## **Child Well-Being and Child Suffering**

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Abstract: "How are the kids doing?" is a well-being question. Reversing the spectrum of this question, it becomes "Are the kids suffering?" Adults might be able to answer these questions for their own children or those in their immediate surroundings, and many children could provide information about their own well-being/suffering or those of other children. However, applied to large populations of children at the national and cross-national levels, well-being/suffering questions are more challenging and have stimulated the rapid development of studies of child well-being indicators in recent decades. This chapter first reviews the objective and subjective approaches to measuring well-being and describes the United Nations Convention on the Rights of the Child and how the Convention has been used in cross-national studies of child well-being. It then reports some descriptive international comparisons of country-specific indicators of child suffering in relation to corresponding values of the Human Development Index and discusses what this tells us about child suffering in relation to human development. The chapter concludes with future directions and needed conceptual and data developments to advance the global monitoring of child suffering.

**Keywords:** Child well-being, child suffering, Domains, Indices, Convention of the Rights of the Child

#### Introduction

Child well-being research is an outgrowth of the social indicators movement of the 1960s and 1970s (Lamb and Land 2014) that has received increasing attention since UNICEF's annual reports on *The Progress of Nations* were initiated in 1993. The reports were designed to monitor the well-being of children across the globe in order to chart the changes and 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. The reports also recognized that suffering is a barrier to the realization of child well-being and happiness. Suffering includes distress resulting from threat or damage to one's physical being (i.e., physical suffering), distress originating in one's cognitive or affective self-identity (mental suffering), and distress cumulating from threat or damage to one's social identity (social suffering) (Anderson 2014:10).

This chapter describes the well-being research literature and the extent to which it can be used to make inferences about child suffering. It commences with a review of the objective and subjective approaches to measuring well-being. The United Nations Convention on the Rights of the Child and how the Convention has been used in cross-national studies of child well-being then is reviewed. This leads to a descriptive analysis of country-specific indicators of child suffering in relation to corresponding values of the Human Development Index and what this tells us about child suffering in relation to human development. The chapter concludes with future directions and needed conceptual and data developments to advance the global monitoring of child suffering.

### **Approaches to Well-Being Measurement**

Two basic views or approaches to measures of child well-being are objective and subjective.<sup>1</sup> Objective measures focus on the state or status of the child, whereas subjective views focus on the expression of opinions, behaviors, beliefs, feelings, 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, national, 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 across 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 indicators regularly collected via surveys by international organizations such as UNICEF, the World Bank, and the World Health Organization. As the survey titles indicate, such surveys

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<sup>&</sup>lt;sup>1</sup> This review of approaches to well-being measurement is based on Lamb and Land (2014), which can be consulted for more details.

usually are collected for specific reasons, yet they yield important indicators for comparative research of 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).

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.

### 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),<sup>2</sup> which has been ratified by all UN countries except the United States and Somalia. Prior to 1989 there had been a number of 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; and thus, 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.).

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<sup>&</sup>lt;sup>2</sup> See Land and Lamb (2014) for additional materials on the CRC and cross-national studies using concepts and measures based on the CRC.

There are four core principles in the CRC 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).

Children are to be recognized as active members of a society with entitled rights, while also being dependents of their families. A major goal of the CRC is to establish criteria regarding the improvement of child well-being and child quality of life with the recognition that children are to be considered full citizens with basic human rights (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 indicated that childhood is to be recognized as a *separate phase* in life, and children are to be considered to be *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 an identity that is separate from adults (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 development of indicators and methodologies in the study of child well-being. It is important that children's voices be heard and understood as their perspectives may differ from those of adults. A major emphasis of the CRC is that children should be respected as persons that can contribute to informing policymakers and child advocacy concerns, and children need to be better informed about legal and political issues that directly affect their lives (Ben-Arieh 2005). In fulfilling these obligations, an increasing 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, as outlined in the CRC.

## Cross-National Studies of Child Well-Being Using the CRC Approach

The CRC has been used as the basis of several recent cross-national studies of child well-being. 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 results were published in 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. The use of multiple domains represented an improvement over UNICEF's previous use of income poverty as a proxy for child well-being. In the Report Card the ranking of countries varied across the domains, which indicated that no one indicator could serve as such a proxy.

Jonathan Bradshaw and colleagues Petra Hoelscher and Dominic Richardson were members of the group of external advisors for the UNICEF Report Card 7. This team of researchers has 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 mentioned UNICEF report. In comparing child well-being in OECD countries, Bradshaw et al. (2007a) provided additional information regarding the selection of indicators for the assessment of child well-being. They also provided a more detailed explanation regarding the methodology used to develop the rankings. In the same year Bradshaw and colleagues (2007b) published a multi-dimensional child well-being index for the 25 European Union countries (EU25). This study was more detailed because there were more indicators available for the EU25 countries as compared with the OECD nations. Bradshaw and Richardson (2009) conducted another study of child well-being in 27 EU countries plus Iceland and Norway. They found similar results as in their study of the 25 EU countries. In general the Nordic countries (the Netherlands, Sweden, Finland, and Denmark) ranked in the top third and the former Eastern bloc countries, except Slovenia, were 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).

Richardson et al. (2008) expanded their global multidimensional study of child well-being by focusing on 21 countries from Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS), covering the first decade of the 21<sup>st</sup> century. "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 were experiencing social changes, particularly in demographic reforms and economic structures, so it was important to study the well-being of children amid such transitions. Richardson et al. (2008) identified trends in the ranking of dimensions. Belarus, Bulgaria, and Russia ranked high in dimensions associated with standard public services, such as economic/material situation, child health, and education, and ranked poorly on personal and social relationships and indicators of risk and safety behaviors. The opposite effect was evident for Bosnia Herzegovina, Uzbekistan, and Azerbaijan; countries that were faced with turmoil. For example, ethnic conflict and divisions in Bosnia Herzegovina stalled the establishment of public services to support the diverse population, and thus, poverty rates were high and there were many displaced persons. The new EU members Romania and Bulgaria only ranked 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' research, in part, was 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 only explained about a third of the variation in ranking of children in the countries studied.

Lau and Bradshaw (2010) evaluated children's well-being in 13 countries in the Pacific Rim. Countries within the Pacific Rim were 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 – had the highest rankings on the global Human Development Index (HDI)<sup>3</sup>, whereas Malaysia, Thailand, China, the Philippines, Indonesia, and Vietnam had high to medium HDI rankings (Lau and Bradshaw 2010). By comparison, Japan, Singapore, Taiwan, Hong Kong, and New Zealand were the five top-ranking countries in overall child well-being. As with other multinational studies of child well-being, no Pacific Rim country was consistent in its ranking among the seven domains. Indonesia and the Philippines, at the bottom of the overall rankings, each scored high for subjective well-being and Thailand ranked high for living environment. The wealthier countries were associated with higher scores (R<sup>2</sup> = 0.54), although there were some notable exceptions. Australia and South Korea ranked lower than one might expect given their nations' wealth.

A notable omission in extant cross-national comparisons of child well-being is the systematic study of child well-being in 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. But to date there has been no study of the available data to study child well-being in these parts of the world.

### **Child Suffering and Human Development**

As the foregoing review and summary make clear, the main emphasis of recent cross-national studies of the condition of children has been on measures of well-being, the positive end of a suffering-to-well-being dimension. The question to which we now turn is the extent to which existing sources of cross-national data can be used to assess the suffering end of this spectrum for children.

For comprehensive comparisons across large numbers of countries that range from developed to less developed, the short answer to this question is that the available indicators of child suffering tend are very limited and concentrated among indicators of health and education. Because of this we focus our analysis on the extent to which cross-national indicators of child suffering correlate with human development indicators, specifically, the Human Development Index (HDI). The HDI is a composite social indicator/well-being index based on life expectancy, education, and income statistics at the country or national level. The objective of the HDI is to rank as many

<sup>3</sup> The Human Development Index is to be discussed more fully in the next section of this chapter.

countries as possible on a scale of human development. The following is a brief summary of its conceptual and methodological foundations.<sup>4</sup>

The HDI has been produced and updated yearly since 1990 by the United Nations Human Development Programme (UNDP; <a href="http://www.undp.org/content/undp/en/home.html">http://www.undp.org/content/undp/en/home.html</a>). The UNDP is the global development network of the United Nations, in 2013 it operated in 177 countries working with them on their own solutions to global and national development challenges. As countries develop local capacity, they can draw on the expertise and help of the people of the UNDP and its array of partners. The UNDP is an executive board within the United Nations General Assembly, and its Admistrator is the third highest-ranking official of the United Nations after the Secretary-General and Deputy Secretary-General. The UNDP works in four main areas: poverty reduction and achieving the Millennium Development Goals (MDGs; United Nations 2000); democratic governance; crisis prevention and recovery; and environment and sustainable development. The MDGs include eight goals for the year 2015:

- 1) eradicate extreme poverty and hunger;
- 2) achieve universal primary education;
- 3) promote gender equality 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.

With the instituional sponsorship and consistent support of the UNDP and the efforts of the HDI project team to update and improve the index, the HDI has become one of the most well known composite social indicators. This section describes the development and evolution of the HDI, the data and methods used in its calculation, its contributions to the assessment of global wellbeing, and the extent to which it relates to these MDGs and child suffering.

Conceptually, the HDI is based on the work of Sen and Nussbaum (Nussbaum and Sen 1992; Sen 1987), who developed the *capabilities approach to human well-being*, which focused attention on what human beings can do and be, instead of on what they have. Sen and Nussbaum defined *capabilities* as the abilities and the power of individuals to do certain things, to obtain what they desire, to achieve desired states of being, to utilize the resources they have in the way they desire and to be who they want to be (Stanton 2007, p. 9). By comparison, *goods* are the things that individuals possess. Capabilities facilitate using goods in ways that are meaningful to individuals. Sen used the term *functionings* for the capabilities that individuals actually used or participated in, while the more comprehensive capabilities term refers to the full set of functionings that are feasible or can be used by a given individual or group of individuals. For example, with an individual's capabilities set, a fish-based diet may be the only choice; with another set, fish may be one of many dietary choices. Capabilities also can have intrinsic value by adding worthwhile options or positive freedoms to individual's lives (Sen 1999; Crocker 1992, 1995).

Based on the Sen-Nussbaum capabilities conceptualizations, Mahbub ul Haq directed the "human development project" of the UNDP in the late 1980s. This project sought to develop a

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<sup>&</sup>lt;sup>4</sup> For a more detailed exposition and assessment of the HDI, see Land (2014).

new conceptualization of human well-being that went beyond national income and measures such as GDP and to make available measures of well-being based on the new definition. The project produced its first *Human Development Report (HDR 1990*, UNDP) in 1990. *HDR 1990* stated that the human development process is one of enlarging people's choices. It then focused on three essential capabilities: a long and healthy life, knowledge, and "access to resources needed for a decent standard of living" because, "If these essential choices are not available, many other opportunities remain inaccessible" (UNDP 1990).

With the 2010 HDI Report, the HDI was revised. It combined the following statistical measures of the three dimensions:

- A long and healthy life as measured by life expectancy at birth (LE)
- Education index as measured by mean years of schooling (MYS) and expected years of schooling (EYS)
- A decent standard of living as measured by Gross National Income per capita (GNI<sub>pc</sub>) in purchasing power parity with the United States dollar (PPP US\$)

For a calendar year for which the HDI is calculated, country-level statistical measures of each of these four measures are scaled as proportions of the maximum observed value for that year. Prior to the *HDR 2010*, the scaled values of each of the education statistics then were arithmetically averaged to calculate a country-level arithmetic mean Education Index. Then the scaled values for each of the three component dimensions were arithmetically averaged to yield country-level HDI values. Beginning with the *HDR 2010*, the arithmetic means were replaced with geometric means, as arithmetic means can be substantially affected by extreme values on any one of the three component indices of the HDI, while the geometric mean is less influenced in this way (see, e.g., Hines 1983). Thus, the Revised HDI geometric mean formula places more emphasis on consistency among the three HDI component statistics for a country and makes an extremely large or small value on any one of the three components less influential on the calculated value.

The *HDR* 2010 contains HDI numerical values and rankings for a total of 186 countries. These are grouped into quartiles labeled from high to low as: Very High Human Development, High Human Development, Medium Human Development, and Low Human Development. The empirical question to which we now turn is the cross-national relationship of the HDI to indicators of child suffering. At this inclusive global level of cross-national comparisons, in contrast to the region-specific studies of child well-being reviewed above, the available indicators of child suffering tend are very limited and are concentrated among indicators of health and education.

Figure 1 shows cross-national scatterplots of six child suffering indicators (on the vertical axes) for 2010 or 2011 with HDI values (on the horizontal axes) for 2010. The HDI values are bounded by 0.34 and 0.955.

The first three panels of Figure 1 show scatterplots of bivariate relationships between health statistics that are indicative of early childhood suffering and the HDI values. Panel A of Figure 1 contains a plot of the infant mortality rate (deaths between birth and age 1 per 1,000 live births) for 2010 and the HDI. The infant mortality rates range from a low of 3 to a high of 114. Overall, countries scoring in the Very High and High quartiles of the HDI have relatively low

infant mortality rates compared to those at Medium and Low Human Development levels. The overall relationship is one of curvilinear decline in the form of a reverse J-curve as the HDI ranges from lower to higher levels. The scatterplot also shows evidence of heteroscedasticity, with countries at lower values of the HDI have a larger range of infant mortality rates than countries at the higher levels.

These properties of the Panel A scatterplot are evident in the next two graphs as well. Panel B shows the scatterplot of the child mortality rate for children ages zero to 5 per 1,000 live births in 2010 and the HDI values. Again, the relationship is heteroscedastic with larger variance among the rates at lower levels of human development. The relationship also is strongly negative in that higher levels of the HDI are associated with lower child mortality rates in the form of a reverse J-curve form. Panel C displays the scatterplot of the percentage of children under age 5 who are moderately or severely underweight for their age in 2010 and the HDIs. Data for this statistic is missing for 77 countries. Nonetheless, the scatterplot shows a reverse J-curve, heteroscedastic relationship between levels of human development and this health indicator of child suffering.

Panels D and E of Figure 1 show relationships between the HDI and measures of public health immunizations against childhood diseases that are associated with child suffering. Panel D contains plots of the percent of children with DTP (Diphtheria, Tetanus, and Pertussis/ Whooping Cough) immunization vaccinations in 2010 and the HDIs. Panel E gives similar data for measles vaccinations. These scatterplots show quite different cross-national relationships of the HDI to the immunization coverage statistics. In Panel D, it is evident that DTP immunization coverage is 90 percent or above for countries at Very High and High levels of human development as measured by the HDI. At Medium and Low HDI levels, all countries have DTP immunization percentages of 60 percent or greater and many are at the 80 percent or greater level. The measles immunization percentages plotted in Panel E are more dispersed – at all levels of the HDI, there are countries with percentages of coverage below 80 percent – although the numbers of such countries are larger at Low to Medium HDI levels.

In addition to the health indicators of child suffering in Panels A through E of Figure 1, another indicator for which there are data on a large number of the world's countries that is indicative of levels of child suffering is the combined (both sexes) gross enrollment in primary educational institutions percentage plotted in Panel F.<sup>5</sup> Larger levels of this indicator can be regarded as associated with lower levels of child suffering in the sense that more education opportunities are indicative of lower levels of social suffering in Anderson's (2014: 10) conceptualization. The scatterplot of this school enrollment and HDI statistics in Panel F show a positive linear relationship, with higher levels of human development associated with higher percentages enrolled. This positive relationship is to be expected, because, as noted above, Education is one of the three dimensions of the HDI. At the same time, the plot also evidences some heteroscedasticity at the Very High and High Human Development levels of the HDI, with some countries having percentages enrolled in the 60 to 80 percent range even though most countries at this level of development have enrollment percentages of 80 percent or more. There also is some heteroscedasticity at the Low Human Development end of the HDI scale, with some

<sup>&</sup>lt;sup>5</sup> While this statistic is defined as the number of students enrolled in primary, secondary and tertiary levels of education, regardless of age, as a percentage of the population of school age for the three levels for each country, values range up to 105% due to inconsistencies in the enrollment and/or population data (UNESCO 2009).

countries having percentages enrolled in the 20 to 40 percent range even though most countries at this human development level are in the 40 to 70 percent range. In sum, Panel F shows that higher levels of human development as measured by the HDI are associated with greater educational experiences of children and, by inference, lower levels of social suffering.

#### **Conclusion: What Needs to be Done**

This chapter began by noting Anderson's (2014: 10) conceptualization of suffering as including distress resulting from threat or damage to one's physical being (i.e., physical suffering), distress originating in one's cognitive or affective self-identity (mental suffering), and distress cumulating from threat or damage to one's social identity (social suffering). We also noted that suffering is the negative end of a suffering-to-well-being spectrum or dimension along which individuals, countries, and other units of analysis can be arrayed. With a focus on children, our review and summary shows that much research has pursued a well-being perspective, at least among the more developed countries of the world. It also is clear, however, that the absence of child suffering, and indicators thereof, are very much consistent with the principles and rights identified in the CRC.

As an illustrative exercise, we have described international comparisons of several country-specific indicators of child suffering in relation to corresponding values of the Human Development Index. On the basis of these analyses, two tentative generalizations can be made. First, national level (and likely, subnational level as well) indicators of the incidence or prevalence of child physical, mental, or social suffering generally decline as human development, conceptualized in the human capabilities terms of Sen and Nussbaum and as measured by the HDI, increase. For some indicators, the nature of the functional relationship to the HDI will take the form of a reverse J-curve, with large decreases in child suffering as human development increases from the Low to the Medium to the High levels of the HDI. Others will exhibit a linear functional relationship. Second, for those countries for which sufficient statistical data are available to construct a broad array of child well-being indicators measuring several dimensions of well-being, there generally will be a negative relationship between increases in the child well-being indices and indicators of child suffering.

Does this mean that effort does not need to be expended to develop a more complete array of indicators of child suffering at the national level? Not at all. To begin with, a systematic application of Anderson's physical, mental, or social suffering constructs to develop a more complete array of country-level indicators needs to be pursued. The few examples of child suffering indicators we have presented in this chapter are only illustrative. A systematic identification of a full range of such indicators, especially in conjunction with the CRC, would be most desirable. In addition, while the general negative functional relationships of national level child suffering indicators with the HDI and with indices of child well-being stated in the previous paragraph might hold on the whole, there likely will be a number of indicators of specific forms of child suffering that deviate from the general cross-national functional forms and thus provide additional information leading to additional analysis. In this way, the child suffering perspective can advance the global monitoring of child suffering and add value to existing HDI and well-being data and analyses.

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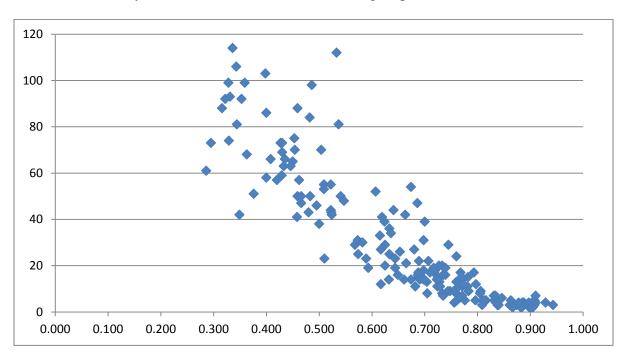
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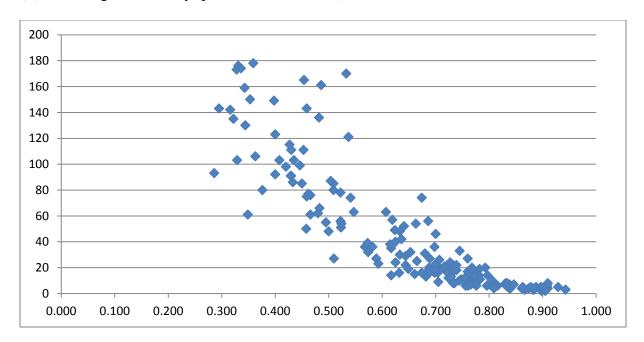
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Figure 1. Cross-National Scatterplots of Relationships Between 2010 Human Development Index Values (Horizontal Axes) and Measures of Child Suffering (Vertical Axes)

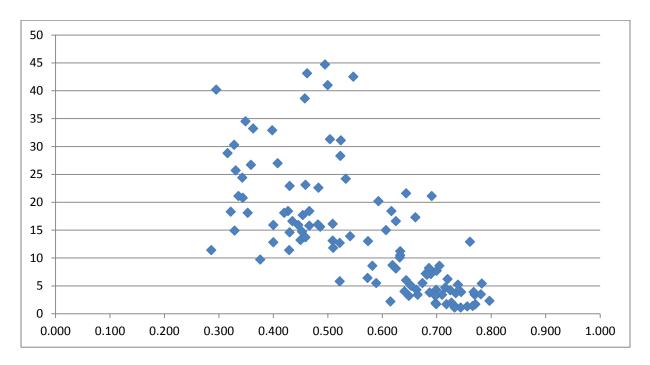
(A) Infant Mortality Rate (Deaths Between Birth and Age 1 per 1,000 Live Births), 2010



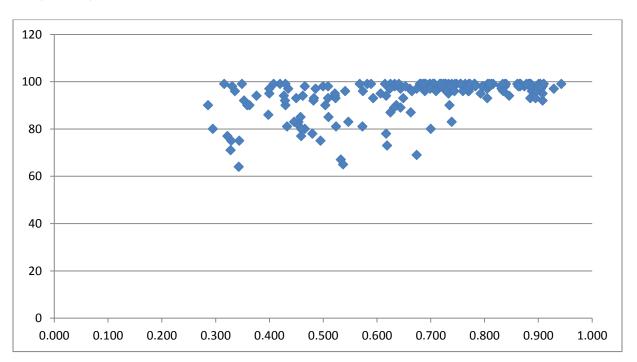
(B) Under Age 5 Mortality (per 1,000 Live Births), 2010



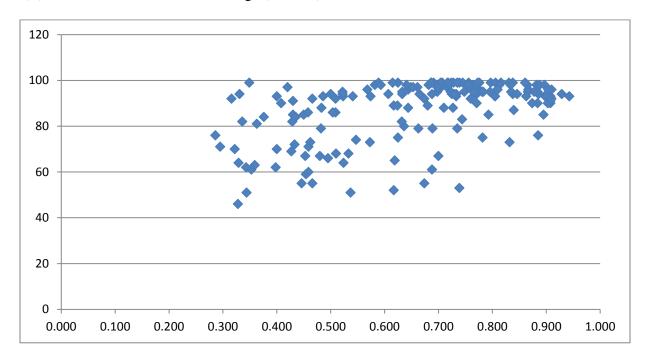
# (C) Children Under Age 5 Who Are Underweight For Their Age (Moderate or Severe, Percent), 2010



# (D) DTP (Diphtheria, Tetanus, and Pertussis (Whooping Cough)) Immunization Coverage (Percent), 2010



# (E) Measles Immunization Coverage (Percent), 2010



# (F) Combined (Both Sexes) Gross Enrollment in Education (Percent of a Theoretical School Age Population), 2011

