

## 19. Worldwide View of Child Well-Being

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### Abstract

“How are the kids doing?” is a well-being question. Many adults might be able to answer the question for their own children or those in their immediate surroundings, and many children may provide information about their own well-being or those of other children. However, applied to large populations of children at the national and cross-national levels, questions of this genre are more challenging and have stimulated the rapid development of studies of child well-being in recent decades. This chapter reviews the objective and subjective approaches to measuring child well-being, describes the roots of this field in the social indicators movement of the 1960s and 1970s, outlines the conceptual and methodological development of child well-being research, and summarizes empirical findings from several major national and cross-national studies of child well-being. The chapter concludes with future directions and needed conceptual and data developments to advance the global monitoring of child well-being.

### Keywords:

Child well-being, Domains, Indices, Convention of the Rights of the Child, subjective well-being

### INTRODUCTION

Child well-being research is an outgrowth of the social indicators movement of the 1960s and 1970s. International experts from a number of disciplines initiated a project to initiate the international monitoring and measurement of child well-being. The project was due, in part, to reactions to UNICEF’s annual reports on *The Progress of Nations* that began in the 1993. The reports were designed to monitor the well-being of children across the globe to chart “the advances made since the 1990 World Summit for Children” (UNICEF 1997). The reports documented that available indicators were not adequate for monitoring children even in the developed world where most of the children’s survival needs had already been met. In time, the project led to the development of the *International Society for Child Indicators* (ISCI) in 2006. Persons across the globe could meet and network with a focus on data collection, analyses, and dissemination of results to further the monitoring, measurement, and study of child well-being.

There have emerged numerous ways to measure and quantify child well-being (Ben-Arieh 2006, 2008a, 2012). Much of the research, data analysis, and construction of knowledge about child well-being was initially guided by available data rather than tested theoretical frameworks (Casas

1997). However, this field of study has matured and child-based methodological and theoretical perspectives now guide many of the frameworks for assessing child well-being cross-nationally.

The purposes of this chapter are to examine:

- basic views in measuring child well-being,
- the methodological and theoretical development of child well-being research,
- the results of multinational studies of child well-being, and
- future directions and needs to further the global monitoring of child well-being.

## OBJECTIVE AND SUBJECTIVE VIEWS

Two basic views or approaches to measures of child well-being are objective and subjective. Objective measures focus on the state or status of the child, whereas subjective views focus on the expression of opinions, behaviors, beliefs, or experiences.

*Objective measures of child well-being* are based on available statistical data and can include indicators associated with health (e.g., infant mortality or low birth weight), education (e.g., completion or graduation rates at various school levels), economy (e.g., child poverty), or behaviors (e.g., teen pregnancy rates). Such measures have been used to generate reports on the “State of the Child” to monitor the status of children. The state of the child reports have been produced for children of varied age-groups and from different population settings including local, state or sub-region, nation, and multinational regions. Literature reviews have revealed that such reports date back to the 1950s although the majority of the reports are one-time reports rather than a series of reports (Ben-Arieh and Goerge 2001; Ben-Arieh 2006, 2012). However there are notable series reporting objective measures of children including UNICEF’s *State of the World’s Children* reports since 1979 and their *The Progress of Nations* reports published since 1993. In the United States, the Annie E. Casey Foundation has published the *KIDS COUNT Databook* since 1990 in which the 50 U.S. states are ranked and compared based on ten negative objective indicators of child well-being and the U.S. Federal Interagency Forum on Child and Youth Statistics has issued reports entitled *America’s Children: Key National Indicators of Well-Being* since 1997.

*Subjective measures or indicators of child well-being* are usually obtained through sample surveys and are designed to measure opinions, attitudes, or responses from children or adults speaking on behalf of children. Such measures are important to more fully understand notions of well-being expressed or experienced. Efforts to facilitate the harmonization of multi-nation comparisons have yielded survey instruments that are used in a number of countries. In Europe, child well-being indicators from sample surveys of children and youth, include the Program for International Student Assessment (PISA), the Health Behavior in School-aged Children (HBSC), and European School Survey Project on Alcohol and other Drugs (ESPAD), and from indicators regularly collected via surveys by international organizations such as UNICEF. As the survey

titles indicate, such surveys are collected for specific reasons, yet they yield important indicators for comparative research of child well-being.

## **THE SOCIAL INDICATORS MOVEMENT AND CHILD WELL-BEING**

The term *social indicators* was coined in the early 1960s to refer to efforts to detect and anticipate social change and to evaluate specific programs, such as the U.S. space program, to determine their impact. The basic social indicator question is: How are we doing? (Land 2000). Work on social indicators during the 1960s and 1970s followed two basic traditions. One direction was the *development of objective measures* through the review of available data to provide descriptive evaluations of the status of society and to recommend unmet data needs for such evaluations. The other direction was the *development of subjective indicators of well-being and quality of life*. Both traditions have impacted the monitoring and measurement of child well-being (Land et al. 2007); see the preceding section.

In the tradition of subjective indicators, Cummins (1996) conducted a review of empirical studies of adult quality of life. He found that a vast majority of the total reported data could be grouped into the following seven domains of life: (1) economic or material well-being (e.g., command over material and financial resources and consumption); (2) health (e.g., health functioning, personal health); (3) safety (e.g., security from violence, personal control); (4) productive activity (e.g., employment, job, work, schooling); (5) place in community or community engagement (e.g., education and job status, community involvement, self-esteem, and empowerment); (6) intimacy (e.g., relationships with family and friends); and (7) emotional well-being (e.g., mental health, morale, spiritual well-being). According to Cummins, the empirical studies indicate that all of these seven domains are very relevant to the overall concept of subjective well-being or quality of life.

These seven domains of well-being were derived from subjective assessments in focus groups, case studies, clinical studies, and sample surveys that cannot, by definition, be replicated in studies of the quality of life that utilize objective data. Nonetheless, as recommended in a comprehensive review of numerous quality of life indices (Hagerty et al. 2001), the domains identified by Cummins (1996) can and should be used to guide the selection and classification of indices of quality of life that are based on objective data. These findings on domains of adult well-being plus research that focused on children and adolescents led to the development of the U.S. Child and Youth Well-Being Index.

## **THE U.S. CHILD AND YOUTH WELL-BEING INDEX: AN OUTGROWTH OF THE SOCIAL INDICATORS MOVEMENT**

In 1994, the U.S. Federal Interagency Forum on Child and Family Statistics was founded to foster cooperation and collaboration among the U.S. federal agencies that collect data on children and families. Initially, there was a proposal to produce a child well-being index using the varied measures collected and calculated by the participating federal agencies, but the proposal was not supported because some areas of child well-being were underrepresented in the data and there was no methodology or guidelines for the selection and weighting of indicators to develop an overall index of child well-being. Instead, the members decided to publish a report that presented separate trends for the key child well-being indicators that were organized in four domains: economic security, health, behavior and social environment plus a section on demographic measures of family and child statistics. The first report, *America's Children: Key National Indicators of Well-Being*, was published in 1997 and presented data on 25 key indicators of child well-being (Federal Interagency Forum on Child and Family Statistics 1997). *America's Children* continues to be published annually with many indicators presented by sub-groups such as age groups, gender, or race/ethnic groups.

The availability of a growing collection of key indicators led the Foundation for Child Development to support the construction of an *overall, composite index of child well-being – the Child and Youth Well-Being Index (CWI)*. The CWI was developed by Kenneth C. Land, Vicki L. Lamb, and their colleagues (Land, Lamb, and Mustillo 2001; Land, Lamb, Meadows, and Taylor 2007; Land, Lamb, and Zheng 2011; Land, Lamb, and Meadows 2012; Land, Lamb, Meadows, Zheng, and Fu 2012) to address the following questions: Are the circumstances of life for children and youth in the United States bad and worsening or good and improving? Has the well-being of America's children improved or deteriorated? Their objective was to measure the circumstances of children's lives in a way that reflects their well-being – to assess their quality of life – and to track changes in well-being and over time. A major goal for the CWI was to develop a composite indicator or index of well-being that encompassed different domains of children's lives from birth to age 18.

Land and colleagues (2001; 2007; Land, Lamb, and Meadows 2012) identified research studies that focused on children and adolescent participants and their articulation of subjective or positive well-being. These child and youth-based studies also highlighted themes or domains that were similar to the seven that were identified by Cummins (1996). Thus, those seven domains of well-being were adapted to focus on children and youth in the construction of the CWI.

A number of data sources were examined to identify key indicators of child well-being. The five criteria for the selection of key indicators were that each indicator must be: (1) easy to understand by a broad range of audiences, (2) objectively based on substantial research connecting them to child well-being and based on reliable data, (3) balanced so that no single area of children's lives dominates the CWI, (4) measured regularly so that they can be updated and show trends over time, and (5) representative of large segments of the target population, rather than one particular age group.

A total of 28 Key Indicators were compiled and grouped into seven domains. Using the Cummins (1996) domains as a guide, the CWI well-being domains are: (1) family

economic/material well-being (child poverty, secure parental employment, median family income for families with children under age 18, and children covered by health insurance); (2) health (infant mortality, low birth weight, mortality for ages 1-19, children with very good or excellent health, children with activity limitations, and obese children and adolescents); (3) safe/risky behavior (teen births, violent crime victimization, violent crime offenders, cigarette smoking, binge drinking, and illicit drug use); (4) productive activity/educational attainment (reading test scores and mathematics test scores); (5) community engagement (preschool enrollment, receipt of high school diploma, receipt of bachelor's degree, youth not working nor in school, and voting in Presidential elections); (6) social relationships (single-parent headed families and moving residences within the past year); and (7) emotional/spiritual (suicides, weekly attendance of religious services, and reporting religion is very important). Many of the indicators refer to broad age groups (ages 0 to 17 at last birthday) whereas some indicators are age-group specific. Also, the indicators represent both positive and negative measures of child well-being.

These 28 indicators are based on statistical time series data collected in annual (calendar year) time periods at the national level and most could be dated back to 1975. The data sources included U.S. Federal (objective) data, a number of sample surveys of youth (such as the Monitoring the Future Study and the National Crime Victimization Survey), and sample surveys of adults reporting on youth and families (such as the National Health Interview Survey and the Current Population Survey).

The major goal of the CWI project is to *measure trends in child well-being* (by indicator, domain, and overall) based on annual changing values. "Change rate ratios" were calculated in order to measure the percentage change in the value of a rate (such as infant mortality) in a particular year compared with the base year rate value, thus creating an index value. Index values for years subsequent to the base year that are greater, equal, or lesser than 100, indicate improvement, no change, or deterioration, respectively, in the time series relative to its base year value. The base year used by the CWI is 1975, which corresponds to the period in which many of the 28 Key Indicator time series began to be available at the national level in the U.S. Given the base year, the CWI then calculates an equally-weighted composite index of changes for all indicators within each of the seven domains of well-being. After constructing composite indicators of changes over time for each well-being domain relative to base year levels, the overall composite CWI then is calculated as an equally-weighted average for each year of the domain-specific index values.

Figure 1 shows the trend of change in the overall CWI for the years 1975 to 2011, using 1975 as the base year. This chart indicates that, on average across all Key Indicators and well-being domains, child and youth well-being in the U.S. went through a long "recession" from the early 1980s to the early 1990s followed by a "recovery" through 2001 and an oscillating period of ups and downs across the first decade of the twenty-first century. In their various publications, Land and colleagues have identified several demographic, economic, and social forces that help to explain these trends. Briefly, the early 1980s were years of cohort replacement of parental generations as the Baby Boomers of the 1946-1964 post-World War II period themselves matured into the adult ages of child-bearing and child-rearing, replacing parents from the 1920s

and 1930s. These years also saw an increasing prevalence of female-headed households with children and increasing levels of female labor force participation. The adaptation of other societal institutions to these demographic and social changes (e.g., the development and diffusion of after-school hours care programs for children with working parents) began but took several years into the 1990s to be available on a large scale. This lag led to an increase in relatively unsupervised children, adolescents, and teenagers that increasingly engaged in various forms of risky behavior (e.g., drug use, teenage child-bearing, violent crime). By the early 1990s, however, parents and community institutions had seen the severity of these problems and put into place many initiatives to supervise children more closely and engage adolescents and teenagers. This accounts for the major recessionary and recovery periods noted above. Since 2001, these parental and community efforts have been in place and the main trends in the CWI have primarily been related to expansions and recessions in the national economy.

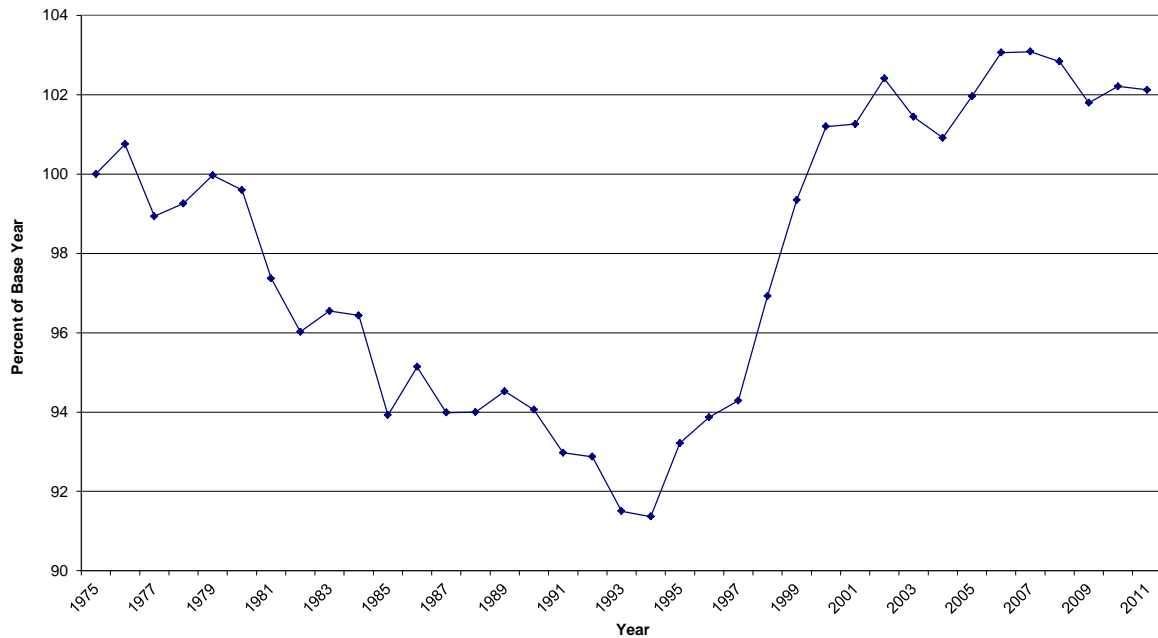


Figure 1. Overall Index of U.S. Child and Youth Well-Being, 1975-2011

**The Equal-Weighting Method.** As noted above, in their initial article on the composite Child and Youth Well-Being Index, Land et al. (2001) applied an equal-weighting arithmetic averaging method to the change-rate ratio indices of changes in the Key Indicators belonging to each of the seven domains of well-being in the CWI. This yields a composite index for each of the domains that measures the average percent change in the domain's indicators from the base year of the index. A second equal-weighting method then was applied to compose the overall CWI as an average percent change from the base year. In this initial article, Land et al. noted only that there did not exist any systematic research on which to base differential weights for any of the Key Indicators in the domain indices nor for any of the domain indices in the overall CWI. Nor was there systematic research on the priority and influence of different indicators for children at different life stages. In addition, the equal-weighting method had precedent in the Human Development Index (HDI) and its associated Annual Report that had been calculated and

published since 1990 by the United Nations Human Development Programme (Land 2013). The HDI is based on the work of Amartya Sen (Professor of Economics, Harvard University, Nobel Laureate in Economics, 1998) and Martha Nussbaum (Ernst Freund Distinguished Service Professor of Law and Ethics at the University of Chicago) (Nussbaum and Sen 1992; Sen 1987) and is used for cross-national comparisons of societal development.

The equal weighting procedure originally was used by the HDI and by Land et al. (2001) because of its simplicity, with little justification as a statistical estimator. This deficiency was addressed by Hagerty and Land (2007, 2012), who showed both analytically and through numerical examples, that the equal weighting method is what is termed in statistics a *minimax estimator* in the sense that it minimizes extreme disagreements on unequal weighting schemes. In the absence of an unequal weighting scheme on which there is high consensus, this is a desirable statistical property. Hagerty and Land also showed that numerical values for composite indices obtained from application of an equal-weighting method are quite robust and consistent with those that would be obtained from many differential weighting schemes. This is an important methodological finding because of the widespread use of equal-weights methods in social indicators and well-being research, including in the CWI and other indices to be described below.

**Child Well-Being in Anglophone Countries.** Land, Lamb, and Zheng (2011) conducted a comparative cross-national study of child well-being for the U.S. and four other English-speaking countries, specifically: Australia, Canada, New Zealand, and the United Kingdom. These countries were selected for the international comparison because: (1) all share a common language, (2) Australia, Canada, New Zealand, and the U.S. were all former colonies of the U.K., (3) all five nations are liberal democracies with representative forms of government, (4) all five emphasize the use of economic markets for the production and distribution of goods and services, and (5) all share a common history and culture (Land et al. 2011). The authors found 19 indicators that were measured around the year 2000. These indicators were classified into seven domains: family economic well-being, social relationships, health, safety and behavior, educational attainment, community connectedness, and emotional well-being.

Table 1 shows the relative ranking for the domains for the five nations. The rankings for the domains range from ‘1’, the highest ranking to ‘5’ (or ‘4’ for social relationships), which designates the lowest ranking. An examination of the separate domains indicates that no country consistently scored the same rank across the seven domains. Each country scored a ‘1’ or ‘2’ in some of the domains, and Canada ranked ‘1’ in three of the domains. Thus each country is doing well in some domains but each country also had domains that ranked lower and suggest areas that need greater attention.

**Table 1. Relative Ranking of Five English-Speaking Countries by Domain: 2000**

<i>Countries</i>	Family Economic Well-Being	Social Relationships	Health	Safety/ Behavioral Concerns	Educational Attainment	Community Connectedness	Emotional Well-Being	Average Rank Across Domains	Average Rank Across Indicators

<b>Canada</b>	1	1	1	3	1	2	3	<b>1.7</b>	<b>2.0</b>
<b>Australia</b>	2	2	3	1	3	3	4	<b>2.6</b>	<b>2.6</b>
<b>U.S.</b>	2	3	5	2	5	1	2	<b>2.9</b>	<b>2.9</b>
<b>New Zealand</b>	2	--	4	5	1	3	5	<b>3.3</b>	<b>3.0</b>
<b>U.K.</b>	5	4	2	4	4	5	1	<b>3.6</b>	<b>3.1</b>

Note: Data are from Table 3, Land et al. (2011). '1' represents the highest ranking.

The last two columns in Table 1 show the arithmetic averages across domains and across the indicators for the five countries. For both calculated Average Rankings, the order remains the same: Canada, Australia, the U.S., New Zealand, and the U.K.

Land et al. (2011) note that Canada, Australia, New Zealand, and the United Kingdom are all countries with egalitarian and/or universalism traits; and thus, score higher than the U.S. on the health and educational attainment domains due to greater public funding for these institutions. The United States scores higher in a number of domains: safety/behavior, community connectedness, and emotional well-being. These domains are supported in the U.S. by non-public initiatives provided by familial, religious, and civil society groups that can work to encourage positive outcomes.

## **THE UNITED NATIONS CONVENTION ON THE RIGHTS OF THE CHILD**

In 1989, the United Nations adopted the Convention on the Rights of the Child (CRC) (United Nations 1989). To date all UN countries except the United States and Somalia have ratified the CRC. The CRC was an outgrowth of previous international resolutions and declarations regarding children, including the Geneva Declaration of the Rights of the Child of 1924, the Declaration of the Rights of the Child adopted by the United Nations General Assembly in 1959, plus International Covenants on Civil and Political Rights and on Economic, Social and Cultural Rights. The CRC was formulated to recognize that children are citizens of society in their own right rather than merely future adults. The overriding purpose was to grant children the full range of human rights including: the right to survival; to develop to the fullest; to protection from harmful influences, abuse and exploitation; and to participate fully in family, cultural, and social life (UNICEF n.d.).

In the CRC, there are four core principles that encompass the human rights to be held by all children:

- (1) non-discrimination (*Article 2*),
- (2) devotion to the best interests of the child (*Article 3*),
- (3) the right to life, survival, and development (*Article 6*), and
- (4) respect for the views of the child (*Article 12*) (United Nations 1989).

The CRC therefore recognizes that children are active members of a society with entitled rights in addition to being dependents of their families. Associated with the direct focus on children as



full citizens with basic human rights is the hope that child well-being and child quality of life will improve (Casas 1997).

According to Article 1 of the Convention, a child is defined as “every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier” (United Nations 1989: 2). The CRC indicates that childhood is to be recognized as a separate phase in life, and children are to be considered active members of the society. Part I of the Convention on the Rights of Children lists 41 *Articles* that define the numerous rights of children. In addition to the four core principles listed above, the CRC also includes other specific rights for children:

- citizenship, and a unique identity (*Articles 7, 8*),
- the implementation and legal protection of children’s rights including when arrested, imprisoned, or accused of infringing penal law (*Articles 4, 16, 37, 40*),
- freedom of thought, religion and other basic freedoms (*Articles 13, 14, 15*),
- access to “the highest attainable standard” of health care and health facilities, which include accommodation for children with disabilities or in institutions due to physical and/or mental health needs (*Articles 23, 24, 25*),
- the right to a standard of living that promotes proper “physical, mental, spiritual, moral and social” development as well as equal access to education at all levels (*Articles 27, 28*),
- protection from child trafficking, economic exploitation, sexual exploitation and abuse, and other exploitation that adversely affects the child’s welfare (*Articles 11, 32, 34, 35, 36*), as well as
- respect for parents and family and the duties they fulfill in nurturing and protection of children (*Articles 5, 9, 10, 18*).

The fourth CRC core principle on respect for the views of the child has had an impact on the establishment of methods and indicators in the study of child well-being. Understanding the perspectives of children is important in that their perspectives differ from those of adults. Thus children should be respected as persons that can contribute to informing policymakers and child advocacy concerns, and children should be better informed about legal and political issues that directly affect their lives (Ben-Arieh 2005). In fulfilling these obligations, a number of countries, particularly in Europe, are collecting data or reviewing available data to establish the baseline rights and concerns of children as citizens with defined human rights.

## **CROSS-NATIONAL STUDIES OF CHILD WELL-BEING USING THE CRC APPROACH**

**OECD.** Starting with the credo “*to improve something, first measure it,*” and incorporating the CRC in the conceptualization and interpretation of child well-being, UNICEF (2007) conducted a study of child well-being for OECD countries. The end result was an *Innocenti Report Card on Child Well-Being in Rich Countries* (UNICEF 2007) in which multiple domains of child well-

being were calculated to measure child well-being. This represented an improvement over UNICEF's previous use of income poverty as a proxy for child well-being.

A major issue in the establishment of a multi-nation study of child well-being is the question of finding measures that are available and comparable for all OECD nations that also encompass the important components associated with children's rights and child well-being. As a result, UNICEF accumulated 40 separate indicators that were sorted into 18 components, which were then sorted into six dimensions. The resultant six dimensions (and components) were: material well-being (child income poverty, deprivation, work), health and safety (health at birth, immunizations, child mortality), educational well-being (achievement, participation, aspirations), peer and family relationships (family structure, family relations, peer relations), behaviors and risks (risk behavior, experiences of violence, health behavior), and subjective well-being (health, personal well-being, school well-being) (UNICEF 2007). Insufficient data resulted in 9 of the 30 OECD countries (Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, the Slovak Republic, South Korea, and Turkey) being excluded from the *Report Card* on child well-being.

Each dimension was composed of three components and each dimension score was the average of its three components. Thus equal weighting was used "in the absence of any compelling reason to apply different weightings..." (UNICEF 2007, 5). All scores were converted to z-scores to have a common scale for each measure and can show how by standard deviations far a country's score is from the OECD average score.

The rankings for each of the six dimensions for each of the 21 OECD countries are presented in Table 2. The last column of the table reports the average ranking across the six dimensions and the countries are ordered based on this average ranking. For ease of comparison, the white cells represent the top one third, the light gray shaded cells the middle one third, and the dark gray shaded cells the bottom third. There is much variation in the ranking of the OECD countries among the six dimensions. No one country has all dimensions ranking in the top third, although the Netherlands and Sweden each have only one dimension that is not in the top third. This indicates that all of the OECD countries studied have weaknesses to be addressed. A review of the overall rankings indicates that the Northern European countries of the Netherlands, Sweden, Denmark, and Finland are at the top. The Netherlands and Denmark have no dimension that scores in the bottom third and Sweden and Finland each have one, family and peer relationships. The United States and the United Kingdom are in the bottom ranking for all but one of their scored dimensions. In addition, the United Kingdom is the only country that does not have a dimension that ranks in the top third.

Given the varied ordering of the countries within each of the six dimensions of the UNICEF *Report Card*, it is evident that no one dimension can serve as a proxy for the overall average ranking of child well-being. It was also reported that there was not a particularly strong relationship between a country's wealth and average ranking. For example, the Czech Republic ranks higher than the more wealthy countries of France, Austria, the United States, and the United Kingdom (UNICEF 2007).

**Table 2. Ranking of 21 OECD Countries on Six Dimensions**

<i>Country</i>	<b>Material well-being</b>	<b>Health and Safety</b>	<b>Education</b>	<b>Family and Peer Relationships</b>	<b>Subjective Well-Being</b>	<b>Behavior and Risks</b>	<i>Average Ranking</i>
<b>Netherlands</b>	10	2	6	3	1	3	<b>4.2</b>
<b>Sweden</b>	1	1	5	15	7	1	<b>5.0</b>
<b>Denmark</b>	4	4	8	9	12	6	<b>7.2</b>
<b>Finland</b>	3	3	4	17	11	7	<b>7.5</b>
<b>Spain</b>	12	6	15	8	2	5	<b>8.0</b>
<b>Switzerland</b>	5	9	14	4	6	12	<b>8.3</b>
<b>Norway</b>	2	8	11	10	8	13	<b>8.7</b>
<b>Italy</b>	14	5	20	1	10	10	<b>10.0</b>
<b>Ireland</b>	19	19	7	7	5	4	<b>10.2</b>
<b>Belgium</b>	7	16	1	5	16	19	<b>10.7</b>
<b>Germany</b>	13	11	10	13	9	11	<b>11.2</b>
<b>Canada</b>	6	13	2	18	15	17	<b>11.8</b>
<b>Greece</b>	15	18	16	11	3	8	<b>11.8</b>
<b>Poland</b>	21	15	3	14	19	2	<b>12.3</b>
<b>Czech Rep.</b>	11	10	9	19	17	9	<b>12.5</b>
<b>France</b>	9	7	18	12	18	14	<b>13.0</b>
<b>Portugal</b>	16	14	21	2	14	15	<b>13.7</b>
<b>Austria</b>	8	20	19	16	4	16	<b>13.8</b>
<b>Hungary</b>	20	17	13	6	13	18	<b>14.5</b>
<b>United States</b>	17	21	12	20	--	20	<b>18.0</b>
<b>U Kingdom</b>	18	12	17	21	20	21	<b>18.2</b>

Note: Data are from Chart in the "Executive Summary" (p. 7) in UNICEF (2007)

Jonathan Bradshaw and colleagues Petra Hoelscher and Dominic Richardson were members of the group of external advisors for the UNICEF *Report Card 7*. They have conducted a number of cross-sectional, cross-national studies of the well-being of children, one of which was a report in conjunction with the above UNICEF report. The Bradshaw et al. (2007a) report provided additional details on the selection of indicators for assessing child well-being for OECD countries and greater explanation regarding the methodology used to develop the rankings.

Bradshaw and his colleagues used a number of overriding principles in the selection of indicators for the OECD study and for all of their multinational studies. (1) Indicators were chosen "that best represented a constituent domain of the concept of child well-being" (p.21). (2) Efforts were made to use indicators in which the child, rather than the family or household, was the unit of analysis. (3) The most up-to-date data for each indicator was used although all indicators were not measured the same year. Efforts were made to select indicators that were measured in 2003 or later. However some indicators, particularly from sample surveys, were measured somewhat earlier. (4) The same data source was used to measure a single variable across the OECD countries to reduce problems with comparability. (5) A number of potentially useful

indicators had to be rejected because the measures were not available for an adequate number of countries. The researchers established a 75 percent cut-off in that indicators were included in the OECD child well-being index if the countries had at least 75 percent of the indicators available. (6) When countries had missing indicators within a domain, the domain average score was calculated based on the available indicators within that domain. (7) If data were not available for a country's component or dimension they averaged the indicators or components that were available. As noted in the UNICEF (2007) report, there were serious problems with missing data for Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, South Korea, and Turkey. The authors did calculate components and dimensions for Australia, Iceland, Japan, and New Zealand to be included in the OECD ranking where adequate data were available.

Table 3 presents the rankings for the six dimensions for the re-analyzed 25 OECD countries as reported in Bradshaw et al. (2007a). Regarding the 4 added countries with excessive missing data (at the bottom of the table), Iceland appears to be ranked in the top third, while Australia and Japan are in the middle third, and New Zealand ranks in the bottom third with an average ranking near the U.S. and U.K.

**Table 3. Ranking of 25 OECD Countries on Six Dimensions**

<i>Country</i>	<b>Material Situation</b>	<b>Health and Safety</b>	<b>Education</b>	<b>Family and Peer Relationships</b>	<b>Subjective Well-Being</b>	<b>Behaviors and Risks</b>	<i>Average Ranking</i>
<b>Netherlands</b>	10	3	6	3	1	3	<b>4.3</b>
<b>Sweden</b>	1	1	5	15	7	1	<b>5.0</b>
<b>Denmark</b>	4	5	9	9	12	6	<b>7.5</b>
<b>Finland</b>	3	4	4	17	11	7	<b>7.7</b>
<b>Spain</b>	12	7	18	8	2	5	<b>8.7</b>
<b>Switzerland</b>	5	10	16	4	6	12	<b>8.8</b>
<b>Norway</b>	2	9	12	10	8	13	<b>9.0</b>
<b>Italy</b>	15	6	23	1	10	10	<b>10.8</b>
<b>Belgium</b>	7	19	1	5	16	19	<b>11.2</b>
<b>Ireland</b>	22	22	8	7	5	4	<b>11.3</b>
<b>Germany</b>	14	12	11	13	9	11	<b>11.7</b>
<b>Canada</b>	6	16	2	18	15	17	<b>12.3</b>
<b>Czech Rep</b>	11	11	10	19	17	9	<b>12.8</b>
<b>Greece</b>	17	21	19	11	3	8	<b>13.2</b>
<b>Poland</b>	24	18	3	14	20	2	<b>13.5</b>
<b>France</b>	9	8	21	12	18	14	<b>13.7</b>
<b>Austria</b>	8	23	22	16	4	16	<b>14.8</b>
<b>Portugal</b>	19	17	24	2	14	15	<b>15.2</b>
<b>Hungary</b>	23	20	15	6	13	18	<b>15.8</b>
<b>United States</b>	20	25	14	20	19	20	<b>19.7</b>
<b>U. Kingdom</b>	21	15	20	21	21	20	<b>19.7</b>
<i>Countries with greater than 75% missing data</i>							
<b>Iceland</b>	--	2	13	--	--	--	<b>7.5</b>
<b>Australia</b>	13	14	7	--	--	--	<b>11.3</b>

<b>Japan</b>	18	13	--	--	--	--	<b>15.5</b>
<b>New Zealand</b>	16	24	17	--	--	--	<b>19.0</b>

Note: Data are from Charts 4.1.7, 4.2.9, 4.3.9, 4.4.8, 4.5.8, 4.6.16 in Bradshaw et al. (2006). Average rankings were calculated by the authors.

**EU Countries.** Bradshaw, Hoelscher and Richardson (2007b) also developed a multi-dimensional child well-being index for the 25 European Union countries (EU25) because there were more indicators available for the European countries as compared with the OECD nations. In deciding which indicators to use and the ones that had to be discarded the researchers established a 70 percent cut-off such that countries were included in the EU25 child well-being index if at least 70 percent of the indicator data were available. Four countries had less than 70 percent response rates overall (Cyprus, Luxembourg, Malta, and the Slovak Republic). Sensitivity analysis was used regarding the effect of their inclusion on the index position of the other countries. Two overall ordered rankings were calculated: one that included all 25 EU countries and another that only included the 21 EU countries with less than 30% missing values.

The child well-being indicators came from European surveys of children and youth, including the Program for International Student Assessment (PISA), which measures educational achievement; Health Behavior in School-aged Children (HBSC); and European School Survey Project on Alcohol and other Drugs (ESPAD) and from administrative data regularly collected by international organizations such as UNICEF, World Bank and World Health Organization (WHO).

The proposed EU25 child well-being index was composed of 51 indicators, which were classified into 23 domains that were organized into eight clusters. The eight clusters (and their domains) were material situation (poverty, deprivation, jobless parents), child health (health at birth, immunizations, health behaviors), education (educational attainment, participation, youth labor market outcomes), housing and environment (overcrowding, local environment, housing problems), children's relationships (family structure, relationships with parents and peers), children's subjective well-being (self-defined health, personal well-being, well-being at school), risk and safety (mortality, risky behavior, experiences of violence), and civic participation (participation in civic activities, political interest) (Bradshaw et al. 2007b).

The EU25 child well-being index was considered a causal indicator model, in that the indicators *cause* the domain (or latent variable) (Bollen and Lennox 1991), and thus the indicator variables are each making *separate* contributions to a domain. Thus, there was no assumption that the indicators within a domain are strongly correlated with each other. In fact, if variables within a domain were found to be highly correlated only one variable was used to ensure a concept or measure was not multiplying the weight of that concept to be contained within the domain. Equal weighting was used in the calculation of the domains, clusters, and overall index for each EU country.

The methodology used to create the overall index was based on standardized ( $z$ ) scores to have consistent measures of both rank order and range of dispersion across the measures. The 51

indicators were converted to  $z$ -scores and then the average  $z$ -score was calculated for each of the 23 domains. The domain  $z$ -scores were then averaged to compute a  $z$ -score for each of the eight clusters. The average of the 23 domain scores (rather than of the eight clusters) was used to create the overall child well-being index ranking for each country. Bradshaw and colleagues used domain scores to compute the overall ranking because the domains were considered to represent the “essence” of the concept of child well-being.

Table 4 presents a summary of the EU25 rankings by cluster and overall. As noted earlier, the overall rankings were calculated two ways. First, the overall ranking was calculated for all 25 European countries. The second column of overall rankings included only the countries that had at least 70 percent response rates (N=21). The order of the overall rankings in this column is very similar to the overall rankings for the total 25 countries.

In viewing the overall child well-being ranking of the 21 countries in the last column, it is notable that the top four are the Nordic countries of the Netherlands, Sweden, Denmark, and Finland. Those countries that rank lowest on the overall child well-being index tend to be from the former Eastern bloc except for Slovenia, which ranked in the middle third. Also, when the average overall child well-being indices for all EU states are ordered from high to low, the trend indicated that there was a relationship between the child well-being ranking and wealth of the country. However, there were a few exceptions—Spain was in the top third, Slovenia was in the middle third, and the United Kingdom was in the bottom third (Bradshaw et al. 2007b).

**Table 4. Ranking of 25 EU Countries on Eight Clusters: 2003**

<i>Country</i>	<b>Material Situation</b>	<b>Child Health</b>	<b>Education</b>	<b>Housing &amp; Environment</b>	<b>Children's Relationships</b>	<b>Subjective Well-Being</b>	<b>Risk and Safety</b>	<b>Civic Participation</b>	<b>RANKING: 21 EU Countries*</b>
<b>Netherlands</b>	10	2	6	7	5	1	5	--	<b>1</b>
<b>Sweden</b>	2	1	2	3	15	6	3	14	<b>2</b>
<b>Denmark</b>	5	3	3	2	10	9	15	4	<b>3</b>
<b>Finland</b>	3	7	4	10	17	12	7	18	<b>4</b>
<b>Spain</b>	8	13	15	13	9	3	1	--	<b>4</b>
<b>Slovenia</b>	4	15	--	12	3	8	18	13	<b>6</b>
<b>Belgium</b>	18	20	1	5	6	15	16	5	<b>7</b>
<b>Germany</b>	12	10	9	8	12	7	12	10	<b>8</b>
<b>Ireland</b>	19	19	7	9	8	5	20	--	<b>9</b>
<b>Austria</b>	7	21	17	6	16	2	19	--	<b>10</b>
<b>France</b>	11	14	14	15	14	13	10	--	<b>11</b>
<b>Italy</b>	15	16	19	18	4	11	6	11	<b>12</b>
<b>Poland</b>	23	6	5	20	13	19	11	6	<b>13</b>
<b>Greece</b>	17	25	16	17	11	4	8	2	<b>14</b>
<b>Portugal</b>	13	9	18	22	2	16	17	7	<b>15</b>
<b>Hungary</b>	14	22	12	21	7	10	14	3	<b>16</b>
<b>Czech Rep</b>	9	4	10	16	22	14	21	17	<b>17</b>
<b>UK</b>	20	23	13	1	23	18	22	8	<b>18</b>
<b>Latvia</b>	16	18	8	24	18	21	23	12	<b>19</b>
<b>Estonia</b>	21	12	--	23	21	23	24	15	<b>20</b>
<b>Lithuania</b>	22	8	--	25	20	24	25	16	<b>21</b>

*Countries with greater than 70% missing data*

Cyprus	1	5	--	14	--	--	2	1	--
Luxembourg	5	11	20	4	19	20	9	--	--
Malta	24	24	--	11	1	17	4	--	--
Slovak Rep.	25	17	11	19	--	22	13	9	--

Note: Data are from Figures 4, 8, 12, 16, 20, 24, 28, 29, 31 in Bradshaw et al. (2007b)

\*Overall rankings are for countries with less than 30% missing data and are based on the average score of the 23 domains.

As with previous cross-national studies, an examination of country scores across the eight clusters indicates that no one country consistently scored the same ranking for each cluster. For example, Belgium is ranked first in education, fifth in housing & environment and civic participation, and sixth in children's relationships; yet the country ranked poorly on child health (20), material situation (18), risk and safety (16), and subjective well-being (15). The United Kingdom was first in housing and environment and eighth in civic participation; however the rest of the clusters rank from 13 (education) to 23 (child health and children's relationships). The Nordic countries also had individual cluster rankings at 10 or higher. The first ranked Netherlands ranked 10<sup>th</sup> in material situation. Sweden, Denmark, and Finland ranked 15<sup>th</sup>, 10<sup>th</sup>, and 17<sup>th</sup>, respectively, on children's relationships. The Nordic countries also scored below 10 in subjective well-being (Finland), risk and safety (Denmark), and civic participation (Sweden and Finland). An examination of the lowest third of the ranked countries indicates that all of the countries, except Estonia, ranked above 10 in at least one cluster. Thus, the individual cluster scores show that even the countries ranking the lowest third in overall child well-being is each doing better in some of the individual clusters.

Bradshaw and Richardson (2009) conducted another study of child well-being in 27 EU countries plus Iceland and Norway. The results were similar to their study of the 25 EU countries with the Nordic countries (the Netherlands, Sweden, Finland, and Denmark) in the top third and the former Eastern bloc countries, except Slovenia, in the bottom third. Iceland and Norway were in the top third ranking third and fourth, respectively, between Sweden, ranked second, and Finland, ranked fifth (Bradshaw and Richardson 2009).

**CEE/CIS Countries.** Richardson, Hoelscher, and Bradshaw (2008) expanded their global multidimensional study of child well-being by focusing on the Central and Eastern European (CEE) countries and the Commonwealth of Independent States (CIS) (N=21). "The CEE/CIS region is very heterogeneous in terms of geography and natural resources, demographic structure, economic and political developments" (Richardson et al. 2008, 212). All the countries are experiencing social changes, particularly in demographic reforms and economic structures, so it is important to study the well-being of children amid such transitions. Richardson and colleagues note that in the past the monitoring of children and their lives was based on tracking Millennium Development Goal indicators whose primary focus is on changes in developing countries. Such MDG indicators do contain information on the health and education of children, which represent some of the important domains of child well-being. As the CEE/CIS countries are in transition, it would be better to develop a more comprehensive picture of the well-being of children in this region.

As with other studies, data were drawn from survey and administrative sources. The criteria for the inclusion of indicators were replicated from their previous research. Many of the surveys

used in the EU index (e.g., HBSC) were not conducted in the CEE/CIS countries. Instead, survey data gathered or supported by UNICEF, such as the Multiple Indicator Cluster Survey (MICS), and the Young Voices survey. UNICEF databases were also used for objective indicators associated with dimensions of child well-being. The authors identified 52 indicators that were summarized into 24 components that composed seven dimensions. The seven dimensions were: material situation, housing and environment, health, education, person and social well-being, family forms and care, and risk and safety (Richardson et al. 2008). The indicators were standardized, using z-scores, and averaged to create the components. Then the components were standardized to create the dimensions. Equal weighting was used as there was no compelling framework to address weighting, plus the results from Hagerty and Land (2007) justify the use of equal weights. They used a 50 percent threshold for the inclusion of data in the construction of the components and dimensions. To be included the components had to have at least 50% of its indicators and for the comparison of dimensions the dimension had to have at least 50% of its components.

Table 5 presents the CEE/CIS dimensions and overall ranking of child well-being. Croatia has the highest rank and Moldavia is the lowest. No country have all dimensions ranked in any one level, however the top and bottom ranked countries come close. Croatia ranks all the dimensions in the top third except for risk and safety. All of Moldavia's dimensions rank in the bottom third except for health, which ranks 2<sup>nd</sup> overall.

**Table 5. Ranking of 21 CEE and the CIS Countries on Seven Dimensions**

<i>Country</i>	<b>Material Situation</b>	<b>Housing &amp; Environment</b>	<b>Child Health</b>	<b>Education</b>	<b>Personal and Social Well-Being</b>	<b>Family Forms and Care</b>	<b>Risk and Safety</b>	<i>Average Rank</i>
<b>Croatia</b>	1	1	1	4	1	7	9	<b>3.4</b>
<b>Bosnia Herzegovina</b>	9	3	13	--	2	1	1	<b>4.8</b>
<b>FYR Macedonia</b>	8	10	3	6	3	4	10	<b>6.3</b>
<b>Serbia</b>	5	6	9	11	7	3	5	<b>6.6</b>
<b>Uzbekistan</b>	14	2	6	--	13	8	2	<b>7.5</b>
<b>Turkmenistan</b>	--	9	15	--	4	6	4	<b>7.6</b>
<b>Belarus</b>	6	5	4	2	11	14	16	<b>8.3</b>
<b>Montenegro</b>	7	11	8	13	7	2	12	<b>8.6</b>
<b>Bulgaria</b>	2	7	14	5	16	12	18	<b>10.6</b>
<b>Ukraine</b>	4	13	7	8	9	19	14	<b>10.6</b>
<b>Kazakhstan</b>	15	12	10	1	12	17	11	<b>11.1</b>
<b>Russia</b>	3	15	5	3	17	16	20	<b>11.3</b>
<b>Kyrgyzstan</b>	16	17	11	18	5	9	6	<b>11.7</b>
<b>Romania</b>	10	19	16	7	14	5	13	<b>12.0</b>
<b>Armenia</b>	17	8	19	12	15	11	3	<b>12.1</b>
<b>Georgia</b>	18	4	17	15	6	18	17	<b>13.6</b>
<b>Turkey</b>	13	--	12	17	--	--	--	<b>14.0</b>
<b>Azerbaijan</b>	11	16	20	16	19	10	7	<b>14.1</b>



<b>Albania</b>	12	14	18	9	20	13	15	<b>14.4</b>
<b>Tajikistan</b>	19	18	21	10	10	15	8	<b>14.4</b>
<b>Moldova</b>	20	20	2	14	18	20	19	<b>16.1</b>

Note: Data are from Figure 32 in Richardson et al. (2008)

There is quite a bit of variation across countries in their rankings within the seven dimensions. For example, Azerbaijan was in the top third in risk and safety but ranked in the bottom third on housing and environment, health, education, personal and social well-being, and risk and safety.

Richardson et al. (2008) identify trends in the ranking of dimensions. Belarus, Bulgaria, and Russia rank high in dimensions associated with standard public services, such as material situation, child health, and education, and rank poorly on relationships and risk and safety. The opposite effect was evident for Bosnia Herzegovina, Uzbekistan, and Azerbaijan; countries that are in turmoil. For example, ethnic conflict and divisions in Bosnia Herzegovina have stalled the establishment of public services to support the diverse population, and thus, poverty rates are high and there are many displaced persons. The new EU members Romania and Bulgaria only rank in the middle and lower third, respectively, indicating that the children in these countries have yet to benefit from membership in the EU.

The authors conducted analyses to determine how influential a country's wealth, or GDP per capita, was associated with overall rankings of the CEE/CIS countries. They found wealth to only explain about a third of the variation in ranking of children in this multinational study.

**Pacific Rim Countries.** Maggie Lau and Jonathan Bradshaw created multi-dimensional evaluations of children's well-being focusing on a new area, 13 countries in the Pacific Rim. The Pacific Rim is composed of countries that are at various levels of successful economic growth and development. A number of countries – Australia, Japan, New Zealand and the Asian newly developing economies of Singapore, Hong Kong, and South Korea – have the highest rankings on the global Human Development Index (HDI). Whereas Malaysia, Thailand, China, the Philippines, Indonesia, and Vietnam have HDI rankings in the high to medium categories from 66<sup>th</sup> to 116<sup>th</sup> in 2007 (Lau and Bradshaw 2010).

The first hurdle with which the authors had to contend was the difficulty in finding survey data that addressed subjective conditions of children, particularly in conjunction with the implicit and implicit rights and needs of children as enumerated in the CRC. UNICEF's Speaking Out survey was heavily used for appropriate indicators. In addition, data were drawn from the UNICEF MICS, the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS), and the OECD Programme for International Student Assessment (PISA). Administrative sources from the World Bank, WHO, and UNICEF were also used. The result was 46 indicators that were summarized in 21 components that were organized into six domains: material situation, health, education, subjective well-being, living environment, and risk and safety. As with previous studies, the indicators and components were standardized using z-scores and were equally weighted. Lau and Bradshaw wanted to include as many countries as possible; however missing data was a big issue. Thus a country was included if its missing data did not exceed two-thirds of the available indicators.

The domain and overall rankings of child well-being in the Pacific Rim countries are presented in Table 6. Following the discussion by Lau and Bradshaw (2010) the top five rankings in each domain are white, the bottom five are dark grey, and the middle three are light grey. An examination of the table indicates that Japan, Singapore, Taiwan, Hong Kong, and New Zealand are the five top ranking countries in overall child well-being. New Zealand's relative ranking is much higher than that in Bradshaw et al. (2006) and Land et al. (2011) and may be due to the inclusion of components and dimensions with up to two-thirds missing data. Malaysia, South Korea, Thailand, Indonesia, and the Philippines constitute the bottom five countries.

**Table 6. Ranking of 13 Pacific Rim Countries on Seven Domains**

<i>Country</i>	<b>Material Situation</b>	<b>Child Health</b>	<b>Education</b>	<b>Subjective Well-Being</b>	<b>Living Environment</b>	<b>Risk and Safety</b>	<b>Overall Rank</b>
<b>Japan</b>	1	3	2	12	1	5	<b>1</b>
<b>Singapore</b>	7	2	1	9	2	2	<b>2</b>
<b>Taiwan</b>	6	6	4	5	--	4	<b>3</b>
<b>Hong Kong</b>	8	1	6	11	5	1	<b>4</b>
<b>New Zealand</b>	5	8	5	8	4	10	<b>5</b>
<b>China</b>	12	7	--	1	7	3	<b>6</b>
<b>Australia</b>	4	5	7	7	8	9	<b>7</b>
<b>Vietnam</b>	3	11	10	2	10	7	<b>8</b>
<b>Malaysia</b>	11	10	8	6	6	6	<b>9</b>
<b>South Korea</b>	2	4	3	13	12	8	<b>10</b>
<b>Thailand</b>	9	9	9	10	3	11	<b>11</b>
<b>Indonesia</b>	10	12	11	4	11	12	<b>12</b>
<b>Philippines</b>	13	13	12	3	9	13	<b>13</b>

Note: Data are from Figure 7 and Table 2 in Lau and Bradshaw (2010)

As with the other multinational studies of multi-domain measures of child well-being, no Pacific Rim country is consistent in its ranking among the seven domains. Indonesia and the Philippines, at the bottom of the overall rankings, each score high for subjective well-being and Thailand ranks high for living environment. In this study, the wealthier countries were associated with higher scores ( $R^2 = 0.54$ ), although there were some notable exceptions. Australia and South Korea rank lower than one might expect given their nations' wealth.

These multinational studies of multidimensional rankings of child well-being by Bradshaw and colleagues represent important first forays in assessing the well-being of children while attempting to address the intent of the Convention of the Right of the Child. However, the researchers have always listed important limitations that will hopefully be addressed in future data collection and cross-national studies of child well-being (Bradshaw et al. 2007a; Richardson et al. 2008; Bradshaw and Richardson 2009; Lau and Bradshaw 2010). The limitations include:

- Too focused on adolescents and health in the first year of life. Many ages in between may not be represented at all.
- All dimensions of child well-being are not covered (e.g., mental health and emotional well-being).
- The use of official administrative data and sample surveys tend to provide a broad picture of a country's children with little data on minority or other excluded children. In addition there are no official data on violence within the family, child prostitution, or children with disabilities.
- There is little dispersion within countries within the indicators because thresholds are used and estimates were based on the proportion of children below or above the established threshold. In some instances the researchers did not gain access to the raw data, particularly with the Health Behavior in School Aged Children Survey, in which they were provided with only aggregate data.
- Some of the data were quite old in regards to the reference year for a study. Many of the international surveys have long intervals between data collection (e.g., HBSC four years, PISA three years, Luxembourg study five years).
- There are obvious missing data on measures that should be included in the dimensions studied. They note that 'material situation' has no data on persistent poverty.
- The subjective indicators used in these studies are based on secondary analyses of existing surveys, some of which are heavily used for an analysis of a particular region, such as the Young Voices survey for the CEE/CIS study and the Speaking Out survey for the Pacific Rim study. In addition, some of the existing surveys were not specifically developed to study the multidimensional aspects of the well-being of children. Some international surveys focus on households or families per se and have little to no data on or from individual children.
- Missing data can also be a problem, particularly in multinational research if every country of interest was not included in an international survey. In addition, decisions had to be made regarding percent missing thresholds for inclusion/exclusion of components and dimensions.
- The authors made choices regarding which indicators to use and the construction and weighting of the components and dimensions. However, they ask for comments and offer their data files for reanalysis by other researchers.
- Finally, all of the analyses are cross-sectional. There are no trend data or analyses that could measure changing trends of child well-being over time. This is an important omission that needs to be addressed in future research efforts.

### **RESEARCH EFFORTS TO INCLUDE CHILDREN IN THE ASSESSMENT OF CHILD WELL-BEING**

As noted, the foregoing studies of overall child well-being at the national and cross-national levels have directed more focus on child-centered indicators as advanced by the CRC, the data sources are sample surveys, administrative records, and information provided by international

organizations, and thus the resultant child well-being indices are limited to the data that are available and most complete. Fortunately, there has been an increase in the number and types of surveys in which children and youth provide their own responses rather than having responses that are provided by only parents and teachers. However, as Bradshaw and his colleagues acknowledge, children are not included in *all* phases of the data collection and interpretation process. It would be rather difficult to elicit significant and meaningful involvement from children in the selection of indicators already collected, particularly for cross-national research. But, as Bradshaw et al. (2006) have indicated, the children's perspectives can also be represented in prior qualitative and quantitative research that elicits children's views and experiences.

Ben-Arieh (2005) has discussed possible roles of children in conjunction with child well-being research. (1) Children should be part of the initial design of studies to enhance the development of indicators and measures that are based on the experiences of all children, including those in disadvantaged groups. (2) Children should be used as sources of information to inform and stimulate child well-being research. In modern society, most adults spend much of their time away from their children and may not know the details of children's daily lives, regular activities, and their understanding and concerns about the world that surrounds them. (3) Older children can be part of the data collection process to be trained as interviewers to possibly get around methodological problems associated with unequal power relationships between adult interviewers and child respondents. (4) Children could be part of the data analysis to bring their subjective perspectives to the gathering and interpretation of information regarding child well-being indicators and domains or dimensions. The children's participation in the data analysis process could enhance the adult researchers' understanding of the data that have been collected. (5) The second core principle of the CRC emphasizes that "In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, *the best interests of the child shall be a primary consideration*" (our emphasis, United Nations 1989: 3). Thus, Ben-Arieh argues that children should be partners in disseminating and utilizing data results, to add their voice to the political, legal, and administrative processes that directly affect their lives.

Part II of the CRC directs countries ("States Parties") that have ratified the Convention to "make the principles and provisions of the Convention widely known, by appropriate and active means, to adults and children alike" (United Nations 1989: 18). In addition, each country or state is required to establish a "Committee on the Rights of the Child" to implement the provisions stated within the CRC and to report efforts that are made to adopt the provisions therein.

There have been efforts in national and sub-national areas, particularly in Europe and OECD countries, to include children and youth in the research process to add their voices and concerns to the understanding of their well-being. A number of these efforts were associated with the development of diverse measures in order to create "State of the Child" reports that could be used to identify troubling inequalities and disparities, highlight positive areas, and develop policies to improve the lives of children and youth.

**Ireland.** One such effort was in the Republic of Ireland. The National Children's Strategy was developed in 2000, and a key objective was to develop a national set of child well-being

indicators that encompassed the many facets of children's lives to be used in a Nation's Children Report (Hanafin et al. 2007). The overarching perspective was to focus on the "whole child" acknowledging that children are active participants in their own lives and that the process of selecting indicators of overall child well-being must include and respect children's voices.

A four-step approach was used to develop the national set of child well-being indicators. First, there was a review of indicators, domains, and other measures that had been used in previous research and reports on child well-being yielding over 2,500 indicators. The review also addressed the selection criteria for the identification of appropriate indicators. Second, national statistics and data sources were examined as possible sources for the development of indicators as identified in the first step. Then the indicators in the first step were classified as to whether or not the information could be obtained from such data sources. At that time, all the indicators were categorized into 56 main areas. Third, a panel composed of persons with expertise in areas of children's lives was used via the Delphi technique to gain consensus on broad areas of indicators to be used in the *National Children's Report for the Republic of Ireland*. The experts included service providers, researchers, policy makers, and parents. And fourth, concurrent with the rounds of the Delphi process, a study was conducted on children's understandings of well-being (Hanafin et al. 2007). The finalized set of indicators was composed of 42 child well-being indicators and 7 demographic indicators. The selected indicators were drawn from census and administrative data and European or international surveys of children, particularly adolescents.

A number of challenges occurred in the preparation of Ireland's first State of Nation's Children report that was released in 2006. The key challenges included issues related to the availability of data, inconsistency in the quality of data, problems with consistent international measures of demographic variables such as poverty, and challenges in the construction and organization of the report (Hanafin and Brooks 2009). Nonetheless, this project represents a step towards inclusion of multiple shareholders in the analysis of overall child well-being. In addition, a National Strategy on Children's Lives was formed to address the data availability of indicators to encompass the topics expressed by the children regarding their well-being.

**New South Wales, Australia.** There has been widespread use of qualitative methods to engage children in defining and explaining their current concepts of "well-being." In New South Wales, Australia, Fattore et al. (2007, 2009) used a phenomenological/ethnographic approach to the study of positive well-being. Children ranging in age from 8 to 15 years were allowed to articulate their ideas regarding well-being. The researchers used multi-stage processes to understand children's and youths' conceptualizations of well-being and the dominant domains of well-being. This was accomplished through individual and group interviews and engaging in task-oriented projects including drawing, photography, collage, or keeping journals (Fattore et al. 2007, 2009).

Their findings indicated that children's ideas and dominant themes of well-being were defined through their feelings and were related to their relationships with family and peers, their sense of self, and the importance of safety and security. Many of the themes mentioned by children were similar to those in adult-developed studies; however, their focus was slightly different. For example, the children discussed material and economic resources in the sense of having what is

needed to provide a decent standard of living for families and households. There also was a stronger emphasis by children on the overlapping areas of their emotional lives, a domain that has proven difficult to measure with quantitative indicators. Indeed, one of the issues associated with obtaining rich results from qualitative research is that it should be followed with the development of quantitative measures to capture a large group of children's perspectives regarding well-being and this often is difficult.

Advances continue to be made in child well-being research that is based on the principles of the CRC. An overview of more recent advancements and challenges in research with and by children was the focus of a special issue of *Child Indicators Research* (2011, Volume 4, #2).

### **SHIFTS IN THE STUDY AND MONITORING OF THE “STATUS OF THE CHILD” AND CHILD WELL-BEING**

Asher Ben-Arieh has tracked the changes or shifts in the worldwide monitoring and assessment of the status of the child and expansion of child well-being research in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries (Ben-Arieh and Goerge 2001; Ben-Arieh 2006, 2012). He has recently documented nine major shifts in the field, which are expanded on below (Ben-Arieh 2012): (1) survival to beyond survival, (2) negative to positive indicators, (3) well becoming to well-being, (4) focus on children's rights, (5) traditional to new domains, (6) adult to child perspective, (7) geographic level of the report, (8) inclusion of indices, and (9) policy relevance (Ben-Arieh 2012).

Early social indicators on children were focused on children's physical health and threats to survival using objective measures such as infant mortality rates, school dropout rates, etc. The field shifted with the acknowledgement that child indicators should also focus on child development and well-being. With this shift from survival to well-being came the shift from negative to positive indicators. No longer could one assume the absence of a negative behavior or outcome indicates that the child is developing to his or her full potential.

The shift from well becoming to well-being was in part due to the recognition that childhood is not just a status in transition to *becoming* an adult. The sociology of childhood and the Convention for the Rights of the Child shifted focus to childhood as a separate stage of the life course, and thus research should shift to the child's current *well-being* in addition to *well becoming*. Accompanying the shift from child well-becoming to child well-being was the recognition through the Convention on the Rights of the Child that childhood is a separate status and that this status has its own rights, as discussed earlier.

The transition from traditional to new domains follows from the previous shifts and the increasingly interdisciplinary nature of the study of child indicators. New domains include more child-centered measures that include subjective well-being, happiness, and security. With the recognition of childhood as a separate status that has accompanying rights, the child has

increasingly become the unit of analysis rather than the family or the perceptions or responses of adults about their children. The inclusion of children in all stages of the research process yields new areas to study and measure. In addition, there has been an increase in the sources of indicators calculated from administrative records, national and international data collection, and sample surveys of children and adolescents.

The increase of objective and subjective data across regions of the globe has led to studies of different geographical units including local, state or sub-national, national, and multinational levels. This chapter has directed focus on multinational studies of different countries and geographical regions. More recent geographical studies and the availability of increasing sources of data have led researchers to advance the development of indices to measure the multiple components of child well-being.

Finally, the reporting, analysis, and publication of child well-being research has begun to shift focus to the application and policy relevance of this work. In 2008, Ben-Arieh called for a more policy-oriented perspective in the study of child well-being. As an exercise, he critiqued the UNICEF Index of Child Well-Being (UNICEF 2007) and the U.S. Child and Youth Well-Being Index (Land et al. 2001; Land et al. 2007) for their potential impact on policy (Ben-Arieh 2008b) although neither index was initially established to directly impact policy. He concluded his evaluation with five research questions in order to focus on policy relevance. (1) What are the most salient outcome measures? (2) Which indicators have the most impact on shaping policies? (3) How should indicators be packaged and marketed? (4) How can indicators be used to shape public opinion? (5) What are the most meaningful metrics for indicators? Ben-Arieh sees policy impact and relevance as becoming an increasingly important direction in child well-being research.

## **CHILD WELL-BEING IN THE DEVELOPING WORLD**

A notable omission in this “worldwide view of child well-being” is research results from countries in Africa, Central and South America, and South and West Asia. There are international publications of objective indicators of the state of the child, such as UNICEF’s *State of the World’s Children* reports published annually since 1979 and their *The Progress of Nations* reports published since 1993. Other international organizations such as the World Bank also collect and publish objective indicators for countries of the world.

In 2000, the United Nations General Assembly adopted the Resolution of the United Nations Millennium Declaration that established the *Millennium Development Goals Project* (MDG) to monitor changes in the achievement of universal goal (United Nations 2000). This internationally accepted project is using 48 technical (objective) indicators to address 18 targets to fulfill eight goals by the year 2015. The eight goals include: (1) eradicating extreme hunger and poverty, (2) achieve universal primary education, (3) promote gender equity and empower women, (4) reduce child mortality, (5) improve maternal health, (6) combat HIV/AIDS, malaria and other diseases, (7) ensure environmental sustainability, and (8) develop a global partnership

for development. The objective data that are collected and monitored for this project include a number of child-based indicators for worldwide comparisons. There are a number of cross-national surveys that include information about children in a variety of nations. Examples include the UNICEF-sponsored Multiple Indicator Cluster Surveys to monitor the situation of women and children across the world; the Demographic and Health Surveys, which focus on women and also provide information on children's health and educational achievements; and the World Bank-sponsored Living Standard Measurement Surveys to collect household data to inform policy decisions. At this time there is a dearth of child or youth-based surveys and subjective indicators, which are needed to adequately assess the full dimensions of child well-being. Yet studies of child well-being indices need to be initiated using what indicators are available to begin the multinational cross-national and trend comparison studies.

### **CONCLUDING REMARKS**

Child well-being studies have their roots in the social indicators movement that occurred in the last half of the twentieth century. In the twenty-first century, there has been an explosion in the number of studies on the measurement and assessment of child well-being. Increasingly, there have been cross-sectional multinational multidimensional studies and rankings of child well-being, many of which have been guided by the Convention on the Rights of the Child. We have reviewed a number of these studies and there are more to be examined and compared. The results indicate that no country excels in all dimensions of child well-being, which can point to areas in need of greater focus on improving the life of the child. Economic, political, social, and cultural characteristics of a nation affect how well children are faring across multiple dimensions.

Jonathan Bradshaw and his colleagues have indicated many limitations in their current efforts to study child well-being across nations. There are additional limitations and perhaps difficult questions that remain to be addressed as this research grows and matures. For example, are subjective indicators comparable in meaning across nations with different cultures? The CRC directs countries to include children in articulating and analyzing their status, but at what age can they meaningfully participate? Who speaks on their behalf if younger children cannot understand abstract concepts or describe their subjective experiences?

As can be seen from this review, there is much work to be done to contribute to worldwide measurement and monitoring of child well-being. There is a great need to extend theory regarding the conceptualization of child well-being, which unfortunately is beyond the scope of this entry. In addition, the availability of more reliable and more diverse indicators that are collected internationally is an important need. Also needed are sophisticated methodological techniques to evaluate the sensitivity of the inclusion or exclusion of indicators as well as the measurement and development of dimensions or domains and to evaluate the strength and weaknesses of possible weighting schemes.

### **Cross-References**



Human Development Index, Subjective Well-Being,

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