,
- tailored to the needs of the state's political, social, and economic culture.

According to Con Hogan, "In government, it is often difficult to see results. . . . When looked at over a span of perhaps a decade, we can truly see whether or not we are better off today than we were yesterday" (Ben-Arieh and Goerge, 2005, this volume). SECPTAN uses the indicator data from the SRI to help policymakers in their decision making.

For instance, in response to a particularly common policy challenge described by all seventeen states, SECPTAN hosted a meeting on kindergarten assessment. Conducted in September 2003, this workshop focused on designing and implementing school readiness assessment systems in order to determine how children coming in to kindergarten look over time.

A series of publications to advance school readiness and success are part of the resources that are provided by SECPTAN:

- Seven Things Legislators Should Know About School Readiness
- Financing School Readiness Strategies
- Child Welfare and School Readiness: Making the Link for Vulnerable Children
- Measuring Children's School Readiness: Options for Developing State Baselines and Benchmarks
- A Compendium of Multistate Early Childhood Initiatives
- Beyond the Usual Suspects: Developing New Allies to Invest in School Readiness
- School Readiness Policy and Budgeting: A Template for Collecting State Baseline Information
- Health care and School Readiness: New Approaches and Model Legislation
- Issues to Consider Before Implementing Universal Pre-K
- Early Learning Left Out: Closing the Investment Gap for America's Youngest Children (Editions 1 and 2)

These and others can be found on their Web site, www.finebynine.org.

SECPTAN was structured to operate as a centralized broker for TA in order to address the broad range of policy issues related to school readiness. To meet state needs, SECPTAN works with national organization partners and contracts with other experts or thought leaders to meet the needs of the states and prevent the duplication of services.

National Organization Partners

As the SRI was created, the funding partners considered how states access the most up-to-date information and best practice ideas for influencing policy. Specific types of technical assistance (TA) for targeted constituency groups are offered through national organizations that are trusted and respected by key policymakers, decision makers, and civic leaders. Conversations were held with key national organizations whose constituencies include governors, state legislators, state school officers and leaders, and early childhood providers, researchers, and advocates.

The following organizations received grants to provide TA to the states participating in the SRI:

- · Council of Chief State School Officers
- Education Commission of the States
- National Association for the Education of Young Children
- National Council of State Legislators
- National Governors Association

These five partner organizations provided information, training, and TA at the national meetings, residency roundtables, and when requested, to individual states. They were also available for individually tailored TA free of charge to any state team making a request.

ASPE, as a department within the federal government, was not eligible to receive grant funding. However, given their involvement in the initial multistate indicator project, they served as a valuable partner providing TA to the SRI at selected national meetings and one residency roundtable.

State-by-State Priority Indicators

At the May 2004 final national meeting, state teams presented their final set of school readiness indicators, monitoring plans, and communication products. Each of the seventeen states developed a list of school readiness indicators that fit the political, social, and economic context of their state. As a result, there was not a common format or directive given for which indicators to select or how to categorize them. The initiative required that indicators must cover the broad definition of school readiness as agreed upon by the SRI in conjunction with the readiness equation.

Though there was no limit on the number of indictors that could be identified, states were directed to select the indicators they considered most important to measure and track over the coming year. Appendix lists each state's priority indicators.

Core Indicators

Between May and December 2004, Rhode Island Kids Count and a team of technical advisors worked with the states to finalize a core set of school readiness indicators. A key assumption of the SRI was that indicators of school readiness and early school success would most likely have many similarities across the seventeen states.

The common set of indicators evolved when the participating states were compared. The categories are consistent with the school readiness equation developed during the course of the SRI. The category "Ready Early Care and Education" was added when the states completed their individual priority lists and it was discovered that all of them identified multiple indicators for policy change in this area. This set represents those indicators that were most commonly identified by all states and includes indicators that are currently being tracked.

A total of 23 indicators were identified in 23 different category areas that follow the school readiness equation. Table 1 lists the full set of core indicators.

Emerging Indicators

In addition, emerging indicators were identified. These are equally important to school readiness and success but in need of additional development to effectively measure and track them at the state and local levels. Indicators also emerged in each of the school readiness equation areas. A total of 20 indicators were identified in 16 different categories that follow the school readiness equation. Table 2 lists all of the emerging indicators.

Lessons Learned

The experience of these seventeen states shows that monitoring indicators tied to policy can be effective for enhancing the readiness and success of children as they enter and continue in school. Sara Shuptrine's work at the Southern Regional Initiative on Child Care has also described how regional indicator data can be a powerful tool for achieving action for young children and families (Ben-Arieh and Goerge, 2005, this volume).

As a result of the SRI, there is now a common definition of school readiness across a third of the states in the United States; seventeen states are tracking indicators that fit their unique political, social, and economic contexts, and seventeen states are using the trend data to help inform state budget and policy decisions that affect young children and families.

Following are key lessons learned throughout the course of the SRI. They reflect both successes and challenges experienced by the seventeen participating states. The intent is for these lessons to serve as a learning model for other states interested in using school readiness indicators to measure and track progress to inform policies aimed at helping children enter and continue to be successful in school.

1. The most successful states had teams on which governors' offices, members of the legislature, state departments, advocates and researchers worked closely

This leveraged the knowledge and power of state government about the issues policymakers care about and ability to access decision makers with the expertise of the private sector to market and communicate messages in a way that secures media and public support.

Table 1. Core indicators

Ready Children

Physical Well-Being and Motor Development

• percentage of children with age-appropriate fine motor skills

Social and Emotional Development

 percentage of children who often or very often exhibit positive social behavior when interacting with their peers

Language Development and Literacy

 percentage of children almost always recognizing the relationships between letters and sounds at kindergarten entry

Cognition and General Knowledge

• percentage of children recognizing basic shapes at kindergarten entry

Approaches to Learning

 percentage of kindergarten students with moderate to serious difficulty following directions

Ready Families

Mother's Level of Education

• percentage of births to mothers with less than a 12th-grade education

Births to Teens

• number of births to teens ages 15-17 per 1000 girls

Child Abuse and Neglect

• Rate of substantiated child abuse and neglect among children birth to age 6

Children in Foster Care

• percentage of children birth to age 6 in out-of-home placement (foster care) who have no more than two placements in a 2-year period

Ready Communities

Young Children in Poverty

 percentage of children under age 6 living in families with income below the federal poverty threshold

Supports for Families with Infants and Toddlers

- percentage of infants and toddlers in poverty who are enrolled in Early Head Start Lead Poisoning
 - percentage of children under age 6 with blood lead levels at or above 10 μg/dl

Ready Services: Health

Health Insurance

• percentage of children under age 6 without health insurance

Low Birth Weight Infants

• percentage of infants born weighing under 2500 grams (5.5 pounds)

Access to Prenatal Care

- percentage of births to women who received late or no prenatal care Immunizations
- percentage of children ages 19–35 months who have been fully immunized

(Cont.)

Table 1. (Continued)

Ready Services: Early Care and Education

Children Enrolled in Early Education Program

• percentage of 3- and 4-year-olds enrolled in a center-based early childhood care and education program (includes child care centers, nursery schools, preschool programs, Head Start, and prekindergarten programs)

Early Education Teacher Credentials

• percentage of early childhood teachers with a bachelor's degree and specialized training in early childhood

Accredited Child Care

- percentage of child care centers accredited by the National Association for the Education of Young Children
- percentage of family child care homes accredited by the National Association for Family Child Care

Access to Child Care Subsidies

• percentage of eligible children under age 6 receiving child care subsidies

Ready Schools

Class Size

• average teacher-child ratio in kindergarten and 1st-grade classrooms

Table 2. Emerging indicators

Ready Children

Assessment of Skills and Behaviors

• percentage of infants and toddlers with developmentally appropriate skills and behaviors in each of the five domains of child development

Mathematical Skills

• percentage of 3- and 4-year-olds with age-appropriate skills and behaviors in each of the five domains of child development

Ready Families

Family Reading to Young Children

- percentage of infants and toddlers (4-35 months) who were read to by their parents every day in the last week
- percentage of children ages 3–5 who were read to by a family member every day in the past week

Maternal Depression

- percentage of mothers with young children experiencing depression
- number of kindergartners with parents considered at risk for depression

Ready Communities

Housing

- percentage of families with children under age 6 paying more than 30 percent of their income for housing (rent or mortgage plus heat and utilities)
- · number of times a student changes schools between kindergarten and 4th grade

(Cont.)

Table 2. (Continued)

Homeless Children

- percentage of children under age 6 receiving emergency housing services
- number of children enrolled in kindergarten through 3rd grade who are homeless or living with
- · family members or friends

Neighborhood Conditions

• percentage of children under age 6 living in neighborhoods in which more than 20 percent of the population lives in poverty

Ready Services: Health

Well-Child Visits

- number of children under age 6 who received a well-child exam in the past year
- percentage of 2-year-olds with a recent well-child visit that included a lead screening, vision screening, hearing screening, and comprehensive developmental screening

Developmental Screening and Assessment

- percentage of children under age 6 with a comprehensive developmental screening within the previous year
- percentage of children birth to age 3 in the care of the state child welfare system who received a developmental assessment through Early Intervention (Part C of the Individuals with Disabilities Education Act)

Ready Services: Early Care and Education

High-Quality Child Care and Early Education Programs

 percentage of child care and early education classrooms that rank at the top level in a statewide quality rating system

Parent Involvement

 percentage of early care and education programs with multiple strategies to involve and support parents

Ready Schools

Transition Practices

 percentage of schools with formal working transition plans between early childhood settings and kindergarten

Special Education and Early Intervention

• percentage of kindergarten children enrolled in special education who were not previously enrolled in Early Intervention (Part C) or preschool special education services

2. Pay attention to both the positive and negative sides of the story.

If the data reflects only negative issues and trends, there is less motivation to sustain tracking and to support hard to reach policy goals. Attention should also be given to stating indicators in the positive and to focusing on positive changes that occur.

3. A chicken-egg dilemma exists related to policy and research.

Data must be available to influence policy, but policy must provide and support the investment to develop and use data. To be effective, states must have economic and human resources to develop, track, and report indicators.

4. What gets measured gets attention.

Though indicators are not the only tool for promoting policy change, effectively tracking data can influence the types of programs and policies states will support. Therefore, it is important to make strategic decisions about which indicators are selected and monitored. To achieve the goal of school readiness and early school success, indicators must go beyond what children know and can do and include indicators of family and community progress.

5. There must be a balance between comprehensiveness and priorities for indicators to impact policy.

Identifying and tracking too many indicators can overwhelm policymakers, who need to target limited resources for the greatest impact. Select a manageable number of indicators that policymakers can take action on in a legislative session.

6. policymakers seek guidance from those they know and trust.

Individual technical assistance may be best provided where there are wellestablished relationships, while assistance in the form of workshops, policy briefs, and specific topic reports is very well received from a new provider or broker.

7. A state movement has the potential to influence a national school readiness agenda.

The first priority for states is to identify and monitor indicators that match their specific political, social, and economic context. Once this occurs, it is possible to look across states and identify a common set of indicators that relate to school readiness and early school success. The states believe their work has the power to begin a national conversation about policies to support school readiness for young children and families.

Current Status of the SRI

On Wednesday, February 16, 2005, an audio press conference and a Congressional briefing on Capitol Hill were held to announce the release of the final report, Getting Ready: Findings from the School Readiness Indicators Initiative (Rhode Island Kids Count, 2005).

SECPTAN is planning a national policy conference to be held in 2005. Participants would include a team member from each of the seventeen states and a policymaker from each state. Representatives from Rhode Island Kids Count and the national organization partners may also participate in the conference. The purpose of the conference is to showcase the indicator work in alignment with policy by focusing on promoting the application and use of indicators to influence policy for young children and families.

Funding support is being sought to continue providing indicator and policy technical assistance to states that make requests. Also, there are proposals for funding to support broader dissemination of the final report.

Conclusion

Setting children on a positive trajectory early in life has proven to be the best way to increase later school success. Tracking indicators tied to specific policies targeting school readiness may be one of the best tools to help large numbers of children achieve this goal.

Three national foundations interested in early childhood education invested in a 3-year, seventeen-state school readiness initiative (SRI). State teams defined school readiness, identified indicators, are tracking success, and are using the data to shape policies and budget (re)allocation for early childhood education programs. A core set of indicators common across all seventeen states was identified. Finally, emerging indicators were identified as being equally important to school readiness and early school success but are currently either not being effectively measured or tracked at the state or local levels.

In addition to improving school readiness in seventeen states, the SRI will serve as a learning model for other states or countries interested in using indicators to improve school readiness and early school success programs and policies.

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Appendix: State Priority Indicators

Arizona

Outcomes

- National Assessment of Educational Progress: 4th-grade reading
- AIMS: 3rd-grade reading

Risks

- children under age 5 in poverty
- percentage of 1st graders in special education
- percentage of 3rd graders who changed schools during the school year
- new babies at risk

Access

- percentage of poor 3- and 4-year-olds enrolled in Head Start
- percentage of poor children enrolled in Head Start, Title 1, or ECBG
- percentage of low-income children under age 6 without health insurance
- lack of adequate prenatal care
- percentage of children receiving WIC
- percentage of low-income children receiving WIC

Quality

- child care provider's salary relative to kindergarten teacher's salary
- preschool provider's salary relative to kindergarten teacher's salary
- percentage of licensed child care centers that are NAEYC accredited
- percentage of 75th percentile of market rate that is provided for in a child care subsidy
- ratio of 1-year-old children allowed to be cared for per adult in a child care center according to Arizona law and NAEYC accreditation

Ready Schools

• percentage of 4th graders in classes with 25 or fewer children.

Arkansas

Ready Children

- · ARKids first enrollment
- child care licenses: number, capacity by type, meet quality standards

Ready Families

- poverty rates by family type and presence of child
- median family income by type and children

Ready Schools

- · poverty by school district
- 4th-grade math and literacy

Ready Communities

- top employees and type of earnings by industry
- per capita personal income

California

Children's Health

- percentage of children with health insurance
- percentage of children with up-to-date immunizations at age 2
- percentage of infants born weighing less than 5.8 lbs.
- percentage of children who receive developmental screening at age 3
- percentage of children who have a regular source of health care

- number and percentage of children age 3 and older who receive annual dental exams
- percentage of newborns who receive hearing screening
- percentage of infants and children under age 5 who have elevated blood lead levels ($>10\mu g/dl$)

Early Care and Education

- percentage of 3–5-year-olds enrolled in preschool by income
- percentage of children under age 6 with full-time working parents served by licensed family child care
- percentage of children under age 6 with full-time working parents served by a licensed child care center
- percentage of eligible 3 and 4-year-olds enrolled in Head Start
- percentage of eligible families receiving subsidies
- percentage of staff with early childhood education degree or training
- amount of turnover in early care programs year-to-year

Family Economic Security

- percentage of children who experienced food insecurity in the last 12 months
- percentage of children living in poverty
- percentage of children who qualify for free or reduced-price lunch

Early Risk Factors

- rate of births to females ages 15–19 per 1000 females of that age
- percentage of children born to mothers with less than 12 years of education

K-12 Education

- percentage of students scoring at or above the 50th national percentile rank (NPR) on California standardized reading and math tests in grades 2 and 4
- percentage of credentialed teachers
- number and rate of after school programs per 1000 low-income children with working parents or single working parent (working full-time or 35+ hours)
- number and rate of before-school programs per 1000 low-income children with working parents or single working parent (working full-time or 35+ hours)
- percentage of kindergarten and 1st-grade teachers with early child development
- percentage of students retained in kindergarten or 1st grade

Early Development

- percentage of children entering kindergarten with untreated vision problems
- percentage of children entering kindergarten with untreated hearing problems
- percentage of kindergarteners who demonstrate positive social skills
- percentage of kindergarteners who demonstrate self-regulation of their behavior
- · percentage of kindergarteners who are interested in learning new things

Infant Health Index at Birth

- percentage of mothers with late or no prenatal care
- percentage of mothers with low maternal weight gain
- percentage of mothers smoking during pregnancy
- percentage of mothers drinking during pregnancy

Nutrition and Food Programs

• percentage of schools that offer breakfast and lunch programs

Child Welfare

- number and rate per 1000 children abused or neglected
- number and rate per 1000 children exposed to domestic violence

Parent/Caregiver Involvement

• percentage of 3–5-year-olds whose parents read to them or tell them stories regularly.

Colorado

Physical Well-Being and Motor Development

- percentage of low birth-weight infants
- percentage of 2-year-olds who are fully immunized

Social and Emotional Development

• percentage of children with social or emotional difficulties

Language and Cognitive Development

- percentage of 3rd graders scoring proficient or above on CSAP Reading Test
- percentage of 5th graders scoring proficient or above on the CSAP Math Test
- percentage of infants and children read to on a regular basis

Ready Family

- percentage of children living in poverty
- parents with poor mental health
- infants born to a high-risk mother

Ready School

- percentage of kindergarten through 3rd-grade classrooms with appropriate class size
- percentage of kindergarten through 3rd-grade teachers with an early childhood credential

Ready Community

- number of credentialed early care and education educators
- capacity rate of publicly funded preschool programs
- percentage of primary care physicians that accept Medicaid or Child Health Plan Plus
- high school drop-out rate

Connecticut

Health and Child Development

- percentage of births to teens
- percentage of low birth-weight infants
- children enrolled in Medicaid (HUSKY A)
- children enrolled in HUSKY A receiving a well-child visit

Safety and Child Welfare

- number of children in foster care
- · child death rate

Economic Stability

- percentage children in poverty
- number of children receiving welfare benefits

Early Care and Education

- number of regulated early care and education slots
- number of quality child care slots
- number of children receiving child care subsidies

Ready Schools

- · average kindergarten class size
- percentage of 4th-grade students meeting state performance goal

Kansas

Safe and Stable Families

- percentage of pregnant women who receive prenatal care beginning in the first trimester of pregnancy
- percentage of infants born to mothers with at least a high school diploma
- number per 1000 of substantiated child victims of abuse and/or neglect from birth to age 17
- percentage of children living in families earning at least 200 percent of federal poverty level

Safe and Stable Communities

- percentage of teachers with a CDA teacher license or degree in early childhood
- child care capacity
- percentage of median monthly income used for infant/toddler care
- percentage of children without health insurance
- rate per 1000 population of crimes against persons
- percentage of parents of children birth to age 5 involved in a parenting program *Schools Support Learning*
 - average teacher-child ratio in kindergarten and 1st-grade classrooms
 - percentage of kindergarten to 3rd-grade teachers with early childhood licensure or endorsement
 - percentage of schools with formal working transition plans between early child-hood settings and kindergarten

Children Prepared to Succeed in School

- percentage of kindergarteners with up-to-date immunizations at age 2
- percentage of kindergarteners who demonstrate skills and behaviors appropriate to age
- child's demonstrated ability on kindergarten readiness assessments

Kentucky

Assuring Maternal and Child Health

- percentage of women who have early entry to prenatal care
- percentage of babies born with a low birth weight
- rate of neural tube defects in newborns
- number of pregnant women served in substance abuse program
- number of families receiving support services or parenting assistance through home visiting support program (HANDS Program)

- percentage of families who are offered the HANDS Program and choose to participate
- percentage of families who elect to stay with the HANDS program
- percentage of awareness? (from Meridian data)
- rate of unintentional injury or death of infants and children under the age of 5
- percentage of occurrence of substantiated child abuse and neglect in HANDS families versus control group
- percentage of newborns receiving a hearing screening
- percentage of children fully immunized by age 2
- infant mortality rate
- percentage of children receiving mental health screening
- percentage of children receiving a vision exam prior to school entry
- number of children who drop out of school
- percentage of adults who are literate at age 21
- percentage of adults who are reading at levels 1 and 2

Enhancing Early Care and Education

- number of children in licensed child care programs
- number of slots in certified child care programs
- number of children receiving child care subsidy by type of care
- number of STARS consultations provided
- number of ERS evaluations completed
- number of child care programs participating in STARS initiative
- number of children served in STARS programs
- number of children receiving subsidy served in STARS programs
- number of infant/ toddlers served in STARS programs
- number of preschool children served in STARS family child care programs
- number of school-age children served in STARS programs
- number of licensed child care programs receiving a STAR rating
- number of programs receiving STARS by STAR level
- number of resource and referral activities to stimulate employer involvement
- number of consultations provided by Healthy Start in Child care
- number of scholarships awarded
- educational levels of staff based on scholarship applications
- percentage of counties represented by a Community Early Childhood Council (CECC)
- percentage of CECC's that successfully competed for Early Childhood Development Authority funds
- percentage of CECC's that implemented activities distinct from those funded by the Early Childhood Development Authority
- percentage of CECC's that received funds from other entities within the community
- total number of early care and education providers trained through resource and referral
- number of directors with relevant director's credential
- number of people with trainer's credential
- number of individuals entering CDA/early childhood training programs

- number of individuals receiving the CDA credential
- articulation documents are in place.

Maine

Family Support for Learning

- percentage of families who read to their children
- number of families receiving greater than one home visit in the first year of life *Family Health*
 - percentage of mothers who receive prenatal care in the first trimester
 - number of employees that provide support for early care and education

Early Childhood Education Programs

- availability of Early Childhood Education programs
- percentage of schools that have transitions to kindergarten program

Child Health and Development

- percentage of young children age-appropriately immunized
- children entering kindergarten exiting special education to regular education
- percentage of children entering kindergarten with untreated vision problems
- percentage of children entering kindergarten with untreated hearing problems
- percentage of children entering school with diagnosed conditions of asthma
- percentage of kindergarten students who can function appropriately in group learning activities, participating actively, talking, taking turns, following directions, and working cooperatively (Success By 6 School Readiness Survey)
- percentage of children experiencing difficulties in language development when arriving at kindergarten (Success By 6 School Readiness Survey).

Massachusetts

Physical Health

- percentage of mothers receiving prenatal care
- percentage of births to teens out of total number of births

Language and Cognitive Skills

- percentage of children who score at or above proficient level on 3rd-grade reading tests and grade 4 MCAS tests
- percentage of children in 4th grade who score at or above proficient level on MCAS in math

Early Care and Education

- percentage of children enrolled in early care and education
- percentage of children on waiting list for subsidized care, including early intervention

Ready Schools

- percentage of children in special education between ages 3 and 5 and in elementary school
- average student-teacher ratio for kindergarten classrooms
- percentage of children enrolled in full-day kindergarten
- percentage of children living in poverty as defined by federal poverty guidelines

Self-Sufficient Families

- percentage of mothers who have at least 12 years of education
- percentage of families eligible for or receiving food stamps

Ready Communities

- number of reports of child abuse and neglect
- availability and accessibility to before- and after-school care

Missouri

Family Environment

- percentage of children under age 6 in poverty
- percentage of births to mothers with less than 12 years of education

Community Conditions

- percentage of communities with reductions in crime from prior year
- · percentage of children screened for lead

Ready Schools

- percentage of students with unidentified special needs at kindergarten
- percentage of school districts increasing participation in Parents as Teachers program for high-risk families

Effective Services: Health

- percentage of children without health insurance
- · percentage of births with adequate prenatal care

Effective Services: Mental Health

• percentage of young children on Medicare that access mental health services Effective Services: Child Welfare

- average number of children's division out-of-home placements per child
- percentage of victims with repeated substantiated child abuse or neglect within 6 months

Effective Services: Early Care an Education

- percentage of subsidized children in licensed child care
- ECE child development degrees conferred
- number of accredited child care facilities
- children in EHS/HS as a percent of children under age 5 in poverty

Ready Child: Physical and Motor Development

- percentage of children with age-appropriate fine-motor skills at kindergarten
- percentage of children with age-appropriate gross-motor skills at kindergarten entry
- percentage of births to mothers who smoked during pregnancy

Ready Child: Social and Emotional Development

• percentage of children almost always coping with failure and frustration at kindergarten entry

Ready Child: Approaches to Learning

· percentage of children almost always showing curiosity and interest at kindergarten entry

Ready Child: Language Development

- percentage of children almost always recognizing the relationship between letters and sounds at kindergarten entry
- percentage of children almost always using language to communicate ideas, feelings, questions, and to solve problems at kindergarten entry

Ready Child: Cognition and General Knowledge

- percentage of children almost always determining "same," "more than," and "less than" by using comparisons at kindergarten entry
- percentage of children recognizing basic shapes at kindergarten entry.

New Hampshire

Ready Children

- percentage of births to women who received late or no prenatal care
- immunization rates at age 2

Ready Early Learning System

- child care centers accredited by NAEYC
- percentage of child care homes accredited by NFCCA
- percentage of early educators with early childhood credentials serving children from birth to school entry
- number of school districts offering public kindergarten
- percentage of school districts screening for phonological awareness in kindergarten or 1st grade
- percentage of children at or above basic level in reading and math by end of 3rd grade

Ready Families

• rate of substantiated abuse or neglect

Ready Communities

- percentage of school districts offering before- and after-school programs
- percentage of children under 6 without health insurance
- percentage of children under age 6 below federal poverty level

New Jersey

Early Care and Education

- percentage of eligible families served by Head Start and Early Head Start
- percentage of eligible families receiving Child Care Development Fund subsidies
- percentage of child care programs that are nationally accredited
- percentage and types of credentials held by child care providers
- percentage of preschool-aged children in high-quality public preschool programs
- percentage of preschool-aged children in programs with bachelor-degreed teachers implementing a developmentally appropriate curriculum

Food Benefit Programs

- percentage of eligible families receiving WIC benefits
- percentage of income eligible families that access food stamps

Health Services

- percentage of children without health insurance
- percentage of eligible children enrolled in NJ Family Care
- participation ratios for eligible children receiving at least one screening from the Early Periodic Screening, Diagnostic, and Treatment (EPSDT) program
- percentage of children screened for lead poisoning
- percentage of 2-year-olds who were immunized

Children are Read to Daily by Parents

• percentage of children under age 5 whose parents read to them daily Early Special Education Services

- percentage of children identified with delays that receive early intervention
- percentage of students with unidentified special needs at kindergarten entry or 1st grade

Ohio

The Ready Family

- percentage of mothers using tobacco, alcohol, and drugs while pregnant
- percentage of mothers not experiencing maternal depression
- percentage of infants and toddlers living in families with abuse or neglect

The Ready Child

- percentage of children receiving complete immunization series by age 2
- rate of infants and toddlers screened for developmental delays
- percentage of children with injuries requiring hospitalization

The Ready Community

- percentage of children exposed to crime and violence
- percentage of infants and children with health insurance
- percentage of children in high-quality center-based early learning settings
- percentage of children in licensed/registered family home settings
- percentage of parent education and support services available

The Ready School

- percentage of children screened for vision and hearing impairments and oral health
- percentage of school districts providing full-day kindergarten
- percentage of formal transition agreements between schools and early childhood

Rhode Island

Family Economic Security

- number of children under 6 years of age who received emergency housing services at homeless shelters and domestic violence shelters
- percentage of total births to women with less than a high school diploma Quality, Affordable Health Care
 - percentage of children under age 6 who were covered by any kind of public or private health insurance, including Medicaid, during the previous calendar year

 percentage of children ages 19–35 months who have received the entire 4:3:1:3:3 series of vaccinations recommended by the Advisory Committee on Immunization Practices

Family Environment

- birth rate per 1000 teens ages 15–17
- rate of indicated investigations of child abuse and neglect per 1000 children under age 6
- percentage of all children from birth to age 3 enrolled in the Early Intervention program

Early Support for Infants and Toddlers

• percentage of income-eligible children birth to age 3 enrolled in the Early Head Start program

Quality Early Care and Education

- percentage of child care centers serving young children that have NAEYC accreditation and family child care homes accredited by the National Association for Family Child Care
- number of children under age 6 receiving child care that is either fully or partially paid for with a child care subsidy from the Rhode Island Department of Human Services

Ready Schools

- percentage of public school kindergarten children enrolled in a full-day kindergarten program
- percentage of 4th-grade students who scored at or above the proficiency level for reading in the New Standards English Language Arts Reference Exam.

Vermont

Kindergarten Readiness as Reported by Teachers

- approaches to learning
- cognitive development and general knowledge
- communication skills
- social emotional development

Schools Ready for Children as Reported by Principals

- children's health indicators
- · early prenatal care
- full-weight, full-term births
- immunization rates

Family Well-Being Indicators

- per capita income levels
- rate of adolescent pregnancy
- · rate of child abuse and neglect

Community Capacity

- availability of child care
- availability of affordable housing
- crime rates
- · civic engagement.

Virginia

Benchmarks

- · kindergarten students identified as needing additional intervention under the Early Intervention Reading Initiative (EIRI)
- percentage of children passing 3d-grade Standard of Learning Assessments Child, Family, and Community Indicators
 - rate of births to teens ages 15–17
 - percentage of births to mothers with less than 12th-grade education
 - percentage of women receiving early prenatal care
 - number and percentage of low birth-weight babies born in each locality
 - percentage of children under age 6 living in poverty
 - founded and unfounded cases of child abuse and neglect
 - prevalence of elevated blood lead levels and proportion tested among children under 6

Early Childhood Support Services

- children eligible and enrolled in Medicaid and FAMIS
- number and rate of children under 6 entering and exiting foster care
- average number of children receiving child care subsidies
- infants to 3-year-olds in community early intervention programs
- number and rates of children age 6 and under in public school special education programs
- number of children enrolled in Head Start and Early Head Start
- at-risk 4-year-olds enrolled in Virginia's Preschool Initiative.

Wisconsin

Health Care and Physical Development

- percentage of children under age 6 covered by health insurance
- Medicaid-enrolled children receiving all required EPSDT visits

Family Resources

- number of children in households receiving public assistance
- percentage of births to mothers with less than a high school diploma

Early Care and Education

- percentage of eligible children under age 5 served by Head Start
- percentage of early childhood teachers with 2 or 4 year degrees

Community Conditions

- reported family violence incidents per 100,000 population
- percentage of children living in high-poverty neighborhoods
- receptiveness: schools' readiness for children
- percentage of pre-kindergarten to 3rd-grade teachers with Early Childhood
- percentage of children in kindergarten through 3rd grade who are suspended Ready Children
 - percentage of kindergarten to third-grade children receiving special education services who have a primary disability in speech or language

Increasing the Impact of Indicators Among Legislative Policymakers

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The complexity of the issues and the limitations of the time that we have within the session make it difficult to analyze and deliberate about the issues we face.¹

In order to determine the quality of the lives of children, it is critical that we develop appropriate, reliable, accurate, and stable measures of their well-being in accordance with traditional rules of scientific rigor for the social sciences. The indicators we use must be valid indicators of the various domains of well-being. They must be based on the most reliable, accurate, and timely data available. They must be analyzed using accepted scientific methods and appropriate statistical techniques, acknowledging the limitations and assumptions of those methods and techniques. However, the best indicators, the most reliable data and the most scientific methods will be of no value in efforts to improve the lives of children if they are not presented to policymakers in a way that is both comprehensible and useful to them. Research, no matter how insightful and informative its findings, will have no significant impact if it is never read or understood by those who can impact the lives of the children being studied. The purpose of this chapter is to offer some advice to those gathering data on the current state of children in America and the world, and more particularly, to those using that data to advocate for changes in public policy.

Policymakers, by definition, make decisions regarding public policy. That is what they are elected to do. In an ideal world as discussed in the chapter by Ben-Arieh and Goerge, each of those decisions would be based on thoughtful consideration of accurate, timely, unbiased, comprehensive, and comprehendible data. However, neither policymakers nor advocates or researchers live in an ideal world. Instead, they each work and make decisions in worlds of constraints. Policymakers are constrained by insufficient time, imperfect knowledge, ideological and partisan perspectives, political objectives, and institutional rules (Rosenthal, 1998, pp. 127–130). All too often, advocates and researchers are constrained by insufficient knowledge of the political process, their own partisan and ideological perspectives, a negative attitude toward policymakers, and limited political and financial capitol (State Legislative Leaders Foundation, 1995).

If advocates for children are to use data and research to have a significant impact on public policy as Tom Corbett suggests in Chapter 1 and Ben-Arieh and Goerge in Chapter 2, they must understand the world in which policies are made by legislators and adjust their strategies and use of data to that world (Kurtz, 1990).

The purpose of this chapter is to help advocates and researchers achieve both of those interrelated objectives. First, I will describe key characteristics of the policymaking environment that determine how and on what information policymakers are likely to act. Second, I will offer some specific steps that advocates and researchers can take in the development and presentation of indicators and data to have a more significant impact in that environment. Finally, the chapter concludes with a list of resources that advocates might find useful in developing their own strategies.

Five Keys to Understanding the World of Policymakers

In the representative democracies that define American politics, the key policy-makers are generally the legislators. There are 99 state legislative bodies (two in each state, except for unicameral Nebraska) and the national Congress. There are thousands of municipal and county-level legislative bodies across America in the forms of county commissions, boards of aldermen, and city councils. While these institutions may exhibit significant differences in terms of centralization of decision making, power relative to the executive, proximity to the voters, access by advocates, size, and the importance of partisanship and ideology, they also exhibit some common characteristics (Jewell, 1982). It is those common qualities that we will focus on here, because they define the world that researchers and advocates will encounter and explain why useful data must be accessible, useful, and timely as indicated by Moore and Brown in an earlier chapter of this volume.

Busy! Busy! Busy!

This job is like nothing you have ever experienced. It pulls you all over the place.

Whether at the national, state, or local levels, the world of policymakers is usually a very busy one (State Legislative Leaders Foundation, 2004). In addition to bills to read, committee and caucus meetings to attend, constituents to meet with and lobbyists to listen to, legislators have to also keep an eye on their next election. Policymakers, even those in relatively nonprofessional legislatures, often find themselves going from dawn until dusk.

A typical day during session might include an early breakfast with the local Chamber of Commerce, three committee meetings before noon, lunch of chips and a hot dog on the way to speak to the garden club, legislative session after lunch, two hours in the late afternoon to answer mail, read bills, and return phone calls before attending a fundraising dinner and going "home" (likely a small apartment far from family) no earlier than 10 p.m. Even when legislators in less professional legislatures are not "in session," they still must balance constituent requests, interim committee assignments, family obligations, and their "real" jobs.

All Politics is Local

If a doctor or a lawyer in my district cares enough to write me a letter or give me a call, then I know that they care about the issue and I pay attention to that.

According to the Honorable Tip O'Neil, Speaker of the U.S. House of Representatives and longtime public servant, "All politics is local" (O'Neil and Hymel, 1995). Those words remain as accurate today as when he said them more than three decades ago. While policymakers may have big visions and dream of changing the world, they must keep in mind that it is the voters from their little corner of the world that empower them to make policy and give them the opportunities to fulfill their dreams and visions. Policymakers understand that it is the votes and constituents in their districts who can remove them from office at any time. They must respond to and protect those voters if they hope to be reelected.

Further, most of the policymakers are firmly rooted in their electoral district. Many have lived among and served the people of their district for decades and go back to live and work among them when the session is over. They know the people of the district because they are the people of the district. No matter how important an issue is for the state or even the nation, policymakers will view that policy through the prism of their geographic roots, often defined by the electoral district (Jewell, 1982; Rosenthal, 1998, pp. 6–45). You may be able to take the policymaker out of the country (or city), but it is unlikely that you will ever completely take the country (or city) out of the policymaker. Any effort to make the results more real to policymakers, such as the use of "outcome indicators" as suggested by Can Hogan in a later chapter, can only serve to increase the impact of the data.

Everyone Has an Agenda

The advocates come out of one particular angle, which is why they are advocates. We have to represent the people they represent, but also we have to represent the taxpayers and have to balance the budget every year.

By nature, and hardened by electoral and political battles, most policymakers are skeptical. They do not trust easily and generally assume that every person or group who approaches them has an angle. This assumption is no less true for children's advocates than for any other group. Policymakers assume that their perspective and the data that advocates present will be colored by their desire to succeed on behalf of the group for which they advocate.

Policymakers, especially those who generally oppose the advocacy groups, often assume that liberal advocates are more concerned about promoting their own agenda and increasing government dependency than they are about helping their constituencies, and that conservative groups are more concerned about minimizing government than about helping children. There is a perception that these advocates have no desire to compromise and are generally more interested in scoring political points than really trying to solve the problem and that they have a limited interest in a serious discussion about reforming the system (State Legislative Leaders

Foundation, 1995, 2002). The response and behavior of policymakers to advocates and the information they present is colored by these perceptions.

There Are Rules to the Legislative Game

Don't come in at the last minute. Be involved. Be friendly. Don't attack the legislators. Come in and sit down and show the members the facts.

Anyone who participates in the policymaking process is aware of the formal rules that govern it. Bill assignment. Committee action. Rules committees. Floor votes. Conference committees. Amendments. All of this is written down in the formal rules of behavior and organization for the policymaking body or bodies. However, many are much less familiar with the informal "rules of the game." Every legislature has a certain set of unwritten rules or norms of behavior. Knowledge of these unwritten rules, which may even vary from member to member, often determines the difference between success and failure in influencing public policy (Matthews, 1960; Wahlke *et al.*, 1962).

Effective lobbying is about working within the constraints of those unwritten rules. For example, effective lobbyists are those who build personal, long-term relationships with policymakers. Doing so may mean accepting defeat gracefully when necessary and even encouraging a policymaker to oppose your position if it is in his or her best political interest to do so. An effective lobbyist needs to view the process as a war rather than a battle—a graceful loss in today's battle can pave the way for a victory in the war. Effective lobbyists understand that the policymaking process is a give-and-take process and compromise is critical to its success. Advocates who are unwilling to accept "part of a loaf" are going to find themselves in violation of the "rules of the game" and often sitting on the sidelines (Rosenthal, 1993, pp. 82–111).

Policymakers Are Wary of Complex Statistics

Most people use statistics much like a drunk uses a lamppost—more for support than for illumination.

Academics and scholars are generally quite impressed with sophisticated statistical techniques. Indeed, the methodology section of many academic articles is considerably longer and more complex than the findings, implications, and conclusions. Discussions at academic meetings are more likely to revolve around how data were gathered, how variables were measured, and what assumptions were made to arrive at the results than around questions of real-world implications or applications.

The same is less true with the world of policymakers. Although they want to know the data they receive is accurate, they are more concerned that the results are in terms they can understand and in terms their constituents and constituencies can understand (Rosenthal, 1993, 1998). In short, no policymaker is going the be impressed with the size of a researcher's R^2 or an advocate's t value unless the advocate or researcher explains exactly what that means and what its implications are in terms of both politics and policy. Although methods are critical because they determine the credibility of the data and the findings, they are of limited interest

to most policymakers—they want and need results that they can use. Using data to support one's case is appropriate and beneficial, but that presentation should not rely on high-powered methods or complex statistics alone to persuade policymakers.

Providing Information and Data that Policymakers will Use

If advocates, researchers, and those trying to improve the lives of children through public policy are going to be successful, they must understand the world in which that public policy is made. As noted above, it is a unique and complex world. However, it is not enough for advocates to understand that world. They must also react to it and tailor the presentation of their data to its constraints and limitations. Therefore, some specific tips for the development and presentation of your materials are listed below.

Build a Relationship

Influencing public policy is as much about relationships as it is about knowledge, data and information. If you cannot get in to see the policymaker, your information will be of little value. It is a personal relationship with the policymaker that might enable you to "get your foot in the door" and get that information in his or her hands. As an advocate, you need to understand and respect the importance of relationships. Consider your reaction to a friend or relative who only shows up when he or she wants something. That is the way policymakers feel about lobbyists who only acknowledge them when they want support or opposition to a particular bill. Build a relationship with key policymakers. Just drop by to say hello now and then. Try to get to know them on a personal level (within legal and ethical limits, of course). You want to build a friendly yet professional rapport with the policymaker so that he or she will trust your information and turn to you when he or she needs advice or direction (Rosenthal, 1993).

Be Honest

While there is a perception, accurate or not, that politicians are all dishonest, they expect and indeed demand honesty from lobbyists and others providing information on which they will base their votes. If an honest answer means you lose their vote on this issue, you will gain their respect and be more likely to get their support when you need it in the future. On the other hand, if you do not tell them the truth and they give their support, only to find that their support is based on faulty information or causes political or policy problems, then you may have done irreparable damage to an important relationship. You may have burned a very important bridge. Short-term losses can become long-term victories (Wolpe and Levine, 1996, pp. 13–19).

Be Brief

In light of the busy schedule that legislators have, make the most of any opportunity that you have to meet with them. Be prepared to be brief. Indeed, in initiating your meeting or presentation, it is generally a good thing to acknowledge the value of their time and indicate that you will respect that and make your point quickly. Advocates and researchers should make their strongest and most persuasive points at the beginning of the presentation in case the meeting is interrupted. They may wish to take additional time to speak with you in more detail, but let the policymaker determine whether he or she wants to take additional time (Rosenthal, 1993, p. 177).

Keep It Simple

Advocates or researchers should not overwhelm the policymaker with data, methodology, or information. Provide him or her with information that is accessible in terms of comprehension and importance. Policymakers will be more impressed with information they can understand and use than with the most complex and methodologically sound data that they cannot understand or explain to their colleagues and constituents. This is not to imply that policymakers are not intelligent but to remind you that they are not statisticians, and more significantly, they do not have the time or desire to work through piles of complex tables and appendices to get to something they can use. Do not spend time explaining the methodology of the findings or the statistical assumptions on which they are based. Percentages and cross-tabulation tables, while simplistic to methodologists, are quite appealing and accessible to legislators (Wolpe and Levine, 1996, pp. 29-31). The data discussed by Sarah Shruptine in her chapter on the power of effective indicators serve as a great example of the power and influence of data that are simple and straightforward. Using simple bar charts and frequency tables, the Southern Institute was able to make a significant impact on public policy and on the lives of children. In a similar manner, data gathered from surveys such as those discussed by Staggner and Capizzano, when presented in a straightforward manner, can be of great value to policymakers.

Leave Brief Written Material

Policymakers are bombarded with information every minute of the day. They cannot possibly remember all of it, nor will they read long, detailed documents. Just as your presentation and data should be concise and to the point, so too should any written material. It should be no more than a two or three pages long and presented in a form that they can use on the floor or in making the case with constituents or voters, perhaps a series of bullets or concise statements that highlight the central findings of your work and its implications in terms of policy and politics (Wolpe and Levine, 1996, pp. 29–31).

Localize the Data or the Findings If Possible

While it may not always be possible, policymakers are likely to find an advocate more compelling and the public policy needs more urgent if the problem is related to the constituents from their district. For example, an advocate who has information on the number of children that go to sleep hungry each night in the state should try

to localize that information to the policymaker's district: How many children go to sleep hungry each night there? If you can put a local face or story to the data, all the better. For example, rather than talking only about the number of children abused in the state, a researcher might try to give an example of a child from the district of the policymaker (Rosenthal *et al.*, 2003, pp. 95–114).

Develop and Use District Contacts

An advocate or scholar may be very articulate and able to present a clear and compelling case for your position. However, that case will be even more compelling and the policymaker more likely to respond if the presentation has the support of some person or group with ties to the policymaker's district. If the advocacy group has active members from your group who reside or work in the district, bring them along when you meet with the policymaker. They will improve both your access and your audience. Develop a broad network of contacts in as many districts in the state as possible and then rely on them to help you make a compelling case (Wolpe and Levine, 1996, pp. 34–35).

Respect the Position of the Policymaker

No matter how strongly and passionately the belief in cause and the importance of the results, advocates must maintain a professional demeanor and accept that the policymaker may not share either their passion or their position. Passion at the expense of reason is seldom viewed as an asset in the policy arena. Just as advocates or researchers expect the policymaker to respect their position, they must extend the same courtesy and respect the policymaker's perspective. Policymakers will be more likely to listen and respond positively if they believe that the advocate or scholar is also willing to listen to them and to give serious consideration to their concerns and those of their constituents.

In short, successful advocates are those who build effective personal relationships with policymakers and provide timely information in a manner that they can use to achieve their own goals of policy, power, and reelection. The data they provide and the indicators they use must be accurate, clear, and presented in a manner that is easily accessible and useful to the policymakers.

Unique Status of Advocates for Children

The tips for effectiveness noted above are useful for anyone who hopes to successfully influence public policy in a representative democracy, including those who advocate or research on behalf of children. However, these advocates and the issues they represent also possess some relatively unique characteristics that set them apart from more traditional economic or ideologically motivated lobbyists. For example, while corporate or ideologically oriented groups tend to have large amounts of money and can afford to hire full-time professional lobbyists, children's advocacy groups seldom have that luxury. They are often represented by well-meaning

but inexperienced volunteers or by lobbyists who do not have the "insider" access afforded full-time, highly paid professionals. Further, they do not usually have the kind of budget or well-financed political action committees (PACs) that would allow them to have a strong financial impact on political elections (Rosenthal, 1993, pp. 18–43).

On the other hand, the news is not all bad for those who advocate on behalf of children. First, while there are significant disagreements on just how to do it, no one can oppose the objective of children's advocates: to improve the well-being of children. To oppose them is to oppose baseball, motherhood, and apple pie. Along the same lines, the kinds of data and indicators that advocates can present can be very persuasive if done correctly—indicators such as infant mortality rates, children who go to bed hungry, children with below-average birth weights, children in single-parent homes, and children without access to adequate healthcare are all easily presented to policymakers and can be readily translated into sound bites, graphs, and charts that they can use on the floor or in their own stump speeches. Second, while these groups may not possess large campaign war chests, they often have a relatively strong network of folks that can be mobilized to write letters, send e-mails, put up yard signs, or "march on the capitol." The key is to make sure that this army of volunteers is trained to be effective in light of the environment and the tips for success outlined above (Rosenthal, 1993, pp. 198–206).

Conclusion: Turning Data into Policy

The key to success for any advocacy group trying to influence policy is to make the most effective use of the resources you have within the context of the particular environment that defines the policymaking process you are trying to influence. There appear to be three advantages that advocates for children possess in trying to influence that process:

- 1) a compelling story and positive issue
- 2) comprehensible indicators to support that story, and
- 3) a core of passionate volunteers that can be mobilized.

Advocates should develop a strategy built on these three strengths and reflective of the tips noted above. First, as much as policymakers might be swayed by measures of children's well-being, do not rely completely on those measures—put faces to those numbers. Tell stories of real children, especially those in the policymaker's home state or district. Be careful not imply that they are "anti-child" if they oppose you, but also make clear that your objective, like theirs, is improve the lives of children. Second, when citing the data and statistics, focus on the meaning of the data rather than the science and the methodology that produced it. Make sure the indicators are clear and reasonable and their presentation straightforward and in a form that not only will persuade the policymaker but could be used by the policymaker to persuade colleagues or constituents.

Finally, make sure your team of volunteer lobbyists is not only well-intentioned but also well-equipped. Make sure they understand the policymaking environment

and the unwritten rules of behavior noted above. Make sure they have a firm grasp of the data they are presenting and the effective methods of presenting it. Further, make sure they understand the importance of listening to the policymaker and being willing to compromise when possible.

Note

 Quotes at the beginning of each section are attributed to legislative leaders and gathered in discussions and interviews with those leaders by the author during 2004–2005.

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http://www.irs.gov/pub/irs-tege/topic-p.pdf

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http://www.muridae.com/nporegulation/lobbying.html

Online Compendium of Federal and State Regulations for U.S. Nonprofit Organizations, focus on Lobbying and Political Activity by Tax-Exempt Organizations.

http://www.clpi.org/toc.html

The nonprofit lobbying guide.

http://www.thecapitol.net/Recommended/lobbylinks.htm

Capitol. Net links to lobbying-related stuff at national and state levels.

How Can We Better Use Whole Population and Outcomes Indicators: A Policymaker's Perspective

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Introduction

This paper seeks to examine ways that policymakers can better use indicators in their work to contribute to the overall improvement of the well-being of the people they serve. These observations come from 9 years as Secretary of Vermont's Human Services Agency in the 1990s. All data referred to can be found in the annual Vermont Agency of Human Services Social Well Being of Vermonters reports at www.ahs.state.vt.us.

The Construction of Outcomes and Whole Population Indicators

Much of the international work in the arena of indicators is about constructing comparable indicators across nations. Most programs have indicators of productivity and efficiency, and some, in rare instances, have indicators about effectiveness.

There is interesting work occurring in many places in identifying indicators, which describe and reflect the well-being of people in a place, otherwise known as "whole population" indicators. These have traditionally centered on public health, safety, education, and economic security, using longstanding existing indicators.

A viable option for organizing indicators around traditional outcome domains is to use the lens of human development in terms of the life cycle. For example, many states and localities organize indicators around the outcome "Children Are Ready for School." Coming to school age is a clear point in the development of a child, and indicators that reflect that moment can be applied from many traditional outcome domains. The following is an example of using indicators from several domains to describe this developmental outcome.

Children Are Ready for School

- Child Abuse/Neglect Rates 0-6
- Incidence of Childhood Lead Poisoning
- · Incidence of Childhood Asthma
- Incidence of Hunger/Malnutrition
- Preschool Participation
- Percentage of Children Fully Immunized
- Percentage of Children Ready for Kindergarten

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The benefit for policymakers in using a developmental approach with regard to outcomes and indicators is the integrative possibilities of having many more partners, ranging from government agencies to community groups working on and contributing to the same outcome, using indicators from all traditional domains. As a result, indicators are increasingly being constructed around developmental age cohorts rather than content domains.

Expanding the above example, and constructing outcomes along human, family, and community development life cycles results in a more integrated view of the possibilities. One example of such a construction follows:

ALL: Pregnant Women and Children Thrive

Children Are Ready For School

Children Succeed in School

Children Live in Stable and Supportive Families

Youth Chose Healthy Behaviors

Youth Become Successful Adults

Families and Individuals Live in Safe and Supportive Communities

Elders and People with Disabilities Live With Dignity and Independence in Places They Prefer

Policymakers attempting to integrate efforts on behalf of the people they serve could benefit by more work in constructing indicators for whole populations using developmental frameworks other than the traditional domains of public health, safety, economic security, and education.

Engaging Communities in the Work of Outcomes and Indicators

Some of the most interesting outcome and indicator work is occurring in our communities. In some communities, people have been successful in identifying powerful desired outcomes for their people. "All children are ready for school" is a universal outcome for all of the children in a given area. In these communities and regions, where indicators are constructed to help determine whether or not progress is or is not being made in improving the well-being of the people, indicators are more visible and instrumental in the activities of the community. They are used more to organize work, and in other interesting ways, represent a new and higher level view than those that have flowed from the traditional world of program indicators.

Policymakers can use this emerging community energy and focus to further pursue improved well-being, particularly when indicators can be consolidated into human development terms.

Developing Cross-Organizational Common Purpose

From a policy perspective, whole population indicators represent new opportunities for policymakers to have an impact on the well-being of the people they serve.

For example, using the outcomes approach to develop cross-organizational purpose brings a new and higher meaning of the work of people in those organizations.

In 1999, the Vermont Agency of Human Services conducted a survey of all employees of the Agency.² Eighteen percent of the 2600 employees responded to the survey, which was constructed to answer the question "Does your work contribute to (the agency's) outcomes?" After 9 years of the organization's focus on common outcomes and indicators, the responses of the employees, which came from all departments of the agency and every level in hierarchy, was gratifying. Ninety-five percent of the respondent employees indicated in the affirmative.

In addition to giving people a purpose that goes beyond the boundaries of their organization, a common purpose across organizations can also serve as an important motivational tool, if one can get beyond the bureaucratic inertia of these agencies.

Cross-organizational common purpose can lead nicely to cross-organizational strategies. For example, in the state of Vermont, U.S., the human services cross-organizational strategy that was adopted to improve a variety of indicators were voluntary visits to the families of all newborns in a geographic area. People from a variety of disciplines conduct the visits. Public school nurses, health workers, trained volunteers, school personnel, and caring neighbors can all work together to implement a cross-organizational, community-wide strategy, such as visits to newborns and their families, as one example of a new way of working together toward a strong common purpose.

In Vermont, over the course of a decade, this strategy contributed to significant improvements in a range of child well-being indicators, including the following: lead levels in children; rates of prenatal care; immunizations; infant mortality and child death rates; children with health insurance; parental and child support.

This approach of mobilizing many organizations around a strong common purpose can also help policymakers to avoid costly and sometimes debilitating traditional structural reorganizations. Constructing indicators across traditional organizations that reflect outcomes of interest to an entire community is a different kind of reorganization, namely the reorganization of how we think and mobilize, as opposed to how we move the boxes around.

Promoting the Cost/Benefit Way of Thinking

Outcomes and indicators also promote the idea of using cost—benefit thinking in governmental settings. This is a perspective that is rarely witnessed in government work, but which is commonplace in the ongoing decision making in business.

Well-constructed indicators can be followed over time to better understand trends. Those statistics can be converted into changes in caseload or events, which then can be converted into monetary terms.

For example, in Vermont, it was clearly shown that the 40% reduction in young teen pregnancy rates over a 10-year period in the 1990s resulted in millions of dollars of specific avoided costs. Using teen pregnancy indicators, which reflect many inputs, including the efforts and work of many from many organizations, the costs avoided by this improving social situation can be calculated.³

This use of cost—benefit analysis in government, using the indicator approach, can be employed to obtain targeted resources to help "turn the curve" in communities

focused on addressing specific social problems. For example, in Vermont, the Business Roundtable, which is an organization whose membership consists of large businesses, purchased books for toddlers to be given to the families of all newborns because of their belief in the business investment and cost–benefit ethic.

Recruiting Community Leaders

Indicators not only help motivate personnel across organizations and agencies, but they also bring community leadership and citizens into the equation as local partners, and have the effect of broadening a partnership around a specific common goal or purpose as expressed by a community's indicators. The energy and focus of people in communities is a significant value-added resource, which can be leveraged by indicator information.

Creating Training and Educational Materials

Outcomes and indicators are also excellent educational and training tools. They can be used to promote a more integrated view of the work across agencies—badly needed in governmental and legislative circles. Common strategies that cut across organizations are not a result of the traditional domain-dominated way of thinking in government, but can be viewed as a fresh and welcome approach to thinking about and organizing to make measurable and significant improvements in the well-being of our people. For example, training programs in large human service agencies generally focus on administrative skills, or cross-agency work process. A focus on common outcomes and indicators opens the door to a much richer array of training around integrated strategic initiatives across those agencies. For example, if a common strategy across agencies was universal home visiting for families of newborns, then a wide range of joint training opportunities arise.

Courting the Media

The educational value of outcomes and indicators is not lost on the media, who cover governmental events closely. Because indicators are so readily translated into easy-to-comprehend graphs over time, they are ready made for media use. To be able to graphically portray how a given jurisdiction is doing over time immediately answers the question of whether we are getting better or worse, and when compared to another or a larger population base also helps tell the reader if the indicator is doing better or worse than background data. These are natural points of interest for the media.

I am reminded of an interesting interaction I had with the media in the mid-1990s with the head of the Associated Press office in Vermont. I had received a phone call from his office wanting some background and an opinion as to why there had been so many teen deaths by automobile, as had been reported in the newspapers, which showed a graphic as part of the media coverage of our agency's annual social indicator report. The report graphically showed a 4-year rapidly growing stream of accidents resulting in teen deaths. After exchanging phone calls, we agreed that both of us would dig into the press accounts of each and every teen death by auto over the last 3 years. We could have used the public health database of vital statistics to garner some of the information, but we felt that the press accounts might hold some interesting background and perhaps information about cause of the deaths. The results surprised us. We had gone into the exercise expecting that alcohol would play a large part in the deaths. But in fact, what emerged was lack of judgment on the part of the teen driver in almost every instance. For example, a teen driving a van with other teens in the van, pulled out directly in front of a log truck in Barre, Vermont. A 16-year-old from Cabot, in her first drive alone, went out on a snowy day, was driving too fast, and spun off the road into a roadside tree. Two teens in the western part of the state were passing a truck at high speed on a reverse curve, where they could not see the oncoming driver. The stories quickly added up to a lack of judgment by new teen drivers. These stories resulted in a significant tightening up of teen driver supervision and more graduated licensing by the next legislature; the incidence of teen driving deaths dropped greatly, from the worst record in the nation in 1996 to the second-best record in the nation in 1999. All of this was triggered by the single graphic of teen deaths by automobile that was carried by the newspapers, which then led to the more systematic inquiry, and then political and policy action. Relatively small numbers of deaths in a small state population base suggested considerable caution in reading too much into the numbers, but over a 4-year period there was great progress. Since then, the number of teen deaths has increased, but do not show the kind of negative trend of the early 1990s, which resulted in the useful media attention.

Better Understanding of Relationships Among Indicators

Another byproduct for policymakers in using indicators is the opportunity to understand better the relationship among indicators. The integrated view of indicators across organizations reinforces the sense that the problems we face are very interconnected and interrelated.

For example, when one considers how to reduce infant mortality, the literature tells us that smoking rates among pregnant mothers is connected to infant mortality. We also know that smoking rates are connected to educational levels. Dropout rates are the reciprocal of educational levels, and we know that young women who become pregnant usually drop out of school, or in the converse, when they drop out of school, they often become pregnant. We also know from our administrative data that child abuse rates among teen mothers who drop out of school are higher than those of the general population. Looking at all of these relationships and connections as a whole gives us a different and better-informed perspective of how integrated the

problems we face truly are. A disciplined use of indicators helps us understand those relationships.

Enhancing Personal Motivation

Finally, there is a deep personal motivation that comes into play once we begin using outcomes and their indicators as ways to help us organize our thinking. In government, it is often difficult to see results, particularly in the day-to-day nature of budgeting and program assessment. However, when looked at over a span of perhaps a decade, we can truly see whether or not we are better off today than we were yesterday. This feedback can give us great reinforcement. It tells us that the effort and investment in this work can result in improvements to the well-being of the people we serve. This is a powerful motivation for those who work, volunteer, or who are interested in the impact of the overall effort of services for people.

Summary and Conclusions

All in all, the following conclusions may merit further examination and could be subject to more rigorous testing toward the end of adding a new tools and capacities for people in government and in our communities who work on behalf on behalf of others. There are ways to better use the emerging capacity of outcomes and indicators.

First, using a more developmental construction of outcomes and indicators has the potential of more integrated and effective work across agencies and communities. Conversely, organizing outcomes and indicators around existing organizations and traditional content domains make it more difficult to organize integrated responses to complex problems.

Second, well-constructed integrated outcomes and indicators can draw in communities more easily as partners and collaborators around the common purpose of the outcomes.

Also, crosscutting outcomes and indicators, over time, can impact the culture of related and connected organizations.

Cross-sector outcomes and indicators can lead to analysis techniques, such as cost/benefit analysis that can assist in building partnerships with other sectors such as the business community.

Integrated outcomes and their indicators can, over time, help us understand the complex relationships among indicators.

There is also the possibility that well-constructed, developmentally oriented outcomes and indicators can actually bring a higher purpose to the organizations and work of the many who do the work on behalf of the people we serve.

Finally, and most importantly, there is the very real potential that crossorganizational outcomes and their indicators can demonstrably contribute to improved well-being of whole populations.

Notes

- 1. Former Secretary of Vermont's Human Services Agency.
- 2. "Outcomes: Reframing Responsibility for Well-Being," Hogan and Murphey, 2002, The
- Annie E. Casey Foundation.

 3. "The Economics of Prevention," Cornelius Hogan and David Murphey for the National Finance Project 2001.

Section IV

The Research Perspective—Methods and Techniques

Studying the Role of Child Well-Being Indicators in the Policy Process: Using Surveys Among Decision Makers

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Introduction

Over the last decade, there has been dramatic growth in the collection and dissemination of information related to the well-being of children in the United States (Brown and Moore, 2003). Governmental agencies and private foundations, believing that child well-being indicators are a vital component of the policymaking process, have harvested diverse data sources to produce indicators for children at various stages of development. While certain important gaps remain, an extensive indicator system has evolved, containing perhaps the richest and deepest collection of child well-being information of any nation in the world (Brown and Moore, 2003).

The ultimate goal of collecting, analyzing, and disseminating child well-being data is to ensure that child and family policy is responsive to the complex needs of children. However, the extent to which child well-being indicators influence public policy and the means by which this influence is exerted is not clearly understood. In this chapter, we discuss the methodological difficulties with assessing the precise role of child well-being indicators in the policy process. We begin by outlining the different stages of the policymaking process in the United States and examine how indicators can be, and often are, used at each stage. We then walk through how one might try to use a quasi-experimental design employing data from a survey of decision makers to assess the impact of indicators on the policymaking process. We then discuss the limitations of a quasi-experimental approach and other ways that data from a survey of decision makers might be useful. We conclude by offering suggestions for future survey research in this area as well as alternative methods for studying the impact of child well-being indicators.

Theoretical Framework

Scholars wishing to understand the influence of various forces on the policymaking process in the United States often rely on Congressional agenda-setting and voting behavior literature to derive a theoretical framework by which to study these forces. This literature examines the conditions under which "an idea's time has come" and how policymakers decide among various policy alternatives. One major contribution from this literature is a more comprehensive understanding of the phases of the policymaking process, which begins before the introduction of a piece of legislation

and continues long after legislation is passed. Four broad steps or phases define this process: (1) agenda setting, (2) specification of policy alternatives, (3) policy choice, and (4) oversight of policy implementation. While these steps dramatically oversimplify the public policymaking process, this categorization works as a general framework by which to examine the role of child well-being indicators. We briefly discuss each of the phases below.

Setting an agenda. The first phase of the policymaking process is the recognition of a problem and the realization that there is a need for policy action. While not all of the problems that legislators consider important receive a legislative response, the ability to make policymakers pay serious attention to a problem or issue is a necessary first step in the policymaking process. Accordingly, members of Congress, federal officials, lobbying organizations, and other interest groups go to great lengths to draw attention to their particular policy issues.

Issues, however, tend to find their way onto national and state agendas in a variety of ways. Dramatic events and crises draw attention to important problems that then become a priority. The advent of new technologies or medical procedures may give rise to issues that command the attention of policymakers. Often, the actions and influence of prominent figures or the spotlight of media attention can also cause decision makers to pay attention to specific issues. Perhaps most important for our purposes, issues can also make their way on to the national agenda more slowly, through a gradual accumulation of knowledge that provides evidence of an emerging problem.

Child well-being indicators can play an important role in the agenda-setting phase of the policymaking process because of their ability to demonstrate areas of need (Brown and Moore, 2003; Kingdon, 1984). Whether it be the percentage of children without health insurance or the number of children who care for themselves after school, child well-being indicators can be used to reveal new social and health problems or assess changes in the magnitude of olds one. From a policymaking perspective, a significantly negative change in an indicator is most likely to be defined as a policy problem by decision makers, even when a constantly bad indicator points to a greater need for policy action (Kingdon, 1984). When significant changes to an indicator occur, policymakers have the ability to use the change as evidence of the need for policy action.

Specification of policy alternatives. Once an issue or problem has caught the attention of policymakers, policy alternatives are considered. The process of generating policy alternatives involves translating the problem into specific policy responses, which can take numerous forms. For example, policy solutions to address the looming Social Security crisis in the United States have ranged from the creation of private accounts to changes in the retirement age and benefit levels. The extent to which policy proposals adequately address the fundamental problem varies depending on the prevailing political forces and the level of information available to policymakers addressing the problem. In general, policy proposals that make the short list for serious consideration are both technically feasible and politically acceptable.

Child well-being indicators can play an important role in the development and specification of different policy responses. At any given time, there are numerous policy ideas available that are associated with a particular problem, existing in what has been called a "policy primeval soup" (Kingdon, 1984). From among these ideas, certain policy proposals are generated and narrowed to a short list for serious consideration. Policymakers often use child well-being indicators as evidence that their policy is particularly responsive to the social need or make the case that their policy initiatives should be taken seriously.

Policy choice. After policy alternatives are specified, policymakers must decide to enact a specific policy proposal. A number of forces work to shape the voting decisions of policymakers, including the will of his or her constituency, the lobbying of colleagues and interest groups, readily available and persuasive information, and the member's own personal views and biases. The extent to which a policymaker is influenced by any one of these forces at a particular time varies depending on the reason for his or her vote choice. Policymakers may vote for or against a piece of legislation for a variety of reasons, including satisfying constituents, trading favors with the administration or other policymakers, or the desire to make good public policy.

Under certain conditions, child well-being indicators may play a role in a policymaker's decision among policy alternatives. Policymakers are most often influenced by constituency opinion, cues from other legislators or interest groups, or personal beliefs in making decisions about policy. However, information on the wellbeing of children may play a role in certain cases when properly packaged. Given the time constraints of policymakers and the fact that most are not researchers or scientists, the presentation of policy-relevant information often determines whether it is accessed and used. In general, for information to be useful, it must be timely, relevant, compressed to the point that it is easily digested, and presented in a way that is understandable to the lay reader. (Specific ways to package indicator information are addressed in Thomas Little's chapter in this volume.) Interestingly, some political scientists have argued that "objective" information is not as useful to policymakers as information that is used to take a stance on a certain policy question (Kindgon, 1984). A policymaker must sift through objective information to make a policy decision. More often, policymakers prefer that a case for a particular policy direction be made for them using a logical interpretation of the relevant facts.

Oversight of policy implementation. Policymakers also have a role in the oversight of policy implementation. Public policies are merely words on paper until they are implemented by an administrative agency. Oversight is important because even sound policies may encounter difficulties when they are applied (Pressman and Wildavksy, 1984). Accordingly, policymakers often hold hearings or ask administrative agencies for program reviews as a means of overseeing policy implementation. The goals of such oversight actions include ensuring that the intent of a policy is followed and evaluating a policy's effectiveness (Fesler and Kettl, 1996).

Over the last decade, child well-being indicators have played an increasingly important role in the oversight of public policies related to children and families.

Brown and Moore (2003) argue convincingly that an emerging trend in the oversight of child and family policy is the movement away from "process" measures of implementation (how well a policy is implemented) to outcome-based measures. Outcome-based measures assess how children are doing under certain policies and administrative structures. They can change the way agencies are held accountable, increasing the focus on a policy's ultimate goal as well as providing the incentive to improve outcomes.

Assessing the Role of Child Well-Being Indicators on the Policymaking Process: A Quasi-Experimental Approach

In the last section, we presented a general theoretical model of the policymaking process and discussed the role that indicators can play in each of the phases of policy formation. Here we use this framework in a discussion of how to statistically estimate the marginal impact of child well-being indicators on the policy process using data from a survey of decision makers. We discuss how to test two hypotheses:

- All else being equal, a legislator's exposure to a specific child well-being indicator
 or set of indicators will increase the probability that he or she will consider the
 policy issue associated with that indicator to be a serious issue facing the state
 or country.
- 2) All else being equal, exposure to a specific child well-being indicator or set of indicators will increase the likelihood that a legislator will cast a pro-child vote for the policy associated with that indicator.

For example, controlling for other factors, policymakers exposed to indicators documenting the percentage of elementary children being left home alone after school will be more likely to think after-school programming is a serious policy issue and will be more likely to vote in favor of funding after-school programs. Below we outline the steps to testing these hypotheses.

Step 1: Defining the Universe

Because the outcomes of interest for our hypothetical study are the consideration and passage of policies that benefit children, the analysis should be conducted at the policy level. That is, each policy event—such as a vote by a legislature—is a unit to be examined. Estimating the impact of child well-being indicators, therefore, would require collecting data on policymakers' experiences with specific child and family policies, their exposure to indicators, and a set of other variables that may capture influences on their actions and ultimately affect the well-being of children.

Prior to collecting these data, however, it is important to specify a universe of child and family policies with which policymakers may be familiar, such as those considered in the legislative session directly prior to administering the survey. Limiting the universe in this way would limit recall bias and ensure that each policymaker in the sample had exposure to every policy in the universe.¹

Given that there will be more variation in exposure to indicators if policymakers across states are surveyed, it may makes sense to conduct the analysis at the state level. Examining the experiences of policymakers in all 50 states would also allow for a greater sample of state policies.

The method for creating this universe would entail examining the legislative calendar of each of the 50 state legislatures and identifying the policies affecting the well-being of children. Each policy would need to be classified according to whether it was pro-child (e.g., increasing child care subsidies) or not (e.g., cutting benefits for immigrant children). This classification would allow a policymaker's vote on a specific policy to be designated pro-child or not pro-child, which would be important in examining whether exposure to child well-being indicators increases the likelihood of a pro-child vote. The concept of a pro-child vote, however, is particularly difficult to apply and measure. What ultimately matters is whether the policy improves child well-being through an increase in services or funding, though the ultimate results of funded programs are often unknown.

Step 2: Creating a Survey and Collecting the Data

After the child and family policies that make up the universe are identified and characterized, the next step is to develop a survey to collect data on the experiences of policymakers with each of these policies. Such a survey would include questions from which the dependent, independent, and control variables of our model can be derived. We discuss the specific content areas below.

Dependent variables. Given that our study seeks to understand the role of indicators in influencing the level of importance policymakers place on certain issues and how indicators affect their voting decisions, the survey would need to contain questions that capture these constructs. For each policy in the universe, three questions would be asked of the each policymaker:

- Did the policymaker vote for or against the policy?
- How much attention did the policymaker give the policy during the legislative process (no attention, some attention, or a great deal of attention)?
- How important does the policymaker feel the issue addressed by the policy is to his or her state (very, somewhat, or not important)?

An independent variable. The study's primary independent variable is the policy-maker's awareness of child well-being indicators. In an effort to examine whether exposure to child well-being indicators increases a policymaker's attention to policies that affect child well-being and the likelihood of a pro-child vote, the survey will contain questions to determine how extensively the policymaker was exposed to child well-being indicators when considering each of the policies in the universe.

Control variables. The central questions of our hypothetical study involve the role of indicators in the policy processes all else being equal. To ensure that our hypothetical model is specified correctly and that we do not attribute undue influence to

a policymaker's exposure to child well-being indicators, it will also be important to include a number of control variables in the model. The survey should include questions about other potential influences on the policymaker's consideration of child and family policies and his or her vote on these policies, e.g.,

- the policymaker's personal beliefs about child and family policy,
- the policymaker's philosophy about the role of government in child and family issues,
- the policymaker's assessment of his or her constituency opinion related to child and family issues, and
- the policymaker's state, tenure, party identification, age, and sex.

Step 3: Creating a Hypothetical Data Set

The next step in the process is to create a data set using the policies taken from the legislative calendars and the data from the survey of policymakers. Each observation would contain data on a legislator's experience with a specific policy, making the number of observations in the data set equal to the number of policies in the universe multiplied by the number of legislators interviewed about each policy. For example, if 30 child and family policies came up for a vote in Colorado during the legislative session being examined and 50 legislators were in the state legislature at the time, the data set would contain 1500 observations from Colorado.

Step 4: Analyzing the Data

After the data set is created, analyses would be conducted on at least three dependent variables related to our hypotheses: the amount of attention paid to specific child and family policies, the level of importance of child and family policies, and the likelihood that a legislator will cast a pro-child vote on a child and family policy. Logistic regression and multinominal logistic regression models would be used to test the impact of child well-being indicators on our three dependent variables to evaluate the impact of a legislator's exposure to child well-being indicators on the likelihood that he or she will cast a pro-child vote.

This model will take on a logic specification, $P(Y) = 1/(1 + e^{-Z})$, where Y = 1 if the legislator votes pro-child on a policy and 0 if not.

$$Z = \alpha_1 + \beta_1^{\ I} Indicators + \beta_1^{\ C} Control + \varepsilon_1. \tag{11.1}$$

In this model, α_1 , $\beta_1{}^I$, and $\beta_1{}^C$ are parameters to be estimated and ϵ represents unobserved factors affecting the legislator's vote choice. The vector *Indicators* represents variables measuring policymakers' exposure to well-being indicators and *Control* represents variables measuring policymakers' state, tenure, party identification, age, and sex.

Limitations. There are significant challenges and limitations involved in estimating the impact of child well-being indicators in this way. First, there is an issue with selection bias. Using the methodology discussed above, we are only asking legislators about the importance of policies that have made the legislative calendar. Because

we limit the universe to these policies, this group of policies is more likely to be deemed important by policymakers compared than if we asked about a random set of policy proposals being considered but not necessarily brought to the floor for a vote. Therefore, we would expect that we would be overestimating the impact of indicators on the amount of attention paid to child and family policies, and the level of importance of these policies.

It is also important to differentiate between the role of *systems* of indicators and the role of individual indicators or indicators within a particular domain (such as education). It is possible that full systems of indicators can have an impact beyond single indicators. But for either a full system or a narrow range of indicators, the effect on policymakers is difficult to disentangle in the complex and ever-changing policy process.

Finally, there may also be an issue with the causal direction of the model. The model assumes that exposure to child well-being indicators will increase the amount of attention that policymakers pay to specific child policies and their perceptions of how important the issue addressed by the policy is to their state. However, the opposite may be true. It may be that the importance that policymakers place on a specific issue causes them to seek out more information and to consult the indicators. Given this and the other limitations discussed above, it may make more sense to seek out other methods of understanding the role that indicators play in the policy process.

Other Methods for Using Data from a Survey of Policymakers

As the discussion of the methodological limitations above indicates, it is extremely difficult to determine the marginal impact of child well-being indicators on any specific stage of the policymaking process. However, data collected from a survey of policymakers can be examined in a descriptive context to better understand how indicators are used in practice, how specific indicators can be made more useful, and how policymakers perceive the impact of indicators on the policy process.

For example, a recent survey of state policymakers and their staffs collected information on the uses and impact of the Annie E. Casey Foundation's *Kids Count Data Book*, which contains national and state child well-being indicators (Applebaum *et al.*, 2004). The survey found that, while other sources of child well-being data were used more often, over 75% of the state legislators and over 90% of the legislative staff were aware of the data book. More importantly, over half of the legislators and 71% of legislative staff reported using the data book "a lot."²

The extent to which legislators and their staff were aware of and used *Kids Count* and the extent to which they found the data useful varied by the characteristics of the legislator. Those serving for longer amounts of time (over 6 years) were more likely to be aware of the data source than those serving less time. Legislators serving on committees dealing with children's issues were more likely to find the data source useful compared to those who did not. Given the specialization that exists in legislatures, the fact that committee members who deal with children issues find *Kids Count* a useful source of information is a particularly important finding. Legislators often take their cues on how to vote from other members who are considered specialists in a policy area (Kingdon, 1977). Therefore, the fact

that *Kids Count* is an important source of information to those from whom other legislators may take cues on child and family policy extends its influence beyond solely those who use it.

The survey also found that the data book scored relatively high on the dimensions that are particularly important to legislators seeking out information on an issue of child and family policy. As discussed above, information is only useful to policymakers if packaged correctly. The survey results indicate *Kids Count* excelled in this area. The indicator source was thought by a majority of legislative staff to be clear and understandable, relevant, credible, timely, and useful.

Ultimately, the information from *Kids Count* was used in a variety of ways by legislators and their staffs. The data contained within *Kids Count* were used as background information, for evidence in committee deliberations, and to craft legislation and speeches. Despite these uses, policymakers were reluctant to say that the data book had a "major" impact on public awareness or policy. A majority of policymakers, however, said that the child well-being indicators in *Kids Count* had a "moderate" impact.

Finally, those surveyed offered recommendations on how the data book could be improved. Legislators suggested that while states receive a national ranking on any given indicator, regional rankings were also important and should be included. In addition, legislators had mixed feelings about whether *Kids Count* should have more editorial content. Some legislators wished for more detail on what the indicators meant for their state, while others thought the simple presentation of the indicators helped to maintain the data book's credibility.

Next Steps for Surveys Designed to Assess the Role of Child Well-Being Indicators

The survey conducted by the National Council of State Legislatures (NCSL) was a groundbreaking effort to understand the role of the *Kids Count Data Book* on the policy process. Future surveys designed for this purpose will need to expand the scope of the survey to include other sources of indicators. In addition, survey questions must be added to measure the influence of child well-being indicators in each of the stages of the policymaking process. Finally, the sampling frame should be expanded to include the broad range of actors involved in the policymaking process at various levels of government. We discuss these points in more detail below.

Because of its mandate, the NCSL survey focused on only one source of child well-being indicators. One notable finding was that state policymakers and their staffs often used additional sources of child well-being information, including information provided by the NCSL and the U.S. Census Bureau. Accordingly, the next round of surveys will need to explore the role of child well-being indicators from a variety of sources, including governmental agencies, think tanks, and advocacy organizations. Expanding the survey in this way will allow researchers to understand how different sources of indicators may be used under different circumstances and why certain sources may be used more often than others.

The NCSL survey also limits its universe to state legislators and their staffs. While those who make policy represent the focal point of the policymaking process,

other actors may employ child well-being data in their attempt to influence the decisions of policymakers. Given that political scientists have found that policymakers often prefer that information be packaged in a way that takes a position on a policy issue, it will be important to understand the extent to which child well-being indicators are packaged by child advocates and other interest groups in this way and for what specific purposes. In addition, it will be important to know the types of other actors use the indicators to influence policymakers and how successful they are in doing so.

Finally, the role of the various sources of child well-being must be analyzed for each phase of the policymaking process. Questions should be designed for the various political actors to determine how indicators influence policy priorities, develop and vet policy options, make policy choices, and oversee policy implementation.

Other Approaches to Studying the Role of Indicators

A survey of decision makers is only one way to understand the impact of child well-being indicators. Given the complexity of the policymaking process, qualitative approaches are also useful for a more nuanced understanding of the role of child well-being indicators.

One way to qualitatively examine the extent to which indicators impact the policy process is to measure how often they are used or mentioned by legislators during the various stages of the policymaking process. This can be accomplished through a content analysis of floor debates, committee hearings, and conference reports on issues relating to child and family policy.

A second qualitative means of studying the impact of indicators is through a case study of specific pieces of child and family legislation. One could examine, for example, the passage of the Personal Responsibility and Work Opportunity Reconciliation Act, the No Child Left Behind Act, or the Adoption and Safe Families Act to determine what role, if any, child well-being indicators played in the passage of each piece of legislation.

Conclusion

It is difficult to assess the impact of childhood indictors on the policy process for several reasons. Problems occur on both sides of the equation, affecting both the dependent variable and the independent variables. On the independent variable side, it is simply not possible to "hold constant" all of the factors that may affect the policy process to look at a world with—and without—indicators. Many other factors determine policies, including politics and values, which are difficult to measure. On the dependent variable side, the many steps in the policy process—and the many ways policies may affect the ultimate well-being of children—mean indicators can come into play in many ways in this complex process.

However, it is still valuable to survey policymakers about the role of indicators. Though direct impact on policy will be hard to assess, a more subtle understanding of the role of indicators is desirable. Those who create and distribute indicators will benefit from a deeper understanding of how indicators are used, by whom, and

under what circumstances. Such surveys may help us understand where in the policy process indicators are most likely to matter.

Policymakers face many complex decisions in determining and implementing policy. The more they know about the condition of children—and the more we understand about what they know and what they use—the more likely we will have policies that reflect the values of our society and the best bets for improving children's lives.

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Notes

- If policies from multiple legislative sessions were to be contained in the universe, newly
 elected legislators will not have had the opportunity to consider certain policies in past
 legislative sessions.
- 2. The response rate for this survey was only 23%, so these results should be interpreted with caution.

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Indicators and Policy Decisions: The Important Role of Experimental Studies

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Many strong arguments can be made to support the collection of good indicators of children's well-being and for using such indicators to inform policy and practice. Indeed, indicators such as rates of teen pregnancy, high school graduation, or dropping out can support, contradict, or generally inform public and political opinion about the circumstances of young people today and that is why great effort and resources are expended in collecting and refining child indicator data. Indicators, however, are just one of several important tools for policymakers to rely upon when faced with making difficult policy decisions. Indicator data alone cannot provide information or specific guidance about a policy response to a social problem. Experimental studies are a key type of social science research—the "gold standard" method for untangling cause from effect—that can fulfill this role for policymakers and serve as a necessary complement to indicator data to best inform policy decisions. Here we make the case for the role of experimental studies as the link between indicator data (identifying a social policy concern) and policy decisions. We describe how the results from experimental studies can inform policy decisions as well as the choice of which indicators to study.

One of the strongest research methods for evaluating the effects of social policy on human behavior is the randomized experiment, also known as random assignment design. Randomization entails using a lottery-like process to assign each eligible sample member to a group that is offered the intervention or a group that is not. This random process ensures that the two groups are the same (in expectation) in all ways, except that one group tests the intervention. Therefore, any statistically significant differences that are subsequently observed between the two groups can be confidently attributed to the intervention.

There is a long history of reliance on random assignment designs, especially in the medical community, to pinpoint the success or failure of a treatment (e.g., see Cochrane Collaboration, 2002). Well-designed and properly implemented random assignment studies can also answer questions about the effectiveness of social policy interventions, producing findings that are largely undisputed and easy to interpret. Identifying how an individual is affected by a particular treatment in the multitude of influences that affect their day-to-day lives is complicated. By eliminating all factors except the treatment, randomization is the most rigorous technique for studying cause-and-effect relationships. There were more than 800,000 individuals involved in 220 random assignment studies of new or existing social policies between 1962 and 1997 (Greenberg and Shroder, 1997).

The Strengths and Weaknesses of Indicators

Indicators are used for a variety of purposes: to describe a state of affairs or circumstances, to monitor and increase accountability, and to set policy goals (Moore *et al.*, 2003). While indicators are effective in providing much needed descriptive information, indicator data are not an effective tool for assessing social policy or informing policy decisions to address a problem that was first identified through indicator data. Why not? Indicators are an excellent method for tracking the state of affairs but not for attributing trends to specific events.

Consider, for example, the number of children living in poverty. Trend data reveal that the child poverty rate increased from 18 to 23% between 1975 and 1993, but then declined by more than one-fourth between 1993 and 2000 (Song and Lu, 2000). Policymakers are keenly interested in knowing whether or not this turnaround in the child poverty rate was a result of unprecedented changes in welfare policy that occurred in 1996. In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) passed, ending welfare as a federal entitlement and representing a milestone in the effort to increase self-sufficiency among welfare-recipient parents. These new welfare reform policies limited the length of time that families could receive federal cash welfare assistance and required most of them to participate in employment-related activities to be eligible for cash assistance. Could these dramatic policy changes affecting low-income parents' economic well-being be responsible for the declining child poverty rate over this period?

If child poverty rates declined but the employment of low-income parents did not increase, then it might be reasonable to conclude that the set of welfare reforms designed to increase parental employment were not likely to be responsible for the reductions in child poverty rates. In the more realistic case, however, when trends in family and child well-being all point in the same direction, then attributing policy changes such as welfare reform to child poverty is virtually impossible. The simultaneous occurrence of numerous other demographic and policy changes complicates this assumption. Along with changes in welfare reform policies, the 1990s were marked by economic growth, with more jobs available to low-income workers; increased spending on child care for low-income parents at the state and federal levels; and increased cash support for working families with the expansion of the Earned Income Tax Credit (EITC). Any combination of these social policies—or possibly none of them—could have influenced child poverty rates.

Changing demographics may also influence indicator data, resulting in yet another factor that could confound an appropriate policy response using trends of social indicators. The proportion of poor children could rise over time because of changes in the groups of families who are more likely to be poor (an increase in single parenthood, for example) or changes in the poverty rate among single parents. This matters because a policy response targeting single parenthood—such as eliminating marriage disincentives in the tax or welfare system or increasing the availability of marital education programs—is different from a policy response targeting the poverty rate.

With this challenge in mind, social science researchers have developed and applied sophisticated empirical techniques to trend data in an effort to better

understand how trends respond to social programs and policies. For example, interrupted time series analyses that rely on having data with multiple observations of an outcome before and after a program is launched can help to determine the likelihood that any change in a trend coincided with the program or policy under investigation. Such a technique was recently used in the Project on Devolution and Urban Change, a study conducted by MDRC² to understand the effects of welfare reform in four major urban communities (Brock et al., 2002, 2004). In this study, the analysis used information about welfare receipt (or another outcome) for a number of years prior to the implementation of welfare reform to extrapolate a trend into the postreform period. The computed deviation from the baseline "predicted" trend to the actual trend is used to determine whether welfare reform policy change made any difference. While the logic behind the interrupted time series approach is simple, one assumption of this technique is that the prebaseline trend would have continued into the postreform period in the absence of the reform. Unfortunately, in the case of welfare reform in the 1990s, this assumption was complicated by the array of economic and policy changes that occurred concurrently with welfare reform. Consequently, as with the example of child poverty rates, despite the sophistication of the nonexperimental technique, it was nearly impossible to determine the extent to which welfare reform caused the observed outcomes.3

Confidence in findings using these types of interrupted time-series techniques depends on the availability of a comparison group (i.e., in this latter example, a group that did not experience the changing economic circumstances of the 1990s or a group that did not experience welfare reform) or the ability to replicate analyses across multiple sites that provide variation in the timing of the policy effect under study (and, thus, gaining confidence in seeing the same finding across varying local circumstances that are tied to the timing of the intervention under study and not to broader policy changes). The duration of time between the intervention and the expected effect is also important: The longer the time period between the implementation of the policy and measurement of the outcome, the more difficult it is to capture the influence of the policy or program. Because researchers cannot always control research conditions in this context, these studies, akin to "natural experiments," are opportunistic and might not always occur at the right time to inform policy.

A good example of a study that meets many of these conditions is one examining the effects of drinking-age laws on alcohol-related crashes (Figlio, 1995). In this analysis, Figlio uses monthly Wisconsin time-series data from 1976 to 1993 to estimate the effects of increased minimum drinking age on alcohol-related crashes involving teenagers. The long time period in which to examine trends along with multiple changes in the drinking age over this period allow Figlio to confidently attribute trends in crashes to changes in drinking-age laws. In addition, Figlio compares Wisconsin and other states to provide greater credibility to the analysis. Because the timing of the drinking-law changes differed across states, critical variation is provided by the use of these multiple state comparison groups. Together, these factors make the analysis of trend data quite credible in assessing the effects of policy change.

Two key points emerge from this discussion. First, descriptive snapshots or trends with indicator data alone are not a reliable measure of program impact. Second, it is possible to apply sophisticated empirical techniques to trend data to untangle the role of policy or programs in influencing outcomes, but only under very specific circumstances that are often out of the control of a researcher. Indicator data also cannot determine whether alternative programs or policies could be more successful. Although well-designed and well-implemented programs are intended to address problem areas of interest, history has taught us that unintended and sometimes costly consequences are also possible. Some programs have failed to produce their intended positive effects, such as well-designed home visit programs with inconsistent benefits for children (Gomby *et al.*, 1999) and the Negative Income Tax experiments, a test of a guaranteed level of family income on labor force participation that had the surprising (and influential) effect of increasing marital dissolution (Munnell, 1986; Office of Income Security Policy, Department of Health and human Services, 1983).

Randomized Control Experiments

Randomized control experiments offer one best-case alternative that can directly inform policy and be designed a priori to do so. In an experimental study, individuals or entities are randomly assigned to treatment groups to test the effectiveness of a program or policy. In an ideal world, we might have wanted to observe the same individual in two alternate universes—one in which the individual receives the treatment and one in which he or she receives some counterfactual against which the treatment should be measured—to ensure that any differences we observe were actually due to the treatment under study and not to any individual characteristic. In practice, of course, we can only observe one of these potential outcomes for any given individual. The idea behind random assignment is simple: With the flip of a coin, assign each target group member to the treatment group (or to a set of treatments) or to a control group to create two random subsamples of target group members, both of whose expected potential outcomes equal those for the target group as a whole. Assuming full compliance with randomization, the observed difference between mean outcomes for the two random subsamples selected through random assignment provides an unbiased estimate of the average treatment effect for the target group.⁴

Because assignment to the intervention program is truly random, differences in outcomes between the program and control groups can be confidently attributed to the program under study. Moreover, the results are quite simple to understand and communicate—differences between two groups at the follow-up are due to the difference in the experiences of the two or the treatment program relative to the counterfactual. The fact that this research is so easy to understand and communicate and yet is still rigorous makes it particularly effective in informing policy (see Little (2005), this volume, for further discussion of the use of complex statistics in communicating with policymakers).

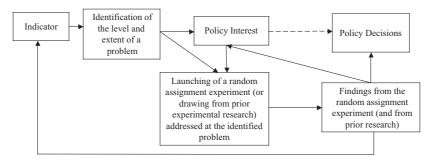


Fig. 1. Conceptual model of the complementary role of indicators and experimental studies in informing policy decisions.

A Complementary Role for Experimental Studies and Indicators in Informing Policy Decisions

We propose that the most effective way to inform policy decisions is to rely on the strengths of both experimental studies and indicator data. The following schematic (Figure 1) illustrates a complementary role for these two kinds of data and how together they could be used to inform policy. Indicators provide information critical to the identification of a particular problem that can result in policy interest in that problem. The interest should lead to the launching of experiments (or drawing on prior experimental research) to test whether varying approaches have any effect on the problem of interest. The results of these experiments can and should inform policy decisions.

This schematic also includes an arrow from the identification of a problem directly to the launching of a study to recognize that while large amounts of public funding may only be directed toward research in areas where there is clear policy interest, smaller studies may be launched in areas where research might contribute to knowledge-building without clear policy interest. Some noteworthy examples of this include small-scale developmental studies such as the Abecedarian experiment and the Perry Preschool Project.

Because the results of social experiments are so easy to understand and difficult to dispute, the results from controlled experiments can have an important influence on policy. (See Capizzano and Stagner (2005), this volume, for more detailed discussion of when and how such research might be used.) Some good examples in which this has indeed been the case include early experimental studies in the area of welfare policy, initially implemented under federal welfare waivers. Here, research conducted by MDRC has helped states convince their constituents that welfare-to-work programs are a smart fiscal investment and thus helped policymakers gain bipartisan support for changes in welfare policy associated with the 1988 Family Support Act. Other research that showed that children were not harmed by some forms of time-limited welfare policies might have contributed to the uncontroversial

continuation of federal time limits in recent discussions around the reauthorization of welfare reform.

How Findings from Experimental Studies Can Generate Policy Interest

Just as indicators can help form public opinion and bring an issue to the forefront of public and policy interest, findings from social experiments can also play this role. For example, recent findings from experimental welfare and employment programs show that welfare and employment policies may negatively affect adolescents while having a neutral or positive effect on their younger peers (Gennetian et al., 2002a, 2002b). This unexpected finding raised concern among policymakers, leading them to consider testing the effectiveness of two-generation interventions that include direct services to adolescents combined with employment services for parents as part of the U.S. Department of Health and Human Services Hard to Employ Demonstration Project being conducted by MDRC (in addition to sparking state approaches in the current Temporary Assistance for Needy Families [TANF] legislation to assess how programs were addressing children as they made more demands on single parents). Our conceptual model (Figure 1) has an arrow from the results of random assignment experiments to policy interest in a particular area; in an ideal world, this would lead to the launching of new studies or drawing on existing studies to yield new programmatic responses.

How Findings from Controlled Experiments Can Inform the Choice of Indicators

Results from random assignment experiments may also be useful in identifying indicators that are most amenable to change or most receptive to policy initiatives (see Figure 1, arrow between first and last boxes). As noted in Teitler and Ben-Arieh in this volume, defining the best outcome measure is a key need in indicator research. Random assignment experiments might inform this effort by improving our understanding of particular age groups of children most open to intervention efforts (and, therefore, populations for whom the tracking of indicators might be a more effective tool for informing policy). We have conducted a series of analyses under the Next Generation Project (a project conducted by researchers at MDRC and a number of research universities) to understand how the effects of welfare and employment policies may change over the course of children's development, and we find that times of developmental transition are most sensitive to the changes wrought by policies aimed at the employment and income of low-income parents (Morris et al., 2004). That is, we find positive effects of welfare and employment policies during the transition to middle childhood (for children ages 4-5) and negative effects of these same policies during the transition to adolescence (for children ages 10-11). Tracking indicators for children over a broad age range might not bring to light nuanced differences in a policy's effect on children at different developmental

stages.
Further, we find that certain domains of child functioning are more amenable to intervention efforts (e.g., child school achievement) while others are more sensitive

to genetic influence (e.g., child temperament). This might lead researchers to collect relatively more information on the former as compared to the latter when tracking indicators most likely to be affected by policy, even though both domains are critical to understand how children are faring.

Limitations of Controlled Experiments

While randomized experiments have many merits in informing policy decisions as well as informing the collection of indicator data, there are several important limitations. First, experimental studies can only be realistically launched to examine interventions for which entities or individuals can be randomized. Because in some situations it is impossible or unacceptable to do so, there are many important questions that cannot be addressed directly using the experimental approach. For example, it is not possible to test the effects of demographic characteristics of birth parents on their children by randomly assigning children to parents or parents to children.

A second, more important limitation of the experimental approach—one that is often not fully appreciated or understood—is that even when things can be randomized, full compliance with random assignment usually cannot be ensured. For example, one can randomize the offer of a new medical treatment, but one cannot guarantee full randomization of its receipt without forcing some patients to take it against their will, which is, of course, unethical. Similarly, one can randomize the offer child care for low-income families, but one cannot guarantee full randomization of its use because families have the right to choose the care that works best for them and their children.

Third, the results of random assignment experiments can only be generalized to the populations and time periods studied. One example is the experiments of welfare reform strategies that took place during the early 1990s. While they provide some of the best information about the effects of welfare reform policies on children in an experimental framework, their relevance to the welfare reform debate is limited by the fact that they took place in a particular economic climate, and their effects could be very different in alternative contexts. The same case can be made for the sample under study—the experimental method provides no information about those individuals who choose not to apply for welfare. In effect, randomized experiments have strong internal, but not external, validity.

Finally, although experiments are the most powerful known way to assess what effects are caused by an intervention, they do not necessarily provide much insight into how these effects are brought about or why they occur. This issue is particularly important for interventions that consist of numerous components, any combination of which might be responsible for an observed effect. For example, testing a multifaceted employment program by randomly assigning each member of a sample of welfare recipients to a group that is offered the new program or to a group that is not is an excellent way to measure any subsequent change in employment that the program causes (relative to the program clients would have offered otherwise). However, without further information, assumptions, or both, the experiment will

not provide compelling evidence about how or why the program did or did not improve employment or about the relative effectiveness of its various elements. This limitation of the experimental paradigm is often referred to as the "black box" problem. The black box is the unknown set of mediators between interventions and outcomes. Experiments are good at documenting the links that do or do not exist between an intervention (the input to the black box) and outcomes (the output of the black box). Unless process and implementation questions are addressed, experimental results provide little or no direct information about the inner workings of the black box. Nonexperimental techniques applied to experimental data are one promising method for uncovering these "black box" questions (see Gennetian *et al.*, in press; Morris and Gennetian, 2003).

A Final Thought: Using Random Assignment Experiments to Test the Effects of Indicators on Policy Decisions

Finally, a related use of experimental design in informing indicator research might address whether providing indicator data can actually affect policy decisions. That is, can you randomly assign policymakers to receive or not receive indicator data to understand whether indicators make any difference to the political process? The reason for even considering random assignment as a design for this question stems from the concern raised by Capizzano and Stagner, in this volume, that policymakers who seek out indicators on a particular issue may be predisposed to prioritize certain legislative issues or vote a particular way.

While an experimental design is possible to answer this question, a couple considerations are critical. First, because decision making is a group process, individual-level random assignment of policymakers will likely not address the question of interest. More specifically, because you cannot shield the control group from receiving indicators, and because indicators *need* to be shared to move the process forward, individual-level random assignment is likely not an appropriate design to test the effect of indicators on policy. The solution to this problem is group-level random assignment (e.g., assign states or counties to different groups), but here sample size considerations become important, and even in this design, the issue of control group contamination may not be completely resolved (given that it is unclear how to fully control the information from getting to the control group sites if information is shared at the national level).

A second kind of experiment might be to survey policymakers and give them varying pieces of information that differ according to experimental or control group status and ask them how they might be influenced by those indicators. This is simply an extension of the survey method described in Capizzano and Stagner, this volume, in which variation in exposure to indicators is modeled as a predictor of policymakers' beliefs about particular issues or their voting behavior. However, the use of the experimental approach allows us to control for the fact that policymakers with particular beliefs may be more likely to seek indicators (and thus increase their exposure to such indicators) and may also be predisposed to vote in a particular way (irrespective of those indicators). In this case, it is the policymakers' beliefs

that drive the association observed between exposure and voting behavior. This is what is called *selection bias*, and is controlled in experimental studies by randomly determining exposure to indicators.

Such a study could test the effect of providing any indicator information but also of comparing across different kinds of indicators, answering questions such as "Are policymakers more influenced by increases in negative outcomes than in decreases in positive outcomes?" This might provide useful information for the selection of indicators, but it is not entirely clear how closely survey responses about behavior correspond with the actual behavior of policymakers. Thus, in controlling for selection issues, we have created an experimental situation that may or may not be related to actual behavior.

In sum, randomized experiments could be used to test the effects of indicators. However, it is not clear that the information from such studies could be fully exploited, given concerns about control group contamination in studies in the real world or the applicability of survey-based responses in "lab" experiments. Given the effort involved in these kinds of studies, it may make more sense to use randomized experiments where they are best suited—to test the effects of policies and programs on individuals to identify effective ways to alleviate social problems.

Discussion and Conclusions

There are good arguments for the role of indicators in providing real-time information to policymakers on the nature and extent of a problem (or of a success) to increase and inform public and policy interest and opinion. Indicator data cannot unequivocally attribute the effects of programs or policies to outcomes. The application of promising nonexperimental approaches to indicator data have sometimes successfully untangled the effects of policies from the effects of a variety of local and environmental circumstances that could have also affected the outcome of interest. However, these approaches are opportunistic in nature and thus require a specific set of circumstances, sometimes limiting their ability to inform policy in a timely manner. Though not without its own set of limitations, random assignment experimental studies can play a complementary role in making the link between indicators and policy decisions where policymakers and researchers can (at least theoretically) control a priori the circumstances and design of the study. Experimental studies provide the best evidence for making policy and program decisions, generating findings that are difficult to dispute and relatively easy to understand. The results can also increase interest in a particular problem and inform the choice of indicators to be used. Together, indicators and experimental studies can lead policy in a direction to improve outcomes for children and families.

Notes

1. For example, see *Trends in the Well-Being of America's Children and Youth* (U.S. Department of Health and Human Services, 5th edition, 2000) and several documents published by Child Trends on this topic.

- MDRC is a nonprofit, nonpartisan social policy research organization. For more information, see www.mdrc.org.
- As we discuss later, combining this analytic technique with a cluster-randomized design can, however, provide critical data to assess program impact when individual random assignment is not possible.
- 4. See Gennetian, Morris, Bos, and Bloom (forthcoming) for a discussion of treatment effects and their interpretation under conditions of noncompliance.
- 5. For more detailed critical reviews of the weaknesses or limitations of random assignment studies see McCall and Green (2004), Michalopoulos (in press), and Moffitt (2003).

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Informative or Not? Media Coverage of Child Social Policy Issues*

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It is well known that news coverage of a topic influences the public's perception of the importance of that topic. This "agenda-setting effect" of the mass media (McCombs and Shaw, 1972; Rogers and Dearing, 1988) represents one of the key theories about how the news media affect public opinion. Agenda-setting influence occurs at two levels. The first involves the salience or prominence of a given issue on the public agenda, establishing for the public what is important to *think about*; while the second relates to the specific views or opinions the public holds on a topic, or more simply, *what to think* about issues that are deemed important to think about (McCombs and Reynolds, 2002).

By serving as gatekeepers of the information the public receives about the condition of children in any society, the press plays a pivotal role in influencing awareness of child-related concerns. Perhaps more important, the messages conveyed by the news media ultimately serve as the foundation for public opinion about the need for policy action to promote children's interests on a wide range of issues, as well as how to best discriminate between the available alternatives (Gilliam and Bales, 2001). When one couples these ideas with the knowledge that public opinion typically plays a significant role in triggering and shaping policy activity (Glynn *et al.*, 1999; Kennamer, 1992), it is quickly apparent that child advocates who wish to influence the policy agenda would be well advised to not lose sight of the media agenda. The way in which policymakers view children's needs and interests can be said to flow, at least in part, from public perceptions that are influenced significantly by the media's coverage of children.

In the United States, researchers have examined the nature and extent of coverage of child-related topics and issues by assessing the broad themes represented in national television and print news (Kunkel, 1994; Kunkel *et al.*, 1999), and in local television news (Dorfman *et al.*, 1997; Parker *et al.*, 2001). These studies have revealed a consistent pattern, with roughly half of all child-related stories reported by the news media devoted to crime and violence coverage. More recently, health topics have received increasing attention, accounting for approximately one-quarter of all stories involving children, with cultural and lifestyle concerns representing most of the balance of child news coverage (Kunkel *et al.*, 1999; Parker *et al.*, 2001).

Child-related news coverage occurs relatively frequently, with major city newspapers averaging more than six stories per edition, and national television networks averaging about one story per newscast (Kunkel *et al.*, 1999). However, very little of this coverage is devoted to policy-related topics that would help to inform the public about important issues affecting children's lives. On network television, only 23% of all child-related stories include any mention of public policy, compared with 20% of stories in major city newspapers, and 13% of stories on local television news (Kunkel *et al.*, 1999; Parker *et al.*, 2001). Such significant topics as child poverty, welfare, and homelessness go virtually unreported in the news media, accounting for less than 1% of all child coverage, despite the fact that one out of six children in the United States lives in homes below the poverty line (U.S. Bureau of the Census, 2000).

These data raise the question of how well the news media are informing the public about the important issues facing American children. Most previous studies of the news media's coverage of children have been primarily descriptive, addressing such questions as how often children are the focus of coverage, and in what topic areas. Much less scrutiny has been devoted to the question of how thoroughly the news media report the stories that are delivered, and the extent to which they convey critical empirical information regarding child policy topics. That is the goal of the present study. Such information can help to illuminate opportunities for increasing the use and enhancing the impact of child indicators as a means of informing the public and policymakers.

In collaboration with the Annie E. Casey Journalism Center on Children and Families at the University of Maryland, the sponsor of this research, the authors selected five key topic areas of critical significance to the well-being of U.S. children: (1) child abuse and neglect; (2) child care; (3) child health insurance; (4) teen child-bearing, and; (5) youth violent crime. All of these issues are of prominent interest to both local and national policymakers. Of course, for information in these topic areas to be influential at informing the public, stories must do more than report isolated events. Presumably they must provide a context, helping the reader to place recent developments into a broader base of knowledge that would encompass critical patterns and trends, underlying causes, or potential solutions related to a given topic or issue area.

The research team commissioned Child Trends, one of the leading child research firms in the United States, to provide a summary of the most important information currently available in each realm. That information was then used as a basis to evaluate the quality of the coverage delivered by the news media in these five topic areas. Child Trends, based in Washington, DC, is a nonprofit, nonpartisan research organization that regularly engages in government-funded research in each of these five topic areas. Senior researchers prepared one-page briefing papers in their respective areas. Each briefing paper included an initial overall summary statement, followed by four independent "bullet" points, each representing an important trend or development in the judgment of the Child Trends experts. For example, in the area of child health insurance, the summary statement reads: "The percentage of children with health insurance coverage has remained largely unchanged

(between 85–87 percent) for more than a decade." The first of the detailed points reads: "Children in working poor families are less likely to have health insurance than either children in other poor families or children in families that are not poor." Copies of each of the briefing papers prepared for use in this study are included in Appendix of this report.

These briefing papers were used to evaluate whether stories in each of the five topic areas provided readers with relevant background or contextual information with which to make sense of the recent events or developments being reported. The study examines the two primary media by which most Americans receive their daily news: television and newspapers. The researchers analyzed a large and broad sample of news coverage, including 12 major newspapers from throughout the country and newscasts on the four leading national television networks. For each of the sources sampled, the study monitored their news product daily for 3 months. Overall, the study examined 1065 editions of newspapers and 354 television newscasts, which to our knowledge establishes it as the largest empirical analysis of child-related news coverage in the United States.

Methodology

Sample

The news content analyzed for this research was gathered between April 21 and July 20, 2001. During this period, each source monitored by the study was examined daily. The study selected 12 major metropolitan newspapers to include based on considerations of broad geographical diversity and diversity of ownership. The newspapers included in the study were: Atlanta Journal-Constitution, Chicago Tribune, The Denver Post, Houston Chronicle, Los Angeles Times, Miami Herald, Minneapolis Star Tribune, The New York Times, The Daily Oklahoman, The (Portland) Oregonian, The Washington Post, and the national newspaper USA Today. In addition, the study included four national television news sources: ABC, CBS, and NBC (the only three broadcast networks with daily newscasts), and the leading cable news network, CNN. Researchers videotaped and analyzed each of the broadcast networks' 30-minute nightly newscast, and CNN's 30-minute newscast airing at 10 p.m. EST. The 10 p.m. newscast for CNN was selected because its 30-minute length matched that of the broadcast network newscasts, and would therefore minimize disparities in findings across networks that would be attributable to the much larger news hole available on CNN.

Stories Examined by the Study

The study evaluated this broad sample of news media coverage using systematic content analysis procedures. Stories were initially judged to determine whether they contained a primary focus on children or child-related issues. Children were defined as those under age 18. In cases where age was not specified but grade level was,

we included youth through the high school years; college students were excluded. Only those stories that fell within the boundaries of one of five topic areas were analyzed. The topics are:

- Child abuse and neglect. Stories in this category focus on maltreatment (either overt acts or failure to take action) on the part of a parent, child caregiver, or provider that poses risk of or results in death, serious physical, emotional, or developmental harm. Common examples in this category include stories about child sexual molestation or child abandonment.
- Child care. These stories report on individuals, groups, or institutions that regularly provide primary care for youngsters' needs while parents are at work or otherwise preoccupied. The children receiving care must be younger than age 13 and not related to the child care provider for a story to be coded in this category. For example, stories may focus on the extent to which families rely on child care, the quality of child care (e.g., facilities, personnel, curriculum), or the effects of child care on children's development.
- Child health insurance. These stories address issues involving whether, as well as how and how well, children are covered by health insurance for basic medical treatment. All types of stories involving public or private health insurance coverage for children are included, as are stories about children who are not insured through these or any other type of health plan.
- Teen child-bearing. Stories in this category are those concerned with teen pregnancy, decisions to have a child, or subsequent child-rearing by teen parents of either gender, whether married or not. Examples include stories about the day-to-day life of a pregnant teen, a teenage mother who graduates from high school, or the risks faced by children of teen parents.
- Youth violent crime. This area was defined as any story about illegal activity in which victims are directly and intentionally threatened or harmed and with a child involved as either a perpetrator or victim. For example, a story might focus on a young child who commits a murder (e.g., a schoolyard shooting) or who has been the victim of a violent crime (e.g., Jon Benet Ramsey).

To be included in the study, a story had to focus prominently on children, and have a primary orientation throughout the story on one of the topic areas. Each relevant story was classified within only one of the five topic areas examined in the study. Any story that might arguably fit within multiple areas was classified in the one category judged to be its strongest match, with one exception. Obviously, many stories in the child abuse and neglect area would also qualify as youth violent crime (i.e., children as victims of violence). In all such cases involving this type of overlap, the story was classified solely as child abuse and neglect, privileging the more specific of the two topic areas.

To maintain a focus on news coverage and to limit consideration to only substantial stories, we excluded editorials and opinion articles, as well as any stories that did not exceed three column inches in length. In addition, because the evaluative criteria that were applied in the study were focused on knowledge in the five topic areas from a distinctly U.S. perspective, we also excluded stories with a primarily international orientation.

Descriptive Measures

Researchers analyzed each story that fit within one of the five topic areas and met the additional criteria specified above on several descriptive measures, including story length, story placement (i.e., section of the newspaper), story position (lead vs. buried, with lead defined as a newspaper story on the front page of any section, or a television story that aired before the first commercial break within a newscast), and story frame (episodic vs. thematic, which differentiates "breaking news" from the less time-sensitive general analysis of an issue).

In addition, researchers collected observations about the types of information contained in each story, including the following variables: use of expert sources; use of parents or children as sources; use of statistical information; providing information of practical use for parents (defined as identifying specific actions or strategies that parents can employ in child-rearing), and providing historical context for the story (defined as supplementary information at least 1 year old).

Finally, the study examined stories to determine whether they included information about public policy. Stories that addressed public policy issues were also judged on the extent to which they presented factual information about the current state of policy, identified any successes accomplished by current policy, identified any problems with current policy, or presented any suggestions or proposals for future policy.

Evaluative Measures

As indicated above, we prepared expert briefing papers in each of the five topic areas. Each briefing paper included an overall summary statement of critical knowledge within that topic area, followed by four independent, key "bullet" points. For each of these five elements, coders judged whether stories provided information consistent with or closely relevant to these points of information judged most important by the knowledge area experts. The study classified original observations on a five-point scale, with judgments ranging from "presents no relevant information" to "presents all aspects clearly and prominently in the story." Because of the very low frequency of information relevant to the topic area knowledge identified by the expert briefing papers, we report the data from the evaluative measures for this study dichotomously, differentiating those stories that include any such information from those stories that do not.

Coding Judgments and Reliability

Twelve undergraduate research assistants at the University of California, Santa Barbara, performed the coding judgments for this study. Data evaluating each newspaper or newscast was obtained from a single coder. Thus, it is important to demonstrate that the judgments made by coders reflected strong agreement throughout the process of data collection.

Coders were trained for approximately 40 hours under the close supervision of the study's authors before beginning their work. At the conclusion of training,

we conducted a reliability test to demonstrate an acceptable level of consistency across coders. Once actual coding of data began, nine additional tests of intercoder reliability were conducted at roughly 1-week intervals throughout the period of data collection. Each test involved the independent review of a randomly selected newspaper or television newscast in its entirety by all coders.

Across all of these tests, coders achieved an overall level of agreement of 82% on their decisions about whether to classify a story as child-related within one of the five topic areas examined by the study. At the next level of story identification, coders agreed 94% of the time on the topic area for all stories that they decided to code. Across 23 items included in the descriptive measures, coders agreed more than 90% of the time on 16 of them, and between 86% and 89% of the time on five of the measures. Two variables achieved more modest reliability: stories that identify problems with current policy (72%) and stories that present suggestions/proposals for future policy (77%). Items such as these with reliability in the 70–80% range should be viewed with some caution due to their slightly reduced, though still acceptable, level of reliability. Finally, there were 20 items (5 within each topic area) that comprised the evaluative measures for the study. Coders achieved a 90% or greater level of agreement across all of these items. Thus, with the exception of the two descriptive items identified above, the reliability assessments establish strong confidence in the accuracy of the data reported in the study.

Findings

Frequency of Coverage

The starting point for assessing the news media's coverage of these five key children's issues is to examine the relative frequency with which stories addressed any of the topic areas. From an overall perspective, we identified 1024 stories across the 1065 newspaper editions analyzed, indicating that an average of roughly one story from among the five areas was found in each edition of the newspapers surveyed. This overall perspective, however, masks several important trends in the data, including significant differences in the frequency of stories provided within each of the five topic areas, as well as disparities in the number of relevant stories delivered by the varying news sources included in the study (see Table 1).

Focusing first on reports delivered by the print media, we see that more than one-half of all newspaper stories (53%) identified by the study involved youth violent crime, while an additional 40% were in the area of child abuse and neglect. Thus, $94\%^2$ of all print stories included in the study (N=959) addressed child-related crime and violence of one sort or another. The remaining 6% of stories included 3% (N=35) devoted to the topic of child care, 2% (N=19) involving teen child-bearing, and 1% (N=11) addressing child health insurance. The data make clear that these latter three issue areas receive only scant attention from the print news media, given that only 65 stories were presented in a 3-month period across all 12 of the newspapers surveyed. This translates into roughly 5.5 stories per news source

Table 1. Frequency of child-related stories by topic area and news source

	News	Teen child- bearing		Child care		Child health insurance		Child abuse/ neglect		Youth crime/ violence		Total N of
	source	N	%	N	%	N	%	N	%	N	%	stories
News paper	Atlanta Constitution	2	2%	1	1%	2	2%	45	53%	35	41%	85
	Chicago Tribune	0	0%	4	4%	0	0%	45	39%	66	57%	115
	Denver Post	2	2%	7	6%	2	2%	42	37%	60	53%	113
	Houston Chronicle	3	2%	2	1%	4	3%	58	41%	74	53%	141
	Los Angeles Times	1	1%	2	2%	0	0%	45	38%	72	60%	120
	Miami Herald	2	3%	1	1%	0	0%	31	39%	46	58%	80
	Minneapolis Star Tribune	3	4%	2	3%	0	0%	25	35%	42	58%	72
	New York Times	1	2%	5	11%	0	0%	17	39%	21	48%	44
	Okla. City Oklahoman	1	2%	2	3%	0	0%	32	47%	33	49%	68
	Portland Oregonian	1	1%	4	5%	1	1%	33	40%	44	53%	83
	Washington Post	2	2%	2	2%	2	2%	35	43%	41	50%	82
	USA Today	1	5%	3	14%	0	0%	6	29%	11	52%	21
	Newspaper Total	19	2%	35	3%	11	1%	414	40%	545	53%	1024
Television	ABC	1	8%	0	0%	0	0%	4	31%	8	62%	13
	CBS	0	0%	1	6%	0	0%	5	29%	11	65%	17
	NBC	0	0%	0	0%	0	0%	7	58%	5	42%	12
	CNN	1	3%	0	0%	0	0%	17	57%	12	40%	30
	Television	2	3%	1	1%	0	0%	33	46%	36	50%	72
	Total											

Note: Percentages add across to 100% for each news source.

during the 3-month sampling period, or an average of fewer than two stories per month devoted to any coverage of child care, teen child-bearing, or child health insurance.

Examining the frequency of coverage provided by each of the individual newspapers surveyed reveals a broad range in terms of raw numbers, from a low of 21 stories across all five topic areas in *USA Today* (note that it publishes only five issues per week, rather than the seven delivered by all other news sources in the

study) to a high of 141 stories in the *Houston Chronicle*. Despite this variability, the proportion of stories devoted to the categories of youth violent crime and child abuse and neglect holds relatively stable across all sources, ranging from 81% to 98%. It follows, then, that the obverse holds true: that the proportion of stories devoted collectively to the topics of child care, teen child-bearing, or child health insurance ranged from a high of 19% to a low of 2% of all stories presented by any given paper. In sum, regardless of the perspective employed, it is clear that crime and violence dominated the coverage of children in the news in this study, while other important topic areas such as child care, teen child-bearing, and child health insurance were comparatively overlooked by the print media.

If that pattern is clear for newspapers, it is even more so for television news. Across 354 newscasts aired on four national networks during the 3-month sampling period, only 72 stories were presented on any of the five key topic areas. Of those 72 stories, 96% (N=69) were devoted to some form of crime or violence (the combination of youth violent crime and child abuse and neglect). In contrast, the four networks reported only three stories on any of the topics of child care, teen childbearing, and child health insurance. CNN provided the greatest number of stories across all topic area (N=30), averaging about one story every three days, although virtually all of these were devoted to reports categorized as either youth violent crime or child abuse and neglect. During the entire study, no network provided more than one story on all of the three topics of teen child-bearing, child health insurance, or child care, combined.

Basic Characteristics of Coverage

Table 2 provides a summary of the basic characteristics of the stories devoted to the five child topic areas examined by the study. Child care stories were the greatest in length, averaging nearly 23 column inches of newspaper coverage, or roughly double the amount of space devoted to the average article reporting on youth crime and violence (Mean = 11.3 inches). The one television story devoted to child care (4:17) ran substantially longer than the average time for all child-related coverage, which was 1:50 per story. Newspaper stories addressing the five topic areas were split about evenly between the front section (49%) and the local or metropolitan section (47%) of each newspaper, with only a few articles appearing elsewhere. Roughly one out of every four stories (24%) received lead coverage.

The final characteristic reported in Table 2 addresses the extent to which story coverage is either episodic or thematic, a variable that is commonly referred to in news analysis as the "story frame." Episodic frames focus on discrete events that involve individuals located at specific places and times (e.g., a report of nightly crime activity), whereas thematic frames place issues in a broader context by focusing on general conditions or outcomes (e.g., a report on poverty trends in the United States) (Entman, 1993; Gilliam and Bales, 2001). The data from this study confirm the findings of previous research, which indicate that episodic frames predominate in the news media. More specifically, 89% of all the stories analyzed for this study employed an episodic frame, compared with just 11% with a thematic orientation.

Table 2. Basic characteristics of child-related stories by topic area

	Teen child-bearing	Child care	Child health insurance	Child abuse/ neglect	Youth crime/violence	Total
Story type	N = 21	N = 36	N = 11	N = 447	N = 581	N = 1096
		S	Story Length			
Newspaper	15.1	22.8	15.7	13.9	11.3	12.8
Television	1:56	4:17	0	1:52	1:43	1:50
		Section	on of Newspa	per		
Front	52%	26%	45%	50%	49%	49%
Local/Metro	37%	37%	55%	46%	48%	47%
Business	0%	6%	0%	0%	0%	1%
Arts/lifestyle	10%	17%	0%	0%	1%	1%
Special Edition	0%	0%	0%	0%	0%	0%
Other	0%	14%	0%	2%	2%	2%
		S	tory Position			
Lead Story	19%	42%	27%	26%	21%	24%
Buried	81%	58%	73%	74%	79%	76%
			Story Type			
Episodic	57%	42%	91%	90%	92%	89%
Thematic	43%	58%	9%	10%	7%	11%
		:	N of Stories			
N of Newspaper Stories	19	35	11	414	545	102
N of Television Stories	2	1	0	33	36	72
Total N of Stories	21	36	11	447	581	1096

This outcome is driven by the patterns established in the two, most prominent story categories, namely, youth violent crime and child abuse and neglect. In each of these two topic areas, we identified episodic frames in at least 90% of the stories. The vast majority of these articles presented time-sensitive reports of crimes that had just occurred or, to a lesser extent, reported progress or outcomes in law enforcement investigations or judicial proceedings related to the crimes. We also observed an equally high rate of episodic framing in the realm of child health insurance, where most of the very few stories presented focused on actual or proposed changes in the applicable law in the area. In contrast, the media more frequently used thematic framing in stories about child care (58% were thematic) and teen child-bearing (43% were thematic).

We will return to this distinction between episodic and thematic story framing shortly when we address the findings from the evaluative measures that assess how well reporters are providing important background and contextual information for the child-related stories that they write.

Table 3. Elements included in child-related stories by topic area

	Teen child- bearing	Child care	Child health insurance	Child abuse/ neglect	Youth crime/ violence	Total
Story type	N = 21	N = 36	N = 11	N = 447	N = 581	N = 1096
Uses expert sources	71%	89%	100%	76%	76%	77%
Presents some historical context for story	86%	72%	82%	50%	45%	49%
Uses parents as source of information	14%	39%	27%	29%	15%	21%
Presents first-hand accounts from children	38%	11%	0%	13%	24%	19%
Presents information of practical use for parents	10%	19%	18%	2%	1%	3%
Presents statistical information	95%	61%	46%	9%	6%	11%

Finally, Table 3 provides a summary of the use of various elements in the stories addressing the five key topic areas. It reveals that most stories (77%) rely on expert sources, with relatively little variance across the story types. One-half of stories in the area of youth violent crime and about one-half (45%) of child abuse and neglect reports provide some historical context (defined as information at least one year old), whereas other types of stories do this much more often (72–86% of the time). Neither parents nor children are used as sources in the majority of stories in any of the five areas; child care stories are the most likely to use parents as sources (39%) and teen child-bearing stories are the most likely to present first-hand accounts from children. Almost none of the coverage of youth violent crime (1%) or child abuse and neglect (2%) present information of practical use to parents, while other story areas provide such information somewhat more often (10–19%). Statistical information is common in the realm of teen child-bearing (95% of stories), moderately common in the areas of child care (61%) and child health insurance (46%), and quite uncommon in stories about child abuse and neglect (9%) or youth violent crime (6%).

Coverage of Public Policy Concerns

There is a wide range among the five story topic areas in their focus on public policy concerns (see Table 4). Child health insurance stories usually present some factual information about policy issues in their coverage (91% of stories), whereas stories on youth violent crime (15%) and child abuse and neglect (17%) typically do not. Stories on teen child-bearing (24%) and child care (47%) fall in between these two extremes

From an overall perspective, stories about child health insurance have the greatest likelihood of presenting factual information about current policy, of identifying

Table 4. Treatment of public policy in child-related stories by topic area

	Teen child- bearing	Child care	Child health insurance	Child abuse/ neglect	Youth crime/ violence	Total
Story type	$\overline{N} = 21$	N = 36	N = 11	N = 447	N = 581	N = 1096
Presents factual information about the current state of policy	24%	47%	91%	16%	14%	17%
Identifies problems with the current policy*	14%	33%	55%	11%	7%	10%
Presents suggestions or proposals for future policy*	19%	19%	27%	4%	2%	4%
Identifies successes accomplished by the current policy	19%	31%	55%	8%	5%	8%

Note: Items marked with an asterisk reflect data with slightly low reliability coefficients, as described in the "Methodology" section of this report, and should be viewed with some caution

successes and problems associated with current policy, and of presenting proposals for future policy. Child care stories rank second on all of these measures, followed by teen child-bearing. In contrast, stories about youth violent crime and child abuse and neglect rank consistently low on all of the measures of policy coverage.

Providing Important Contextual Information

The primary goal of this research is to assess the extent to which coverage within these five key topic areas provides the reader or listener with the critical background and contextual knowledge in each domain. Examining all articles identified by the study, we see significant differences across areas in how thoroughly the press performs this function. In the realm of teen child-bearing, 90% of all stories included at least some information identified by the expert briefing papers as background in the story, and this was also true of 75% of the stories on child care (see Table 5, left-hand column). At the opposite end of the spectrum, stories about youth violent crime and child abuse and neglect rarely included any relevant contextual information, with only 3% and 5% of their stories, respectively, addressing any of the points in the expert briefing papers. Child health insurance fell in the middle, with 36% of its stories including important background information identified by the experts, although its total number of stories is so small (11) that one must be cautious in interpreting the findings in this area.

As noted previously, the story categories of youth violent crime and child abuse and neglect both reflect a predominantly episodic approach to the framing of their reports. More specifically, about 9 of every 10 such stories reflect an episodic

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Table 5. Use of important contextual information in child-related stories by topic area

<u> </u>		, i
T	% of all stories with relevant	% of thematic stories with relevant
Type of coverage	information	information
Teen	Childbearing	
US has high rate despite recent declines	81%	89%
Shifts in rate over past years	71%	78%
Hispanics have highest rate	29%	22%
Identification of key risk factors	9%	11%
Proportion of non-married births by teens	5%	11%
% of stories with relevant information	90%	100%
on at least one item		
	Child Care	
Child care is increasingly common	14%	14%
Majority of young children experience	11%	5%
Government subsidies have increased	14%	10%
Quality has modest impact on child development	44%	52%
Research on effects is controversial	42%	52%
% of stories with relevant information	75%	76%
on at least one item		
Child I	lealth Insurance	
Proportion without coverage is highly stable	9%	100%
Working poor families are least covered	36%	100%
Proportions with private coverage has fluctuated	0	0
Publicly-provided coverage has fluctuated	0	0
Hispanics are least likely to be covered	0	0
% of stories with relevant information	36%	100%
on at least one item		
Child	Abuse/Neglect	
Neglect is most common form	1%	9%
Number of victims is declining	0	5%
Relative frequency by type	0	5%
Youngest are most valuable	3%	5%
Parent is most common perpetrator	0	21%
% of stories with relevant information	5%	34%
on at least one item		
	Crime/Violence	20/
Levels remain high despite recent declines	1%	9%
Shifts in rate over past years	1%	11%
Firearms increasingly used	0	2%
Overall shifts driven by black male change	0	2%
Teens more likely crime victims than adults	0	6%
% of stories with relevant information on at least one item	3%	24%

frame. In contrast, stories about teen child-bearing and child care were more evenly balanced, with a nearly equal split between articles employing an episodic or a thematic frame. This different approach to the framing of how stories are reported is clearly associated with the use or omission of critical background information. This pattern can be seen by comparing the right-hand column of Table 5, which isolates the stories that employ only a thematic frame, with the left-hand column of the table, which analyzes all stories regardless of framing approach.

When we examine only those stories with a thematic frame (113 of the 1024 stories), we see that a substantially greater proportion of news coverage includes critical background information on youth violent crime and child abuse and neglect. That is, the percentage of stories presenting relevant background knowledge jumps from 3% to 24% for youth violent crime, and from 5% to 34% for child abuse and neglect. Of course, these higher levels of information are found in only the small minority of stories (about 10%) in each of the two topic areas that employ a thematic approach to their subject matter. We find no comparable shift for child care (75% overall vs. 76% thematic), and only a modest improvement for teen child-bearing (90% overall vs. 100% thematic). For child health insurance, the figure jumps from 36% to 100% when stories are framed thematically, although the comparison is of limited value because only one of the 11 articles in this area employed a thematic frame.

In sum, this study makes clear that the news media's coverage of both youth violent crime and child abuse and neglect typically omits background information that the Child Trends research experts deem most valuable for understanding these issues. In the realm of youth crime and violence, even those stories that emphasize analysis over the reporting of episodic events reflect this same pattern. Only one of four (24%) thematic stories on youth crime or violence include any of the trend or background information identified by area experts, while in the area of child abuse and neglect, only one out of three (34%) such stories meet that same mark.

News media performance was much stronger on stories involving teen child-bearing and child care. Although the media devoted much less coverage to these topics, 75% of all stories about child care presented at least some information identified as critical by area experts, while 9 out of 10 of all stories about teen child-bearing did the same. Stories on child health insurance proved to be only moderate in their use of relevant background information, with roughly one out of three (36%) including at least some of the key points identified by area experts.

Conclusion

This study of the news media's coverage of children focused on five topic areas widely recognized as among the most significant issues facing American youth. Two of these five topics—youth violent crime and child abuse and neglect—received extensive coverage in the news. Indeed, these two subjects collectively accounted for more than 9 of every 10 stories in all five of the categories examined during a 3-month period. In contrast, the print media consistently overlooked important topics such as teen child-bearing, child health insurance, and child care, and these topics were almost invisible on national television newscasts. Even the nation's most

prominent metropolitan newspapers, on average, deliver no more than a story or two per month across all three of these "nonviolent" topic areas.

The framing of stories devoted to the categories of youth violent crime and child abuse and neglect are also quite different from the stories about teen childbearing, child health insurance, and child care. Stories in the former group tend to be shorter and framed in episodic fashion (meaning they emphasize "breaking news" developments) in at least 9 of every 10 stories. In contrast, stories on the topic of teen child-bearing, child health insurance, and child care all tend to be somewhat longer and to rely much less frequently on reporting time-sensitive events without placing those developments in any broader policy context. News coverage that addresses child health insurance focuses much more extensively on policy, while stories about child care and teen child-bearing tend to include at least moderate treatment of policy perspectives. Perhaps most important to this volume, stories about youth violent crime and child abuse and neglect rarely include statistical information, which means that no child indicators of any sort play a role in these topic areas. By their very nature, child indicators would have been classified by the study as statistical information. (Note that the present research was not done in conjunction with the child indicators project and hence there was no specific measurement of such information in this study.)

Finally, the most significant aspect of this study involves its assessment of how thoroughly news stories about these topic areas provide the reader with information deemed the most important by area experts. In two of the topic areas—child care and teen child-bearing—at least three of every four stories included some of the important contextual information identified by Child Trends experts. Coverage of child health insurance was moderate on this measure, with 36% of stories including some of the important background information.

Yet arguably the most important finding of the study is the dramatically low rate at which stories about youth violent crime or child abuse and neglect provide any important contextual information in their coverage. Fewer than one of every 20 stories in these two categories included any information to help the reader relate the "breaking news" developments to any broader patterns and trends. Even when one isolates only those stories that employ a thematic approach to their topic (i.e., in-depth analysis without any emphasis on breaking news events), the proportion of stories that provide at least some relevant background information is still relatively low, at only 24% of stories about youth violent crime and 34% of stories about child abuse and neglect. This contrasts with the stories in the other three topic areas that emphasized an analytical approach, where the study found that critical contextual information was presented in 76% of child care stories, and 100% of the coverage of teen child-bearing and child health insurance. Clearly, the extent to which the news media provides important background and contextual information on youth violent crime and child abuse and neglect differs from the other three story topics examined in this study.

From a broader perspective, the news media differs substantially in the way it identifies the policy issues affecting children. It would be interesting to examine the relation between these patterns of media coverage and public opinion or knowledge about the particular topics, as well as the potential link between the public's views

and any policy activity in each realm. To our knowledge, no such research has yet been attempted. Given the findings from our study, it seems clear that child indicators can play a much more active role in informing the public and policymakers about critical issues affecting children.

Appendix

Trends in Child Abuse and Neglect in the United States³

After increasing in the early 1990s, the estimated number of children who were victims of abuse and neglect declined from 1994 through 1999. Neglect consistently accounts for about half or more of the cases of child maltreatment.

- From 1990 through 1994, the estimated number of victims of child abuse and neglect increased from approximately 861,000 to just over 1 million. The trend then reversed so that by 1999, an estimated 826,000 children were victims of abuse and neglect.
- In 1999, 58% of child maltreatment victims experienced neglect, 21% were physically abused, and 11% were sexually abused. (Please note that some children suffered more than one form of maltreatment.)
- Rates for child maltreatment are highest for the youngest children (ages 0–3) and lowest for older children (ages 16–17).
- In the vast majority of child maltreatment cases, a parent or parents (including step-parents) are the perpetrators.
- Based on data from 19 states, a parent or parents were the perpetrators in 87% of child maltreatment cases in 1999. Other care providers and relatives together were perpetrators in less than 6% of child maltreatment cases.
- In almost half of cases of child maltreatment (45%), a child was victimized by a female parent acting alone. In 18% of cases, both parents were the perpetrators, and in 16% of cases, the perpetrator was a male parent acting alone.

Child Care³

Child care has become an increasingly common experience among families with young children.

- More than half (54%) of children ages birth through 3rd grade were in some kind of nonparental care in 1999, up slightly from 1995. This includes:
 - 49% of children ages birth to 2; 77% of children ages 3–6 not yet in kindergarten, some portion of whom are in a preschool or other early childhood education program; 49% of kindergartners; and 43% of children in grades 1 through 3.
- Under welfare reform, federal and state funding has increased to provide child care subsidies to low-income families, especially those moving from welfare to work.
 Yet many eligible families still do not receive subsidies, and the subsidy levels are often too low to purchase quality care.

Working families with modest incomes may have the hardest time paying for child care since they often do not qualify for subsidies.

- Research finds that the *quality* of child care has at least a modest influence on child outcomes, but that the family and the home environments are much stronger influences on child outcomes than is child care.
 - Research also suggests that much of the child care available in the U.S. is *not* high-quality.
- Debates continue in the research community over the effects of child care on children, even as use of child care is increasingly common among families of young children.

Health Insurance Coverage for Children in the U.S.³

The percentage of children with health insurance coverage has remained largely unchanged (between 85 and 87%) for more than a decade.

- Children in working poor families⁴ are less likely to have health insurance than either children in other poor families or children in families that are not poor.
 However, the gap in health insurance coverage between children in working poor families and children in other poor families narrowed between 1996 and 1998 after implementation of the Children's Health Insurance Program (CHIP), which primarily targets children with family incomes between 100 and 200% of poverty.
- The percentage of children with private health insurance has declined in the last decade, from 74% of all children in 1988 to 68% in 1998.
- The percentage of children with publicly-provided health insurance fluctuated during this same period, increasing from 19% in 1988 to 27% in 1993, before declining to 23% by 1998.
 - Black and Hispanic children are much more likely than white children to receive publicly-provided health insurance. In 1998, 42% of black children, 31% of Hispanic children, and 19% of white children had publicly-provided health insurance.
- In general, Hispanic children are less likely to have health insurance coverage than either black or white children. In 1998, 70% of Hispanic children had health insurance, compared to 80% of black children and 86% of white children.

Teen Childbearing in the United States³

The U.S. teen birth rate has declined every year from 1991 to 1999, yet the U.S. still has a much higher teen birth rate than other industrialized nations.

- The teen birth rate in the U.S. declined substantially from 1960 through 1986. The trend then reversed, as the teen birth rate increased between 1986 and 1991, fueling public concern over teen pregnancy. After 1991, the teen birth rate began to decrease again and has continued to decline through 1999, the latest year for which data are available. (See Figure A.1.)
- *Hispanics* have had the highest teen birth rate in the U.S. since 1995, followed by blacks and then whites. While the black and white rates declined beginning

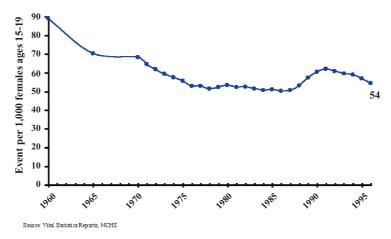


Fig. A.1. U.S. teen birth rate, 1960–1996.

in 1992, the Hispanic teen birth rate did not begin to decline until 1995. (See Figure A.2).

Blacks have experienced the most substantial drop in the teen birth rate between 1991 and 1999.

Whites account for 45% of all teen births (ages 15–19) in the U.S. Blacks account for 25%, and Hispanics for 26%.

- Research strongly indicates that four factors increase the likelihood that a teen will bear a child: poverty, family dysfunction, early behavior problems, and early school failure.
- Teenagers account for a diminishing share of births outside of marriage in the U.S. In 1999, teens accounted for 29% of nonmarital births, compared to half of

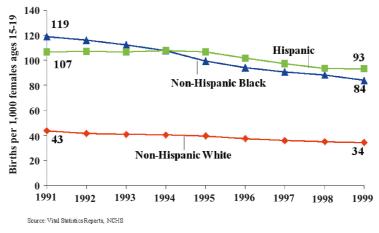


Fig. A.2. U.S. teen birth rate by race/ethnicity, 1991–1999.

nonmarital births in 1970. Women in their 20s accounted for 55% of nonmarital births in 1999.

Violent Crime Among Youth in the United States³

Violent crime by youth and on youth have both declined substantially since the mid-1990s, although levels remain very high.

- Rates of serious violent crime by youth (including aggravated assault, rape, robbery, and homicide) increased substantially from the mid-1980s through the early 1990s. The rate then began to drop in 1994 and has declined steadily since then.
- Firearms are involved in 85% of youth homicides—up from 66% in 1980.
- Both the increase and the subsequent decrease in the youth homicide rate were largely driven by changes in the homicide rate for black male youth. While the black youth homicide rate (ages 15–19) fell by almost half between 1993 and 1998, it remains much higher than the white youth homicide rate.
- Youth ages 12–17 are nearly three times as likely as adults to be victims of serious violent crimes.

Notes

- * This research was supported by a grant from the Annie E. Casey Journalism Center of the University of Maryland, a program of the Annie E. Casey Foundation, Baltimore, Maryland.
- 1. In content analysis research, simple variables (e.g., the age of TV characters) are expected to be coded at a level of approximately 90% agreement to yield legitimate data, whereas more complex variables are generally judged as acceptable by social scientists when they achieve a level of agreement of approximately 80% or above. Disagreements rarely occurred about whether to code articles with a clear emphasis on children, yet many articles mentioned children or family concerns tangentially and posed a challenge for coders about whether to include them as having a "primary focus" on children. The 82% agreement rate on decisions to code articles for this study is consistent with previous research published in recognized peer reviewed academic journals, given the complexity of the task
- 2. Actual figures are 53.2% and 40.4% which sum with rounding to 94% overall.
- ${\it 3. \ \, Prepared by Child Trends for the Casey Journalism Center.}$
- 4. Working poor families are defined here as families with incomes below the federal poverty line in which two parents together work at least 35 hours a week, or a single parent works at least 20 hours a week.

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Some Possible Directions for Research

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Introduction

The previous chapters focus on a wide range of indicators of child well-being, their uses and potential uses, and numerous methods of data collection and dissemination. At the same time, the breadth of perspectives and range of examples for the measurement and use of indicators illustrates the lack of solid knowledge and consensus about what types of indicators are most salient to national and local policymakers, to program directors, and to academic constituencies. Furthermore, we still lack an understanding of the conditions (context and mode of dissemination) that lead to specific indicators having an impact. In this chapter, we attempt to identify important gaps in our knowledge of child indicators and suggest ways in which research can begin to fill those gaps. We also discuss how research can best make use of indicators.

Ben-Arieh and Goerge observe that the stakes are high as indicators have the potential to improve the lives of children. However, to have such an impact, the "right" set of indicators must be identified; that is, the indictors that will maximize the value of the information conveyed in a package that appeals to those who act upon them. This is not a small task as those who attend to child well-being indicators may diverge in the goals they think are most important and in the type of information to which they respond. Furthermore, those of us in the research community who believe that indicators are potentially of great value and worth an investment of resources come from a variety of disciplinary backgrounds. Consequently (and not surprisingly), we tend to allocate different weight to specific domains of children's well-being.

We identify five questions that future research should answers and suggest appropriate methodologies to answer each question, indicate the academic disciplines for which each question is most salient, identify methodological priorities, and point out relevance for policymakers. The questions are listed in Table 1. They are (1) What are the most salient outcome measures? (2) How can indicators be used to maximize their influence on policy? (3) How should indicators be packaged and marketed? (4) How can indicators be used to shape public opinion, and (5) What are the most meaningful metrics for indicators?

Our suggestion that new research needs to answer some fundamental questions in the area of children's indicators is not intended to diminish the value of the large body of work in the area developed over the past 40 years. In fact, this area of interest has progressed considerably, at least in the academic community. Changes can be

Table 1. Suggested research directions and their implications.

		•		
	Method	Investigators field	What Is important?	Policymakers' reaction
What are the most salient outcome measures?	Basic social science research	Social science academics	Scientific rigor more important than timeliness	Not relevant
Which indicators have the most impact on shaping policies?	Case studies, policymakers' surveys	Public policy academics, advocates, and consultants	Timeliness is critical	Core question
How should indicators be packaged and marketed?	Market research (focus groups, product testing)	Business and economic academics, consumer and commercial research	Scientific rigor more important than timeliness	Central question
How can indicators be used to shape public opinion?	Public opinion polls, content analysis	Political science and communication	Scientific rigor and timeliness are important	Relevant but not crucial
What are the most meaningful metrics for indicators?	Time series and comparative research	Multidisciplinary consortiums	Scientific rigor more important than timeliness	Not relevant

characterized along four axes: Early indicators tended to focus on child survival, whereas recent indicators are more inclusive of child well-being; indicators have shifted from being primarily focused on negative outcomes to positive outcomes; an emphasis on "well-becoming," that is, indicators that predict subsequent achievement or well-being, has been supplanted by indicators of current well-being; and, finally, the field is becoming much more expansive as it develops indicators across new domains. The evolution of indicators has occurred in many countries, although at varying paces. (See Ben-Arieh [2002] for a discussion of the universality of these trends.)

The progress that has been made in the development of indicators has come at a cost. As indicators have been broadened to include multiple domains of child well-being, the need to identify parsimonious sets of "best" measures has grown. Additionally, researchers continue to work on refining ways to measure child outcomes (Moore *et al.*, 2004; Wells and Johnson, 2001).

Research Question 1: What are the Most Salient Outcome Measure?

As mentioned above, there is a shift in the development of indicators from those focusing primarily on negative outcomes and problems and that are future-oriented to one which is inclusive of positive and current outcomes. However, the former

continue to be the most widely used in practice, despite their limitations (Aber and Jones, 1997; Ben-Arieh *et al.*, 2001; Federal Interagency Forum on Child and Family Statistics, 2002; Guzman *et al.*, 2003; Moore, 1997). This is probably because research on indicators has tended toward adding rather than systematically evaluating indicators. Rigorous evaluation of how well indicators reflect children's well-being, how complementary they are, and how interrelated they are with other present-time indicators as well as longer term outcomes would help researchers reduce to a manageable list the outcomes they focus on, and perhaps more importantly, help convince policymakers to value indicators as markers of population level needs and of the effectiveness of policies intended to improve the lives of children.

The burden of pursuing this line of research lies with social science academicians who possess the data and methodological tools necessary for such evaluations. They also tend to be the ones developing new indicators. Morris and Gennetian, in their chapter, illustrate one promising approach to assessing children's well-being—controlled experiments, though they also note the limitations of those methods.

A rigorous, scientific determination of a best set of indicators requires much testing and replication in various countries and for various subpopulations. Therefore, it is a lengthy process. It is also one that is not likely to be followed closely by policymakers until the research can lead to specific recommendations.

Research Question 2: Which Indicators have the Most Impact on Shaping Policies?

The question of which indicators provide the best markers of children's well-being is distinct from the question of how to maximize their impact. Much of this volume is devoted to case studies of the latter. Together, these case studies provide valuable insights into ways in which indicators can potentially influence policy. Yet there has been very little systematic research on this potential influence (Ben-Arieh *et al.*, 2001). As a result, advocates for children often rely on their experience, which may be limited, and on what may be subjective perceptions of the value of the indicators they point to in their appeals to policymakers. The lack of research on indicator effectiveness may also hinder a standardization of the information presented to national and local leaders. The effort required by each advocate to familiarize leaders with new sets of indicators is resource-intensive and may not have as large and impact as would a standard set of indicators with which policymakers are familiar. What complicates the task of investigating the impact of indicators (or sets of indicators) is that maximizing their impact may vary by the specific types of programs or policies in play.

Indicator impact investigations can proceed in a number of different ways. One possible strategy is to compile case studies such as the ones presented in previous chapters and to draw from them lists of approaches to the use of indicators that have at least the potential to be effective. Subsequent to identifying promising approaches currently in use as well as new approaches advocated by researchers and child advocates, studies could be designed with the specific intention of determining which are most effective. Another approach is to survey policymakers about what

indicators they rely on and what format is most accessible to them (such as the approach described by Little and discussed by Stagner and Capizzano in this volume), to systematically inventory what indicator data make it to policymakers.

The different approaches to indicator effectiveness studies might best be carried out by consortia of public policy analysts (from academia and research institutes) as well as by advocates and policy consultants who may have more direct access to policymakers. In contrast to question (1), timeliness is critical when there is a need to determine how best to impact specific policies, as the timing of debates around those policies is not likely to be driven by researchers. For this second question, the response of policymakers is the primary outcome, so the relevance of their reaction is high.

Research Question 3: How Should Indicators Be Packaged and Marketed?

The question of how to translate research findings into language, formats, and media that are appealing to policymakers is one that had received increasing attention. As with question (2), there is more anecdotal and speculative knowledge about how this translational activity should be conducted than actual empirical evidence, despite the fact that many private communication firms claim to possess this knowledge. Some researchers have suggested possible delivery mechanisms and approaches (such as the need to tailor messages to both media and politicians) that might enhance the impact of child well-being research (Appelbaum *et al.*, 2004; Ben-Arieh *et al.*, 2001; Moore, 1997; State Legislative Leaders Foundation, 1995). These suggestions are useful starting points, but their value should be assessed in a rigorous scientific manner.

Social science researchers interested in child well-being often lack the translational expertise and resources necessary to answer this third question. It is likely that studying the impact of various approaches to disseminating indicator-based research and shaping policies would be more appropriately achieved in collaboration with researchers in the fields of business and marketing. Market research and product testing is well suited to these types of investigations.

The investigation of this third question, we think, should weigh scientific rigor more heavily than timeliness, as effective packaging and marketing of research is more likely to vary across client constituents than over particular topics that are open for discussion. In other words, the knowledge gained from market research studies is likely to be applicable across a wide range of topics and over an extended period of time, so long as the targeted recipients are the same.

Research Question 4: How Can Indicators Be Used to Shape Public Opinion?

A question that parallels our third question is how indicators shape public opinion. Part of the answer to this question likely relates to the impact of indicators on policymakers and the news media: Messages that make their way to politicians and to the press are likely to make their way to the public. However, it may be that affecting policy is achieved though indirect means by shaping public opinion. Furthermore, the impact of indicators on public opinion may differ greatly from the direct impact of indicators on policymakers.

Previous research (see, for example, Kunkel *et al.*'s chapter in this volume) has identified historical trends in how children's issues have been shaped in the United States. However, we know little about historical trends in children's policy debates in other countries, and we know very little, if anything, about how indicators shape public opinion now.

We believe that our colleagues in marketing, political science, and communications are the most qualified to answer the question of how indicators can shape public opinion. Research in this area would inform us about the types of indicators to which the public is responsive and how information can be delivered to have the most impact on public opinion.

Research Question 5: What are the Most Meaningful Metrics for Indicators?

Finally, we believe that the impact of indicators is intricately tied to the development of meaningful and widely accepted metrics that help to define and compare (across neighborhoods, cities, states, and nations) the well-being of children. This is perhaps the most challenging of research goals, as it is laden with political ramifications. Setting high standards for indicators of well-being may create controversy by making some localities look bad. Conversely, setting low standards may devalue the effort. One possibility is to resist establishing threshold levels (like the one established for poverty) and instead to develop single and composite indicator scales to be used to monitor progress in children's well-being and to make cross-locality comparisons.

The more collaborative the effort to establish metrics of well-being across disciplines, political spectra, and interest groups, the more widely we think the indicators will be used, and the more impact they will have. However, the determination of appropriate metrics should proceed empirically as well. Benchmarks and scales should have sensible distributions and be reasonably discriminating across individuals and place.

Answering the five interrelated questions that we have discussed in this chapter is a massive task, but one we think will lead to important advances in research on child well-being and a necessary one for indicators to assume their rightful place in the child and family policy arena. We have focused on specific research questions relating to the value and effectiveness of indicators. We have left aside several other general questions to which there remains disagreement among researchers. However, we think the answers to these questions may be provided in part by the answers to the questions we have laid out.

The general questions are (1) Should indicators measure processes and investments in children or outcomes? (2) Should the role of indicators be to define policy

issues or to answer policy questions? (3) Should indicators be universal (applicable across cities, nations, disciplines) or can different sets of indicators be developed for different purposes?

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Studying the Impact of Indicators of Child Well-Being on Policies and Programs

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Conclusion

The volume is devoted to the use of childhood social indicators to improve the well-being (or, in Ben-Arieh's terms, the "well-becoming") of children. While it draws upon the output of an international meeting at Columbia University, it is part of a series of exchanges organized by a multinational group of which Asher Ben-Arieh is a leading figure. (See bibliography of Ben-Arieh and Goerge in this volume for earlier reports.) While the Ben-Arieh and Goerge paper has much of the flavor of an introduction, the Teitler and Ben-Arieh contribution, written after the discussion, could serve very well as a volume conclusion.

Child Trends has defined an indicator as "a measure of behavior, condition, or status that can be tracked over time, across people and/or geographical units." In Corbett's terms, indicators are "quantitative measures of key attributes characterizing how the society is doing." Corbett stresses that the development and use of social indicators in ways that significantly influence public policies have emerged as a "critical challenge in recent years." He points out that social programs were traditionally monitored, managed, and evaluated by process measures. In contrast, there is a growing trend toward focusing on outcomes measures on the effects on child and family well-being. The classic experiment is no longer the only analytic strategy for determining whether welfare is working and why.

A number of the papers concentrate on the ways in which well-designed indicators contribute—or might contribute—to programming and policy development in local social services and public assistance ("services integration" [Corbett]); comprehensive community initiatives (McDonell); regional service reform (Shuptrine); national policy monitoring (Bradshaw); making international comparisons (Phipps); and school reform (Klein). In these and other settings, according to Moore and Brown, indicators may serve to enhance description, monitoring, goal-setting, accountability, and evaluation, but each requires cautious use and clarity.

To begin with the context, not the indicator (as in Corbett's discussion of services integration in U.S. welfare reform) inevitably requires a preoccupation with complex organizational matters that may take the focus away from child indicators, even though their importance in evaluation is affirmed. Corbett's work in the Midwest and McDonell's review of problems and solutions in child indicator methodology to assess components of—or all of—comprehensive community initiatives suggest that much is going on and that results are clearly useful.

Here it is appropriate to call attention to the case of the Southern Regional Initiative on Child Care, accurately described by Shuptrine as "a powerful strategy to achieve action on behalf of children and families." The indicators report regional data for 17 states. Task forces and collaboration helped create norms that set state targets and made it possible to note progress. Comparable data across states is critical to support such an effort.

Bradshaw's contribution from the U.K. and the E.U. deals with adoption of indicators to measure progress against child poverty and the social exclusion of children. Here the goals were set and announced politically and the researchers had to search for and adapt several indicators. As important as poverty and exclusion are, they are not the only indicators of child well-being. Bradshaw refers to a broader survey at York University that led to a critique of available measures and identified interest in a survey that would permit children and young people "to express their views about their aspirations, attitudes, beliefs, feeling and perceptions," perhaps more valuable information than "crude measures of family income, public health records, administrative statistics and survey data based on adults." Nonetheless, Bradshaw concludes that indicators played an important role in shaping public policy with regard to reducing child poverty, generated dissatisfaction with existing measures, stimulated the setting of policy goals, and ultimately led to positive outcomes.

In a related paper, Phipps recounts her experience with use of international indicators to help a given country chart and monitor its own progress by providing norms for similarly affluent countries. Such comparisons help identify policy problems and potential solutions. We are able to report such use from our own crossnational research and a child policy comparative database as well (Kamerman and Kahn, 1991, 1995; www.childpolicyintl.org on the Web). We have always said that we do not expect the U.S. to copy what we have reported in various cross-national comparisons but rather to see such data as enriching the menu of options for improving children's lives.

All of these reports of in which indicators are or could be major tools pose challenges to indicator methodology and utilization. The Klein paper recounts a valuable case story. A series of national developments capped by the Bush administration's No Child Left Behind Act reflect the widespread recognition of the importance of school readiness and efforts to develop an indicator that will focus on the crucial dimensions of family, community, and school. Klein describes a 3-year, 17-state project to develop and apply such indicators and offers a helpful section on lessons learned.

The Ben-Arieh and Goerge chapter highlights the desirability of using indicators to help shape policies and programs. Noting that some indicators are more useful than others and demonstrating the need for rules or guidelines in their construction, Ben-Arieh and Goerge find too little research on which indicators are most effective. This volume, they note, is a compendium of methods: case studies, surveys among decision makers, media analysis, and controlled experiments, and they stress the particular value of case studies. They argue that after being reviewed for validity and relevance, indicators should be assessed for "their potential to influence policy making." Details include a listing of social science validity criteria and the experiences of policy planners with an array of indicators.

The Moore and Brown chapter outlines the purposes of indicators: description, monitoring trends over time, goal setting, accountability, and evaluation (not to draw causal conclusions but to inform reflective practice). They provide a systematic exposition of criteria for indicator utility, noting that "in addition to solid science, outcome measures need to reflect social values." Indicator impact depends, too, on accessibility (an on-line data base?) and on effective presentation, preferably with a story line—a coherent and clear explanation of trends and their implications.

Citing a Vermont case study, Hogan endorses "whole population" indicators as assembled by federal agencies, states, and various voluntary groups (see below). Hogan illustrates how a state that adopts health, education, and safety goals can use such standardized indicators to assess progress and makes a compelling case for increasing and improving whole population reports and studying their intersections. Recently, there has been an explosion in indicator reporting and disseminating, both whole population indicators and child-youth reports, like the increasingly focused *Current Population Reports* from the U.S. Bureau of the Census, with both monthly and annual reporting, and the decennial census and the Survey of Income and Program Participation (SIPP), now readily available on-line. Of similar value and availability is the series from the National Center for Health Statistics, part of the U.S. Department of Health and Human Services. The series offers frequent reports and trend data on such subject as births, deaths, immigration, out-of-wedlock births, births by maternal age, pregnancy, marriage, and divorce.

Some recent publications in the field of child and youth indicators field include an improved, well-edited, and attractively published series from the Annie E. Casey Foundation (*Kids Count Data Book* and related special reports); *America's Children* and *Key National Indicators of Well-being* (2003) from the Federal Interagency Forum on Child and Family Statistics; the U.S. Department of Health and Human Services *Trends in the Well-being of America's Children and Youth* (2003); and *Keeping Track of New York City's Children* from the Citizen's Committee on Children of New York. We could add to this list many state, some city, and various specialized voluntary agency compilations, or important international series from UNICEF, the UN, UNESCO, and the Organization for Economic Cooperation and Development (OECD) and the World Health Organization (WHO).

But indicators per se, we are reminded by Morris and Gennetian, "cannot provide information or specific guidance about a policy response to a social policy problem. Experimental studies are a key type of social science research—the 'gold standard' method for untangling cause from effect that can fulfill this role for policymakers and serve a necessary complement to indicator data to best inform policy decisions." Here is one of the volume's most significant conclusions. The illustrations show the experimental approach to be feasible, despite natural skepticism and severe limitations.

There are overwhelming obstacles ahead, as suggested by Little and Kunicel, Smith, Suding, and Biely. Information about the condition of children in America, if judged by current media content, is not well absorbed by the public (and sometimes by officials). Yet there is little hope for policy action without public concern. Much can be done to speak more effectively to legislators and other officials. Data on children and youth are plentiful, but the items chosen for media reporting and

the assimilation of what is circulated is quite limited. Engaging the public must be the highest priority for researchers and advocates. There are natural divisions of labor among indicator scholars, policy researchers, and advocates—but all are most effective when their work is linked.

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