

Children's Well-Being: Indicators and Research 6

Kenneth C. Land *Editor*

The Well-Being of America's Children

Developing and Improving the Child
and Youth Well-Being Index

 Springer

The Well-Being of America's Children

Children's Well-Being: Indicators and Research Series

Volume 6

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Editor

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Foreword

The creation of the Foundation for Child Development (FCD) Index of Child and Youth Well-Being (CWI) has two notable points of origin. First, as part of the celebration of FCD's Centennial during 1999–2000, the FCD Board of Directors made a grant in 1998 to Kenneth Land to explore the feasibility of producing the first national composite index of the status of American children that would chart changes in their well-being over time.

Based on national statistics, was it possible to trace trends in child and youth well-being over several decades? Could such an index provide a way of determining whether the United States was making progress in improving its children's lives?

This effort aimed to build on the significant contributions of a former FCD President, Bert Brim, who, during the 1970s, was a leader in the now thriving field of childhood social indicators. Through the work of Child Trends, incubated within FCD, and the annual releases of KIDS COUNT by the Annie E. Casey Foundation and of the Federal Interagency Forum on Child and Family Statistics, we now have regular reports to remind us that the United States has far to go to be consistent with its ideals of equality and fairness for individuals.

What the CWI findings indicate is that there have been periods of significant declines in children's well-being since its base year of 1975, and periods of some improvements. Progress is clearly not linear with fluctuations that map onto economic recessions. Viewing the CWI trends from 1975 to present, we have clear evidence that the United States must do better by its children and youth. The well-being of American children not only lags behind our peer nations, but is also nowhere near what it should be for a nation of our resources.

A second point of origin in the creation of the CWI is embedded in a historical period in American society where policies and the allocation of public resources to children's health, education, and services became increasingly matters of state and local policies. Less than ten cents out of every federal dollar now goes to children and youth, and that amount is very likely to decline. Child well-being depends on the state where a child is born and the neighborhood where a child lives, directly challenging American ideals of equality of opportunity and fairness.

The CWI is thus part of an effort to keep our eyes on the national status of children: How are all American children in their diversity faring over time? The intention was the construction of the first national index of child well-being during a time when more public responsibility for children was being devolved to states and localities. As it turns out, Land's own work indicates that state CWIs track closely onto the national CWI.

Since the research and development activity related to the CWI began in 1998, more states and cities are increasing their capacity to organize and, in some cases, to integrate their data systems to provide more timely and localized information about children and youth across their public agencies. Information technologies make it easier to collect and to analyze children's well-being at the Census tract level, to aggregate that data back into national and even international patterns, and to present these data in visually compelling ways.

FCD's original expectations for the first national index of child well-being have been met. The CWI has been constructed and is firmly part of the social indicators field. It is being used to highlight the status of American children annually, and as point of origin for policy-relevant discussions at the national level. There have been some unanticipated and positive consequences as well.

Land proved that not only was it possible to construct a national index of child well-being, that composite index also connected specific social indicators in a way that could represent "the whole child." This was the most contentious part of the enterprise: How does one put together different indicators of children's life in a way that researchers as well as others can accept as a good evidence-based composite of children's well-being?

That issue is documented in the following chapters and on the FCD website www.fcd-us.org. That documentation provides evidence for the openness and scholarly exchange which is characteristic of the continuing development of the CWI over the years. In the end, there is no perfect solution, but the different points of view about the construction of the CWI reflect different ways of approaching the conceptualization and measurement of child well-being.

Some aspects of children's status are easier to measure, such as reading achievement; others like spirituality and emotional well-being are more vexing. Aiming to construct an index that more accurately reflects the child in toto has led to needed discussions of the kinds of measures that need to be included in national surveys of child and youth well-being, especially in the social and emotional domains as well as more measures that reflect positive rather than problematic development.

Over several annual releases of the CWI since 2003, special reports have been issued that address international comparisons in child well-being, intergenerational changes, age spans, immigrant status, gender as well as economic and racial/ethnic inequalities. These reports have augmented others on the growing economic inequalities in American society, and an early annual release in 2005 documented the rising trend in child obesity before it rose to national attention.

In these ways and through coverage by both national and local media, the status of children and youth has received some of the attention it deserves. A country that neglects investments in its human and social capital is a country in peril.

One of the most interesting analyses using the CWI involves “best practice comparisons” which permit estimates of how much better the well-being of children could be if the United States had been at or near its best historical values on each of the indicators of the CWI. Land and his colleagues estimated that the CWI could have improved by 28% compared to 1975 values. More speculative are analyses of how much better American children would be if the component indicators in the United States reached levels of best values observed in other countries; the CWI would have improved by about 47% based on 1975 values. Clearly, the United States can do much better by its children and youth than it now is. The CWI provides a quantitative basis for that conclusion.

The value of the CWI in the scientific community and in the public commons rests on the contributions of many individuals for over a decade. I thank Kenneth Land, Vicki Lamb, and their graduate students at Duke University for creating and issuing timely reports based on the CWI since 1998. Scholars over the years have reviewed the CWI’s construction and contributed to the literature on its development. In 2009, the Foundation conducted an external review of the CWI work. I thank Nancy Eisenberg, Patricia Gandara, Leighton Ku, and Timothy Smeeding for their careful review of the CWI enterprise at that time. (Papers prepared for that review can be found on www.fcd-us.org)

The Directors of the FCD Board, initially with the leadership of Board Chair Barbara Paul Robinson and Chairs Karen N. Gerard, and P. Lindsay Chase-Lansdale, have been friendly critics of the CWI work, and committed resources over the long period required for research and development of the CWI, and to its vigorous dissemination. Donald J. Hernandez, as a FCD Board member, identified Land as potential researcher for this enterprise, and himself conducted analyses of social and economic inequalities based in the CWI. Fasaha M. Traylor served as FCD program officer for the CWI from 1998 to 2010.

William O’Hare, founding Kids Count Director of the Annie E. Casey Foundation, has always been a strong supporter and generous advisor to FCD on the CWI. He has conducted analyses to produce state CWIs which rank states by their child well-being indices and link state and local policies to child outcomes.

Mark Bogosian, as FCD Communications Officer, has worked tirelessly to assure that the findings are communicated accurately and well. The Brookings Institution, The New America Foundation, and First Focus have been partners with FCD in bringing the CWI to the attention of policymakers in Washington, DC, and making connections between the annual releases and critical child and family policy issues. Amanda Fox and Lisa Chen of Fenton Communications did much to increase public understanding of the CWI through the media in recent years.

The FCD Index of Child and Youth Well-Being is an indicator of FCD’s commitment to connecting research to policy through advocacy. Our goal is to use the CWI as a way to call the nation’s attention to what its children require for happy and productive lives. Michael I. Cohen chairs the CWI Advisory Panel, which meets twice a year to advise the research team and to be a lively forum for vetting ideas regarding the CWI. Its members include Nancy Folbre, Eugene Garcia, Leighton Ku, William O’Hare, and Andrew Racine.

The CWI is an evolving and rich enterprise. This edited volume attests to that evolution and what the CWI promises for how we understand the progress – or lack of progress – in enhancing the life prospects of all American children. As a signature enterprise funded by the Foundation for Child Development, the CWI connects science, policy, and advocacy toward the goal of lively public discussion about how to create a stronger democratic society that supports optimal child and youth development.

New York, NY

Ruby Takanishi
President, Foundation for Child Development

Acknowledgments

This book brings together 11 chapters that describe, and reflect upon, the Foundation for Child Development Child and Youth Well-Being Index (FCD-CWI). In the foreword to this volume, Dr. Ruby Takanishi, President of the FCD, describes the origin, context, and objectives of work on the CWI, which commenced in 1998. Accordingly, this material will not be repeated here. Rather, on behalf of the current CWI research team at Duke University, consisting of myself, Dr. Vicki L. Lamb, and doctoral candidate Qiang Fu, and former members Dr. Sarah Mustillo, Dr. Sarah Meadows, Dr. Hui Zheng, I acknowledge with gratitude the support of the FCD for the development, annual updating, and continuing refinements and extensions of the CWI. The long-term commitment of the FCD to the CWI project has been essential to its accomplishments, as they could not be achieved within a short time span. Especially important has been the support of Dr. Takanishi and FCD staff members Fasaha M. Traylor and Mark Bogosian and that of the FCD Board and the members of the social scientific research community that the FCD has engaged to provide commentary, counsel, and guidance to the CWI Project.

Kenneth C. Land

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Chapter 1

Introduction

Kenneth C. Land

Every generation of adults, and American adults in particular, has been concerned about the well-being of their children and youth (Moore 1999). From the stagflation and socially turbulent days of the 1970s in the US through the decline of the rust belt industries and transition to the information age in the 1980s to the relatively prosperous *e*-economy and multicultural years of the late-1990s followed by the economically uncertain and politically anxious early years of the twenty-first century, Americans have fretted over the material circumstances of the nation's children, their health and safety, their educational progress, and their moral development. Are their fears and concerns warranted? How do we know whether circumstances of life for children in the United States are bad and worsening or good and improving? On what basis can the public and its leaders form opinions and draw conclusions?

These and related questions are addressed by the chapters of this volume. The present chapter commences with a review of the recent research on the general problem of conceptualizing and measuring the well-being of children and young people. The chapter then sets up the specific aspect of this general problem to which the book is addressed – that of obtaining a sense of the overall direction of changes in child well-being over time and across social space in the United States in the presence of many possible indicators and reports from studies that do not always give consistent information. This leads to a review of the concept of social indicators for societal monitoring and their contributions and limitations. Then the evidence-based approach to the construction of the Child and Youth Well-Being Index as a social indicator is described. The chapter concludes with an overview of the contents of subsequent chapters in the volume and Web-based databanks and related resources on child well-being.

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Conceptualizing and Measuring Child Well-Being

How can the notion of child and youth well-being be conceptualized? What is meant by well-being? Assuming this term can be defined, how can it be measured? These are generic, foundational questions to which no simple, definitive, and immutable answers can be given. Rather, they will continue to motivate research and researchers for decades to come. As Ben-Arieh and Frones (2007) note, however, recent studies in the sociology and psychology of childhood conceptualized children's well-being during childhood as a separate and distinct phase in life rather than simply a period of preparation for adulthood. This conceptualization has led to two innovative approaches to the measurement of child well-being.

A Phenomenological/Ethnographic Positive Well-Being Approach

One of these, illustrated by the work of Fattore et al. (2007) on children's conceptualization of their well-being, places children centrally as research participants in the articulation of their understandings of what contributes to their *positive well-being*. Following the approach advocated by Ben-Arieh (2005), the explicit aim of this approach is to facilitate input from children about what for them constitutes well-being and about the factors they identify as contributing to this well-being. The approach employs a qualitative methodology from the phenomenological/ethnographic research tradition, which, according to Denzin and Lincoln (1998, p. 3), attempts "to make sense of, or interpret, phenomena in terms of the meanings people bring to them."

Using children's views about their own well-being, Fattore et al. (2007) sought to derive knowledge and insights about domains of life which are more relevant to the children themselves rather than those previously constructed by adults. Based on a sample of 126 children ranging in age from 8 to 15 years, the research was conducted in three stages. The first stage involved either individual or group interviews (depending on participants' preferences) on what constitutes well-being and how these definitions relate to the everyday experiences of the participants. These interviews were semistructured and allowed rapport to be built between the researcher and individual participants and also their parents/caregivers. The second stage again involved either individual or group interviews, where the researcher and participants explored dominant themes identified in the first interview, allowing an in-depth dialogue to take place, concerning the significance of the themes identified by the participants. Both these stages employed a range of task-oriented methods (e.g., drawing, collage, and photography) where appropriate. The third stage involved participants completing a task-oriented project, exploring a particular theme or themes important to the individual. These projects included the use of photography, collage, drawing, or journal keeping and provided participants with alternative forms of knowledge creation, directed and controlled by them. Discussions between individual children and researchers about the

meanings of their creations, after the completion of the projects, helped to continue to give prominence to children's own interpretations of well-being.

According to Fattore et al. (2007, p. 18), this child-participatory approach leads to the conclusion that *children's well-being is defined through feelings*, in particular *happiness*, but that integrating sadness is also relevant. For example, well-being is about *feeling secure*, particularly in social relations, when relations are harmonious. Well-being also has a *moral quality* – being a moral actor in relation to oneself (when making decisions in one's best interests) and in behaving toward others. Adults are considered as behaving morally when they make decisions in children's best interests.

A Quantitative Positive Psychology Approach

The qualitative research approach and empirical findings of Fattore et al. (2007) complement the *positive psychology* approach of Huebner (2004), which uses more traditional quantitative, psychometric research designs. Huebner noted that various psychologists recently have called for greater attention to a science of positive psychology, which focuses on studying conditions that promote optimal human and societal development (e.g., McCullough and Snyder 2000; Seligman and Csikszentmihalyi 2000). This has led to an increased interest in studies of the nature and determinants of the good life. The expectation is that such a science, along with the creation of prevention and intervention programs informed by the expanded scientific framework, can improve the quality of life for all individuals, not just individuals who are at risk or who already demonstrate psychopathological conditions.

To contrast with the previous emphasis on pathological conditions, the development of positive psychology requires constructs and measures that reflect the full range of human functioning, incorporating indicators of high levels of wellness as well as psychopathological functioning. Huebner (2004) observed that one such construct, *life satisfaction*, has been studied extensively in adulthood (see Diener et al. 1999) but had gained attention in psychological studies with children and adolescents only in the 1990s (see Bender 1997; Huebner 1997). Studies of optimal well-being require adaptive constructs and measures that tap the presence of personal strengths, not just the absence of psychopathological symptoms. The life satisfaction construct fulfills this requirement as it incorporates the full range of satisfaction (e.g., from very low to neutral to very high). In this manner, life satisfaction reports can be sensitive to subtle changes above the neutral point as well as below the neutral point (Kamman et al. 1984).

Since the early work of Andrews and Withey (1976) and Campbell et al. (1976), *global life satisfaction* has been defined as a cognitive evaluation of one's life as a whole (Shin and Johnson 1978). Although affect can influence life satisfaction reports, life satisfaction is distinguished from transitory affective states. Emotions refer to specific momentary reactions to specific events that occur in people's lives,

such as anger, joy, anxiety, and so forth. Life satisfaction reports typically refer to more general, enduring background appraisals encompassing one's overall life or major facets of one's life (Diener et al. 1999; Lazarus 1991). Although experiences of frequent positive emotions, infrequent negative emotions, and life satisfaction tend to intercorrelate, suggesting a higher-order subjective well-being factor, affective and life satisfaction reports can diverge over time and demonstrate different determinants (see Diener 1994).

Based on an extensive review of research studies of children and youth (ages 8–18), Huebner (2004, pp. 22–24; see also Chap. 4 in the present volume) concluded that life satisfaction appears to be a useful psychological construct that is related to, but separable from, a variety of other well-being constructs. Global life satisfaction does not represent an isolated characteristic or appraisal tendency of children and/or youth but has broad implications for their intrapersonal and interpersonal adaptation in a variety of life contexts, encompasses the full range of subjective appraisals from very negative to very positive, and complements well-being measures that are limited to negative well-being indicators, such as reports of psychopathological symptoms.

Social Indicators and the Child and Youth Well-Being Index

In brief, different research approaches have led to the conclusion that *the well-being of children and youth can be defined in terms of the two traditions that have come to dominate subjective well-being studies of adults – those based on feelings, especially happiness, and those based on life satisfaction assessments*. The challenge, however, of using this foundation of research on well-being to address questions pertaining to changes in the well-being of America's children and youths, such as those stated at the beginning of this chapter, is that, with few exceptions, there are virtually no continuous, consistently collected, nationally representative databases on subjective well-being that extend beyond a single cross-sectional sample.

An alternative approach, pursued by Land et al. (2001, 2007; see also Chap. 2 in the present volume), *is to use the results of subjective well-being studies to inform the selection of time series for use in the construction of a social indicator – the Child and Youth Well-Being Index (CWI) – that can be calculated annually and used to monitor overall well-being as well as its major components*. The general nature and rationale of the CWI will be described in the following paragraphs. It will be useful first to recall the nature and uses of social indicators.

Social Indicators and Their Uses

Since the 1960s, researchers in social indicators/quality-of-life measurement have argued that well-measured and consistently collected social indicators provide a way to monitor the condition of groups in society, including children and families,

today and over time (Land 2000). The information thus provided can be strategic in forming the ways we think about important issues in our personal lives and the life of the nation. Indicators of child and youth well-being, in particular, are used by child advocacy groups, policy makers, researchers, the media, and service providers to serve a number of purposes.

Three conventional uses of social indicators – description, monitoring, and goal setting – were usefully articulated by Moore et al. (2003):

- *Description*: The most elemental function of social indicators is public enlightenment – to inform citizens and policymakers about the circumstances of their society, to track trends and patterns, and to identify areas of concern as well as positive outcomes. Indicator reports provide a means for the public and policymakers to get a handle on trends that appear promising (e.g., a decline in youth suicide deaths) and those that appear troubling (e.g., an increase in childhood obesity). Indicator reports also often provide information on subgroup differences (e.g., by gender, race/ethnicity, and poverty status) within the larger population, such as recent statistics showing that Hispanics have higher teen birth rates than whites or blacks. Thus, using social indicators for the purpose of description can tell us what America looks like and also can help to describe the variability within the population and the differences across social groups.
- *Monitoring*: Another use of social indicators is for tracking outcomes that may or may not require policy intervention of some kind. For example, an upsurge in violent crime victimization among children and youth signals a condition that merits attention and possible policy interventions. Indicators may also be found to have lead-lag relationships in such a way that an improvement of one indicator can be predictive of subsequent improvements in other indicators. For example, an increase in the increasing prevalence of enrollments of children ages 3–4 in prekindergarten programs may be predictive of increased average verbal and quantitative test scores at grade three (age 8) a few years later.
- *Setting Goals*: A third use of social indicators is to establish goals – quantifiable thresholds – that express values and that are to be met within a specific time period. An example is the *Healthy People 2010* initiative developed by the US Department of Health and Human Services, which identifies 467 specific, measurable goals aimed at improving the health of all Americans by the year 2010.

In addition to these three uses, Moore et al. (2003) suggest that social indicators can be employed in tandem with program evaluation and assessments:

- *Increasing Accountability and Assessments of Practice*: Fourth, social indicator can be used to achieve positive or improved outcomes. Government and private funding agencies increasingly are using social indicators to hold states, communities, agencies, and individual programs accountable for improving outcomes for children and youth. The emphasis here is on the word *outcomes*, which signals a change from using input data (such as the pupil-teacher ratio in a school system) to using outcome data (such as improvement in student test scores) to measure accountability. Moore et al. (2003) noted that using social indicators to increase accountability and program evaluation is sometimes connected to

rewards or sanctions (e.g., at the federal level, under welfare reform, states that reduced births outside of marriage, the most without increasing abortions, have been rewarded with substantial bonus payments) and caution that the risk is that many factors can determine trends, and only some of them may be under the control of the person or organization being held accountable. Thus, caution is necessary when indicators are used for the purpose of accountability.

All of these uses of social indicators will be illustrated with respect to the CWI and its components in subsequent chapters of this volume.

Various observers (e.g., Land 2000; Noll 2002) have noted that the social indicators and quality-of-life concepts have led to two major lines of development over the past 30-plus years: (1) objective social indicators and (2) subjective well-being indicators.

The Objective Social Indicators Tradition

The term *social indicators* was born and given its initial meaning in an attempt, undertaken in the early 1960s by the American Academy of Arts and Sciences for the National Aeronautics and Space Administration, to detect and anticipate the nature and magnitude of the second-order consequences of the space program for American society (Land 1983, p. 2; Noll and Zapf 1994, p. 1). Frustrated by the lack of sufficient data to detect such effects and the absence of a systematic conceptual framework and methodology for analysis, some of those involved in the academy project attempted to develop a system of social indicators with which to detect and anticipate social change as well as to evaluate specific programs and determine their impact. The results of this part of the academy project were published in a volume (Bauer 1966), bearing the name *Social Indicators* and the following definition:

... *social indicators* – statistics, statistical series, and all other forms of evidence – that enable us to assess where we stand and are going with respect to our values and goals.... (Bauer 1966, p. 1)

Thus, efforts to develop “objective” social indicators began with the initial wave of identity and interest in the topic in the 1960s and extend to the present. The emphasis in this tradition is on the development of statistics that reflect important “social conditions” and the monitoring of trends in a range of “areas of social concern” over time. The key undefined terms here require the identification of:

- The “social conditions” to be measured
- The “areas of social concern” for which trends are to be monitored Since the 1970s, the primary approach to the identification and definition processes has been through the creation of “expert” panels of social scientists, statisticians, and citizens.

These panels have applied a variety of approaches to their work, such as:

- The “indicators of social change” approach (Sheldon and Moore 1968)
- The Swedish “level of living” approach (Erickson 1974)
- The “goals commissions” approach (e.g., the *US Healthy People 2010* Goals; see US Department of Health and Human Services 2000)

The key element of this approach is that the experts must achieve consensus. Specifically, as Noll (2002, p. 175) notes, there must be consensus on:

- The conditions and areas of concern to be measured
- Good and bad conditions
- The directions in which society should move

These, of course, are strong requirements. And, in its reliance on “expert” panels, the objective social indicators tradition is always open to the criticism that the conditions identified have not been corroborated as relevant to how people actually experience happiness, life satisfaction, and subjective well-being. This criticism motivates the other major tradition of work on the measurement of the quality of life.

The Subjective Well-Being Indicators Tradition

The subjective well-being indicator tradition commenced with the Campbell et al. (1976) and Andrews and Withey (1976) volumes cited above. As noted there, the key element of this approach is on the use of various social science research techniques, including in-depth interviews, focus-group discussions, clinical studies, and sample surveys to study how people define their happiness and satisfaction with life and the social conditions of life that they experience on a day-to-day basis.

In the decades since the publication of the path-breaking studies by Campbell et al. (1976) and Andrews and Withey (1976) volumes, many studies of subjective well-being have been conducted. As noted above in the review of recent research on subjective well-being of children and adolescents, these studies show that subjective well-being is an individual’s summary of the positive experiences in life, consisting of three components:

- Global life satisfaction
- Positive affect
- Negative affect (Diener 1994)

Global life satisfaction is a person’s evaluation of his or her life as a whole, which may be over and above judgments about family, friends, and work or school (Huebner 1991).

To put it simply, we today are the beneficiaries of these many subjective well-being studies, including studies of children and adolescents such as those reviewed above. As a result, we know a lot more about what makes people happy and satisfied

with life today than in the early 1970s. In particular, Cummins (1996, 1997) reached the following conclusions about the quality of life based on comparisons of findings across numerous subjective well-being studies:

- There is a potential for tremendous variety of assessments of satisfaction with life experiences, with individuals often differing in their ratings of importance of the key elements associated with their life satisfactions and happiness.
- But, at the same time, the accumulation of findings across many studies shows that certain domains of well-being occur over and over again.
- There also is a fairly high degree of similarity among individuals on the relative weightings given to these domains in determining overall life satisfaction.
- Perhaps most interestingly, there is a lot of similarity between the domains of well-being identified in subjective well-being studies and the areas of concern identified by expert panels in objective social indicators studies.

Intersecting the Two Traditions and the CWI

This naturally leads to the question: Can the empirical findings from subjective well-being studies about domains of well-being be used to inform the construction of summary quality-of-life indices? That is, rather than relying solely on the opinions of expert panels, can we use the accumulated body of empirical findings from subjective well-being studies in a manner similar to the use of research findings or best evidence to inform decisions in clinical and public health in modern evidence-based medicine (see, e.g., Jenicek 2003)? In other words: Can subjective well-being studies be used to make composite or summary quality-of-life indices more evidence-based not only in the use of empirical data but also in the selection of the domains of well-being and indicators used in their construction? Put more figuratively, can we bring these two social indicators/quality-of-life research traditions into intersection so that we may construct composite social indicators that are more firmly grounded in what we have learned about subjective well-being over the past three decades?

The answer to these rhetorical questions offered by Land et al. (2001, 2007) is “yes” with respect to the development of a composite Index of Child and Youth Well-Being. The Child and Youth Well-Being Index is:

- A composite measure of trends over time in the well-being of America’s children and young people
- That consists of several interrelated summary indices of annual time series of numerous social indicators of the well-being of children and youth in the United States

The general objective of the CWI summary indices is to:

- Give a sense of the overall direction of change in the well-being of children and youth in the USA as compared to values observed in certain base years

The CWI is designed to address questions such as the following:

- Overall, on average, how did child and youth well-being in the USA change in the last quarter of the twentieth century and beyond?
- Did it improve or deteriorate?
- By approximately how much?
- In which domains of social life?
- For specific age groups?
- For particular race/ethnic groups?
- For each of the sexes?
- Did race/ethnic group and sex disparities increase or decrease?

The approach to the assessment of child and youth well-being taken in the construction of the CWI, thus, is that of the development of an evidence-based social indicator that can be used to address these and related questions.

Organization of the Volume

The following chapters of this volume have the following content. Building on the work of Land et al. (2001, 2007), Chap. 2 describes the conceptual foundations of the Child and Youth Well-Being Index and its components and its methods of construction. Chapter 3 then reports on a number of empirical findings and validation and sensitivity analyses from studies using the CWI. Chapter 4 presents and compares alternative ways of calculating and presenting trends in indicators and composite indices of the well-being of subgroups of children and youth classified by race/ethnicity, socioeconomic, and immigrant statuses.

Chapter 5 reviews foundational research on the well-being of children and adolescents with respect to subjective measures such as happiness and life satisfaction. It also assesses the structure and components of the CWI with respect to this research and how the CWI could be improved with additional/new indicator time series into the future. Chapter 6 addresses methodological issues in the construction of composite quality-of-life indices and studies several such indices such as the Index of Social Development produced annually by the United Nations Development Programme and the CWI. Chapter 7 addresses the question of the extent to which the CWI can be scaled to apply meaningfully to levels of analysis below the national level. It does this by using the KIDS COUNT database to construct abridged CWI indices for each of the 50 US states and makes comparisons among the states with respect to levels and trends in the indices. Chapter 8 continues the analysis of scalability of the CWI by reporting on analyses at the substate level, specifically for the San Francisco Bay Area and Los Angeles County, California, using the CWI concepts and methodology. While data available for international comparisons of child and youth well-being are very limited, Chap. 9 takes a step in this direction by comparing component indicators from the CWI or variations on those indicators from other nations, particularly Australia, Canada, New Zealand, and the United Kingdom – the UK and its English-speaking former colonies. Chapter 10 addresses

federal and state policies and structures and how they are related to the child and youth well-being, especially to variations in the CWI and its components. Chapter 11 draws overall conclusions about the CWI and what it tells us about changes in child and youth well-being in the US across recent decades. It also highlights areas of well-being for which the database for overtime monitoring are inadequate or completely missing and for which additional data series and databases need to be developed so that the CWI can be improved.

Links to Databases and Web sites

The Child and Youth Well-Being Index described in the chapters of this volume builds upon several significant databases and reports that provide descriptive statistical information about the circumstances of America's children and families. Several of these databases and related reports also are available on Internet Web sites. Perhaps the best known is the annual report *America's Children: Key National Indicators of Well-Being*, the flagship document of the Federal Interagency Forum on Child and Family Statistics. Its database and annual reports are available at <http://www.childstats.gov/>. Another annual report that presents data on numerous social indicators is *Trends in the Well-Being of America's Children and Youth*, which is disseminated by the Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services with Web site <http://aspe.hhs.gov/hsp/00trends/>. More recently, Child Trends, Inc. (<http://www.childtrends.org>), a research organization that focuses entirely on child and family studies, has made an online data resource, the *Child Trends DataBank*, available: <http://www.childtrends-databank.org/>. Data and reports on a limited number of the child well-being indicators included in the CWI have been compiled by the KIDS COUNT program of the Annie E. Casey Foundation and can be accessed at the Web site <http://www.aecf.org/kidscount/>. Finally, materials pertaining to the Child and Youth Well-Being Index, its annual updates and reports, database, and scientific papers are available at <http://www.soc.duke.edu/~cwi/> and at the Web page of the Foundation for Child Development, <http://www.ffcd.org/>, which sponsors work on the CWI.

References

- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: Americans' perceptions of life quality*. New York: Plenum.
- Bauer, R. A. (Ed.). (1966). *Social indicators*. Cambridge, MA: MIT Press.
- Ben-Arieh, A. (2005). Where are the children? Children's role in measuring and monitoring their well-being. *Social Indicators Research*, 74, 573–596.
- Ben-Arieh, A., & Frones, I. (2007). Indicators of children's well-being – Concepts, indices and usage. *Social Indicators Research*, 80, 1–4.

- Bender, T. A. (1997). Assessment of subjective well-being during childhood and adolescence. In G. Phye (Ed.), *Handbook of classroom assessment: Learning, achievement, and adjustment* (pp. 199–225). San Diego: Academic.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russell Sage.
- Cummins, R. A. (1996). The domains of life satisfaction: An attempt to order chaos. *Social Indicators Research*, *38*, 303–328.
- Cummins, R. A. (1997). Assessing quality of life. In R. I. Brown (Ed.), *Quality of life for handicapped people*. London: Chapman and Hall.
- Denzin, N. K., & Lincoln, Y. S. (1998). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry*. Thousand Oaks: Sage.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research*, *31*, 103–157.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*, 276–302.
- Erikson, R. (1974). Welfare as a planning goal. *Acta Sociologica*, *17*, 273–288.
- Fattore, T., Mason, J., & Watson, E. (2007). Children's conceptualization(s) of their well-being. *Social Indicators Research*, *80*, 5–29.
- Huebner, E. S. (1991). Correlates of life satisfaction in children. *School Psychology Quarterly*, *6*, 103–111.
- Huebner, E. S. (1997). Life satisfaction and happiness. In G. Bear, K. Minke, & A. Thomas (Eds.), *Children's needs II* (pp. 271–278). Silver Springs: National Association of School Psychologists.
- Huebner, E. S. (2004). Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research*, *66*, 3–33.
- Jenicek, M. (2003). *Foundations of evidence-based medicine*. New York: The Parthenon Publishing Group.
- Kamman, R., Farry, M., & Herbison, P. (1984). The analysis and measurement of happiness as a sense of well-being. *Social Indicators Research*, *15*, 91–116.
- Land, K. C. (1983). Social indicators. *Annual Review of Sociology*, *9*, 1–26.
- Land, K. C. (2000). Social indicators. In E. F. Borgatta & R. V. Montgomery (Eds.), *The encyclopedia of sociology* (Rev. ed., pp. 2682–2690). New York: Macmillan Publishing Company.
- Land, K. C., Lamb, V. L., & Mustillo, S. K. (2001). Child and youth well-being in the United States, 1975–1998: Some findings from a new index. *Social Indicators Research*, *56*(December), 241–320.
- Land, K. C., Lamb, V. L., Meadows, S. O., & Taylor, A. (2007). Measuring trends in child well-being: An evidence-based approach. *Social Indicators Research*, *80*, 105–132.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Mccullough, M. E., & Snyder, C. R. (2000). Classical sources of human strength: Revisiting an old home and building a new one. *Journal of Social and Clinical Psychology*, *19*, 1–10.
- Moore, K. A. (1999). *Indicators of child and family well-being: The good, the bad, and the ugly*. Bethesda: National Institutes of Health, Office of Behavioral and Social Sciences. 1999 Seminar Series.
- Moore, K. A., Brown, B. V., & Scarupa, H. J. (2003). The uses (and misuses) of social indicators: Implications for public policy. In *Child trends research brief*. Washington, DC: Child Trends, Inc. Publication #2003-01.
- Noll, H.-H. (2002). Social indicators and quality of life research: Background, achievements and current trends. In N. Genov (Ed.), *Advances in sociological knowledge over half a century* (pp. 168–206). Paris: ISSC.
- Noll, H.-H., & Zapf, W. (1994). Social indicators research: Societal monitoring and social reporting. In I. Borg & P. P. Mohler (Eds.), *Trends and perspectives in empirical social research*. New York: Walter de Gruyter.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*, 5–14.

- Sheldon, E. B., & Moore W. E. (Eds.). (1968). *Indicators of social change: Concepts and measurements*. New York: Russell Sage Foundation.
- Shin, D., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5, 475–492.
- U. S. Department of Health and Human Services. (2000). *Healthy people 2010*. Washington, DC: U.S. Government Printing Office.

Chapter 2

Conceptual and Methodological Foundations of the Child and Youth Well-Being Index

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The general question addressed in this volume is: Are the circumstances of life for children and youth in the United States bad and worsening, or good and improving? In terms of the concepts articulated in Chap. 1, the question becomes: Has the well-being of America's children improved or deteriorated?

This question can be addressed in many ways, and the answers can be correspondingly multifaceted and nuanced. There also is a sense in which every child is unique, and thus there is great diversity in well-being. In an absolute sense, therefore, complete answers cannot be given and certainly are beyond the scope of this book. We can, however, focus on limited answers based on the *Child and Youth Well-Being Index (CWI)*, the initial development of which was described in Land et al. (2001, 2007). Accordingly, the purposes of this chapter are to describe the construction of the CWI, specifically its conceptual and methodological foundations.

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