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Strong foundations: early childhood care and education

Measuring and monitoring the well-being of young children around the world

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Introduction

On the eve of a new millennium (the year 2000) at the world summit in Dakar, 160 countries committed themselves to provide basic education to all children, youth, and adults by the year 2015 and to six specific goals of Education For All (EFA). Those six goals could just as well be considered as six primary social indicators or six outcome measures of child well-being on which the global community has agreed. Furthermore, because the world has essentially set these six global goals as targets to which the global community should aim, progress toward reaching these targets can be monitored. The Education for All Global Monitoring Report (GMR) is the prime instrument to assess global progress toward achieving these six EFA goals. Every year, the GMR assesses where the world stands on its commitment to provide EFA by 2015. Developed by an independent team and published by UNESCO, the report is an authoritative reference that aims to inform, influence, and sustain genuine commitment to education for all.

The 2007 report will, among other issues, focus on early childhood education. As part of that effort, the report will document the state of young children's well-being in a global perspective. Further efforts will compile and use existing (up to date) measures and indicators to better understand the nature of young children's lives and experiences today.

The goal of this paper is to support that effort by offering a somewhat "new" concept of children's well-being and its relevance to measuring and monitoring young children's lives. This is followed by a focus on recent shifts and trends in the field, before presenting the history and development of child well-being indicators, drawn from an extensive literature review of nearly 200 "state of the child" reports worldwide published

between 1950 and 2005. State of the Child reports are published reports (not necessarily academic publications) that address the status of children at large, or within subgroups, with the goal of monitoring the status of children in a given geographic region (Ben-Arieh & Goerge, 2001; Bradshaw & Barnes, 1999). In section 4 of the paper, we discuss the current measures and monitoring efforts of young children's well-being around the world. We conclude with research implications in developing child well-being indicators, as well as some practical implications for the EFA global monitoring effort.

A Redefined Concept of Child Well-Being

Numerous efforts have been made to define (and redefine) the concept of child well-being in the context of child indicators. Much of this effort is rooted in Western culture in developed countries. The concept of developmental transitions between different stages in life is well documented, including most recently the transition from adolescence to adulthood (Avard & Tipper, 1997; Settersten, Furstenberg & Rumbaut, 2005). Similarly, developmental theories of child well-being abound, especially their psychological development (Limber & Hashima, 1999), but also their physical, social, moral, and spiritual development (Flekkoy & Kaufman, 1999; Hodgkin & Newell, 1998; Rushton & Greenberg, 1999; Thompson & Randall, 1999; Torny-Purta, 1999). These transitional or developmental concepts typically focus on one dimension of the child's life (for a good overview see Furstenberg, 2000, or Bronfenbrenner & Evans, 2000). Often, especially among young children, the standards for development are based on a preferred adolescent or adult outcome, implying the need to prepare children for their transition into later stages in life or to monitor the developmental process.

Similarly, several studies use an ecological framework for understanding child well-being (Bronfenbrenner, 1992; Andrews, 1997) or a framework that builds on the concept of children in society (Bennet, 2004; Dolev & Habib, 1997). Both of these approaches are useful in understanding child well-being, but they do not encompass the full spectrum of children's lives. What they lack is the child's own current perspective and experience.

This paper does not question the importance of any of the above mentioned concepts or theories. However, it argues that the effort to conceptualize children's well-being should encompass two additional perspectives. First, it should include a notion of children's rights, and second, it should consider childhood as a unique stage of identity, not simply one among many stages of *becoming* an adult.

Children's Rights as Human Rights

The notion of children's rights, in one sense, has emerged from an international movement based on the belief that children are human beings and as such are entitled to treatment that respects their basic human dignity. In the twentieth century, this belief has become so widespread that it is sometimes difficult to remember that not so long ago children were viewed as property, completely at the disposal of the adults in their lives (Takanishi, 1978; Hart, 1991; Hawes, 1991).

Throughout the twentieth century, international law has reflected a growing consensus on the extension of basic human rights, both in the extent of what constitutes rights and which groups are viewed as holders of these rights. The first major indication of this new international approach to human rights was the United Nations' resolution,

referred to as the *Universal Declaration of Human Rights*. This document included two different sets of rights: (1) civil and political rights, which were strongly advocated by Western countries, and (2) economic, social, and cultural rights, which were championed by the Soviet Union and its allies (Ben-Arieh Kaufman, Andrews, Goerge, Lee, & Aber, 2001).

Children became the focus of the international human rights standards when, following important declarations on the rights of children and years of careful drafting and negotiation, the Convention on the Rights of the Child (CRC) was adopted by the United Nations in 1989. The CRC incorporates a full range of rights for children. Furthermore, it makes it clear that civil and political rights are indeed interdependent with economic, social, and cultural rights (Andrews & Kaufman, 1999).

Notwithstanding criticism of the convention over various compromises or that it reflects more Western perspectives than others (Nieuwenhuys, 1998), the Convention provides a very valuable start in defining children's well-being (Melton, 2005). First, it has been ratified by 191 states; only the United States and Somalia have not ratified it, although the United States has signed it. Second, the convention is comprehensive in covering a full set of interdependent rights. The underlying principle of human rights law—the dignity of the individual—is apparent throughout the CRC. All children are included, “irrespective of the child’s or his or her parent’s or legal guardian’s race, color, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status” (Article 2). Third, the convention clearly provides an integrated approach to children's well-being, focusing on the idea that rights are an extension of personhood and personality. In fact, one guideline for a redefined

concept of child well-being provided by the convention is establishing what it would take for children to *feel* that they are being treated with dignity. (For the full text of the Convention and links to numerous sources of relevant information see <http://www.unicef.org/crc/crc>).

Childhood as a Stage in Itself

Although it is possible and reasonable to conceptualize child well-being (and its indicators) by focusing on the outcomes of childhood (that is, outcomes at a future date), such a concept fails to consider the life stage of childhood, a stage that has its own sociological characteristics (Aries, 1962). Much of the literature on children, in fact, focuses on them exclusively as “future adults” or the members of the “next generation.” Looking to the future is a legitimate and necessary activity, but at the same time it excludes the child’s perspective and overlooks the legitimate consideration of childhood as a stage in itself (Qvortrup, 1994).

A more appropriate concept of child well-being would focus, in large measure, on the activities and experiences of children while they are children (Boli-Bennett & Meyer, 1978; Meyer, 1987). This would enable the construction of a clear picture of childhood and how childhood is experienced (Ben-Arieh, 2000). This perspective is relatively new and not easily adopted, given that we have all been socialized into certain ideas about children, ideas that are reinforced everywhere in society and that portray children as potential, rather than actual, members of society.

When viewing childhood as a stage in itself, we accept that, although societal forces affect all members of the society, they are likely to affect children and adults quite

differently. The elderly and the very young will disproportionately use the health care system, for example. The effects of industrialization or urbanization on the experience of being a child are significantly different from those of being an adult. A further example is the continuing debate about working parents, which tends to focus on how two parents in the workforce will play out in future adults rather than on how they have altered the social structure of childhood (Prout, 1997).

An underlying assumption of the traditional view of childhood is that the end justifies the means and, therefore, producing successful adults is the main criterion of analysis. Treating children as a form of human capital focuses our attention on outcomes rather than on the quality of the everyday life of the child; moreover, it treats the stage of childhood as a time to get through or even endure for the sake of certain preferred adult gains (Ben-Arieh et al., 2001). A redefined concept of children's well-being is, therefore, guided by two underlying assumptions: that children are entitled to dignity and basic human rights, and that their childhood is a stage also deserving our attention and respect.

New Shifts and Trends in the Field

If children have basic rights and their childhood is itself worthy of study, then the traditional way of measuring and monitoring children's well-being must change. Indeed in recent years, a consensus has been reached among the professional and academic communities (including advocates and researchers and scholars focused on the measuring and monitoring child well-being and child indicators) that the field is changing (Hauser, Brown & Prosser, 1997; Moore, Lippman, & Brown, 2004). In particular, the literature highlights four major shifts: (1) a shift from a focus on a child's mere survival to a focus

on well-being and other attributes; (2) from a focus on negative aspects in children's lives to a focus on positive aspects; (3) from a focus on well-becoming (attaining eventual well-being in adulthood) to well-being (attaining well-being during childhood); and (4) from a focus on traditional to new domains of children's well-being (Ben-Arieh, 2005; Brown & Moore, 2001).

From Survival to Well-Being

The increased interest in the state of children, their well-being and quality of life, contributed to a shift in the focus of measuring the state of children. Measures such as infant and child mortality rates, school enrollment, and immunization rates, while still important, nevertheless seem outdated and less relevant for measuring the well-being and quality of children's contemporary lives. These measures deal mainly with survival and the basic needs of children and are inadequate for measuring the state and quality of life of children beyond survival. Aber (1997) argues that it is time to develop indicators that go beyond the basic needs of development and beyond the phenomenon of deviance. Likewise, Pittman and Irby (1997) argue for indicators and action beyond survival and prevention to promote child development. It is only recently that more appropriate indicators have been developed to measure and monitor the living conditions and well-being of children.

From Negative to Positive

Measures of risk factors or negative behaviors are not the same as measures that gauge the presence of protective factors or positive behaviors (Aber & Jones, 1997).

Most common measures of early childhood development pertain to deficiencies in achievements, problem behaviors, and negative circumstances. The absence of problems or failures, however, does not necessarily indicate proper growth and success (Moore et al.2004; Ben-Arieh, 2005).

This understanding led to a shift toward including “positive” indicators when measuring well-being (Aber & Jones, 1997). Thus, the challenge became to develop indicators that hold societies accountable for more than the safe warehousing of children and youth (Pittman & Irby, 1997). As Resnick states: "children's well-being indicators are on the move from concentrating only on trends of dying, distress, disability and discomfort to tackling the issue of indicators of sparkle, satisfaction and well-being" (Resnick, 1995, p. 3).

Furthermore, the emphasis on negative indicators, "bad news," without contextual information, has led to speculation about causal factors and the tendency to search for blame and punishment, contributing to political polarization that has failed to serve the interests of children. This has, in turn, also contributed to a shift toward looking at the positive aspects of children’s lives and the “good news” (Ben-Arieh & Goerge, 2005)

From Well-Becoming to Well-Being

Here the term "well-being" has been adjusted to describe the present well-being of children. In contrast, the term "well-becoming" is used to describe a future oriented focus (i.e., preparing children to a productive and happy adulthood). Qvortrup (1999) laid the foundation for considering children's well-being by claiming that the conventional preoccupation with the so-called "next generation" is a preoccupation with adults, which

is not wrong as such; however anyone interested in children and childhood should venture an interest for present childhood as well as future childhood. In other words, children are instrumentalized by the forward-looking perspectives in the sense that their "good life" is postponed until adulthood. Until then, these perspective focus on opportunities rather than provisions (De Lone, 1979)

Accepting the arguments of Qvortrup and others to concentrate on the well-being of children does not deny the relevance of a child's development toward adulthood. However, focusing on preparing children to become citizens suggests that they are not citizens during childhood, a concept that is hard to reconcile with a belief in children's rights. It is not uncommon to find in the literature reference to the importance of rearing children who will be creative, ethical, and moral adult members of community. However, by doing so, are we not denying that children are already members of a community, are creative, are ethical and moral beings? Of course, we all want children to grow up and become good partners, good parents, and good citizens. However, the point is that these roles have nothing to do with child-centered perspectives. We are talking about adult roles of children; hence, we are talking about children's *well-becoming*.

Both perspectives (children as persons today and children in their future status) are legitimate and necessary, both for social science and for public policy. A child-centered perspective has emerged in recent years, and with it a focus on children's well-being—although in most cases this new attention was simply an add-on to the focus on well-becoming and not a substitute. Many would agree that marinating a dual perspective is the right thing to do.

From Traditional to New Domains

The three shifts described above ultimately contributed to a fourth. Until recently, when measuring the state of the children, researchers concerned themselves with measuring children's basic survival needs, or they focused on the deviant and the negative aspects of children lives and their impact on eventual adulthood.

Looking beyond survival and at positive indicators, as well as considering the *current* well-being of children naturally brought into focus new domains of child well-being. Here, we use the term “domains” to refer to subtopics of research or within the various child indicator reports, either as a separate chapter or a section devoted to a specific issue (Ben-Arieh & Goerge, 2001). This shift toward new domains led, in turn, to the shift from traditional domains (such as subtopics aligned with the different social services or professions: health, education, demography, and so) to new domains (such that the subtopics are child-centered and defined as interdisciplinary and cutting across services: civic life skills, safety, children activities, and so on).

The History and Development of the Children’s Well-Being Indicators

Although there is a long history of sociological and demographic study of social trends using statistical indicators, it was the publication of Bauer's book, *Social Indicators* (1966) that prompted the widespread use of the term. One of the key objectives of the early social indicators movement was to assess the extent to which government programs or policies achieved their stated objectives. To evaluate or monitor changes taking place in society, emphasis was placed on the utility of social indicators within social system models (Land, 1975). By identifying key indicators and their

relation to specific outcomes or social well-being measures, these efforts emphasized not only on the descriptive function of social indicators but their analytic functions as well. In regard to children's well-being, these functions were developed to provide better understanding of the impact of children's policies and shifts in socio-demographic trends on the well-being of children (Zill, Sigal, & Brim, 1982).

Concerns about monitoring the situation of children are also not new. UNICEF has published its State of the World's Children report since 1979 (Grant & Adamson, 1979-1995). Other reports were published as early as the 1950s and 1960s, even if many of them were only a one-time publication (Alaska Committee on Children and Youth, 1959; Canada. Dominion Bureau of Statistics, 1965; Community Council of Greater New York, 1957). Various initiatives at the local, regional, national and international levels led by researchers, public agencies, and NGO's have sought better and more reliable information on the situation of children within various sphere of interest or operation (Miljeteig, 1997; Ben-Arieh et al., 2001).

Those efforts to measure and monitor children's well-being have grown in recent years, evident in the growing scholarly interest; in joint projects by government, non-government, and academic institutes; and especially in the production of numerous "state of the child" reports (Land, Lamb, & Mustillo, 2001; Brown & Moore, 2001; Ben-Arieh, in press). Much of this "new" and enhanced activity can be accounted for by UNICEF's *State of the World's Children* annual report, as well as the Annie E. Casey Foundation's *Kids Count* initiative in the United States. The UN's Convention on the Rights of the Child, through its global ratification and especially through its reporting and monitoring

mechanism, has also played a role in increasing interest in the field and in the growth of such reports.

This growth originally prompted several scholars to examine whether any specific patterns or trends are emerging in such reports (Bradshaw & Barnes, 1999; Hauser et al., 1997; Ben-Arieh et al., 2001; Ben-Arieh & Goerge, 2001). However, since these first reviews were published, many more state of the child reports have been produced at virtually every level (i.e., local, regional, national, and multinational), thus creating a larger body of “data” to review. Furthermore, previous reviews were often limited to predicting where the field was headed without the ability to empirically demonstrate the shifts they described.

Thus, the need for a better understanding of the field and its dimensions was apparent. In 2005, I revisited the issue by reviewing all available “state of the child” reports worldwide, yielding a list of 199 such reports. The reports were then classified, coded, and entered into an SPSS data file by using three groups of variables: two *descriptive* variables (period of publication and geographic region); seven *technical* variables (type of publisher, scope of publication, target population, time span, geographic level, unit of observation, and the publication perspective); and three *content* variables (survival or beyond, positive or negative, and well-being or well-becoming). For a full description and the review methodology see Ben-Arieh (in press). The study results are presented in Appendix 1.

The study clearly showed that:

- Activity in the field of measuring and monitoring children well-being has grown dramatically. This growth is especially apparent between January 2000 and March

2005. The study found twice as many “state of the child” reports in this period than in the entire decade of the 1980s. This growth is a worldwide phenomenon and is occurring in developed and developing countries alike.

- Most of the reports were a one-time episode.
- Western and non-Western countries (different regions) reports differed by the type, characteristics, and volume. Compared with non-Western countries, Western countries created significantly more reports by advocacy groups and academic institutions and significantly fewer reports by international organizations.
- Local and regional (state or county level) reports are more common in Western countries. In non-Western countries, national reports are more common.
- The vast majority (almost 70%) of the reports covered multiple domains of children’s well-being. Some differences in scope were observed across regions and time periods; however, none was statistically significant. The majority of the reports (73.4%) covered the entire child population in a given geographic area, and the differences across regions and time periods were again small and insignificant.
- More than 65% of the reports used the child as its unit of observation. This focus has emerged only recently, as many fewer reports focused as such in the past. No significant differences were found in regard to the unit of observation by regions.
- Recent reports are more likely than older reports to incorporate a subjective approach to children’s well-being. However, the vast majority of the reports (86.9%) are still framed from an adult’s perspective.

- Whether the report is focused on survival or beyond survival depends largely on where and when it was published. Later reports are more likely to include a focus on beyond survival as are reports from the developed parts of the world.
- Later reports are more likely to include a focus on positive aspects of children lives, while earlier reports focus on negative aspects. We found no regional distinctions in this trend.
- Whether the report focuses on children’s well-being or well-becoming is largely a function of its publication date. We found no distinctions by region.
- The noted shifts are occurring at different paces. Clearly, the shift from survival to beyond is the most advanced, with only 18% of reports published in 2000 or later still focused solely on survival and basic needs of children (and most of them produced in non-Western countries). The other two shifts have not been as dramatic, with 39.3% of the reports published since 2000 focused on negative aspects of children lives, and 37.8% focused on children’s well-becoming (both are evenly distributed between Western and non-Western countries).

Measuring and Monitoring Children’s Well-Being in the Third Millennium

The analysis presented above leads directly to the methods used today to measure and monitor children well-being, and such efforts can be generally characterized by nine features:

1. They are driven by the universal acceptance of the CRC.

2. They consider both children's survival and beyond. In this regard, it seems a geographic difference still exists, with developing countries (appropriately) more focused on survival indicators than are developed countries. However, this focus does not entirely exclude considerations beyond survival. On the other hand, developed countries, driven by the "achievement" of child survival, are shifting their attention beyond mere survival and toward other aspects of children lives.

3. Emerging from the need to look beyond the risk factors in a child's life, efforts are combining a focus on negative aspects of children's lives with positive aspects. Several major efforts have recently emerged to define the positive aspects of children lives and their measurement, and in this, a country's development status play no role.

4. The well-becoming perspective is no longer the only perspective. Although it still dominates, the well-being perspective is now considered legitimate as well. In that regard much work is still needed to define children's well-being and its measurement; however, once again, a country's development status play no role.

5. The use of "new" domains of child well-being is well underway. Thus, a focus on children's life or civic skills, for example, is much more prevalent; fewer efforts are profession or service oriented; and many more are child-centered.

6. Using the child as the unit of observation is the "new" name of the game. Apparently, the field has evolved since Jensen and Saporiti (1992) described the absence of this focus more than a decade ago. Efforts to measure and monitor children's well-being today start from the child and move outward. In contrast, past studies of child well-being often did not directly assess the child. Such studies may have, instead, selected the mother or the family as the unit of analysis. For example, household composition, which focuses on

those with whom the child primarily resides, is often used to indicate family structure. Yet from the child's point of view, the primary household may exclude highly significant people in his or her concept of family: a noncustodial parent, grandparent, for example, or others with whom he or she stays for extended periods. This information was absent in traditional studies but is much less neglected today.

7. Subjective perceptions, including the child's, are explored, and efforts to include them are growing. Recent efforts acknowledge the usefulness of both quantitative and qualitative studies, as well as multiple methods. In the past, most research on children's lives focused on "objective" description, treating children as passive objects that are acted on by the adult world. For example, socialization studies often assumed that the child was a blank slate to be indoctrinated. Current efforts are more likely to focus on children as active members of society, who themselves influence the adults in their lives and their own peers. Thus, there is an acknowledgment that to gain an accurate measure and provide meaningful monitoring of children's well-being, we must gather children's perceptions of their world and use insights into their experiences.

8. Local and regional reports are multiplying, and indications are that this trend is here to stay. Although this growing attention is especially notable in North America and other Western countries, this geographic focus will eventually (and probably already) penetrate to non-Western regions and countries.

9. There is an evident shift toward greater emphasis on policy-oriented efforts. Current efforts accept that a major criterion for selecting indicators is their usefulness to community workers and policymakers. Policymakers are often included in the process of

developing the indicators and discussing the usefulness of various choices, and policy-relevant indicators are pursued.

Clearly, the study of the “state of children” is changing. A review of the field since 1950 through today supports this claim. The volume of activity is clearly rising, and “new” forms of reports are emerging. However, the field is not only quantitatively changing. The field is also undergoing four major shifts (from a focus on mere survival to beyond; from a focus on negative aspects of a child’s life to positive; from well-becoming to well-being; and from traditional domains to new ones). These shifts are occurring widely, although at different paces. These shifts are also correlated with changes in the “philosophy” or approach of reports (such as the incorporation of subjective perceptions and the use of the child as the unit of observation).

Based on this review and my work in field, I would conclude that the field continues to move in these directions. I further anticipate that the continuation of the trends described here will eventually lead to the creation of a “new” role for children in measuring and monitoring their own well-being—as an active participant rather than subjects of research. In that regard of special interest were the findings that reports that adhered to the four major shifts were more likely to incorporate subjective perspectives at large and those of children in particular.

Incorporating children’s subjective perceptions is both a prerequisite and a consequence of the changing field of measuring and monitoring child well-being. For this paper purpose, we should focus on the consequences of including the child’s subjective perspectives and of the use of the child as the unit of observation. This perspective changes the role of children in efforts to study their status, and leads to children

becoming active actors in the effort to measure and monitor their well-being rather than objects of study (Ben-Arieh, 2005/b).

Practical Implications for Young Children's Well-Being

This paper's goal is to present the state of the art in measuring and monitoring child well-being, with special focus on young children. Studying young children's well-being should not necessarily differ from the study of all children. After all, if the field is moving toward "new" domains of child well-being, those domains should also apply to the study of young children. If the overall research perspective is becoming more children's rights minded, so should the effort to measure and monitor young children's well-being. If using the child as the unit of observation is the latest advance, it should be applied as well in early childhood studies. Finally, if local efforts are becoming more prevalent, so too should studies of young children at the local levels.

However, in many other aspects the mere focus on young children creates some tension in many of the above mentioned shifts and advances in the field. A child's early years are the most vulnerable to survival threats. In fact, the most common survival indicators are focused on young children (i.e., infant and under five mortality rates, immunization rates, and so forth). And yet the field is moving to embrace issues and indicators beyond survival. In regard to early childhood, one example of such an indicator would be in the domain of the young child's social environment (societal and children's perceptions of each other), which encompasses a wide range of possible perceptions, relations, and influences of the society on the child and vice versa.

Survival issues are also very high priorities in the developing world, and appropriately so. However, children's rights beyond survival have also gained considerable momentum and support in the developing world. The overwhelming acceptance of the CRC and its enthusiastic support in developed and developing countries could and should be used to move the study of children's well-being beyond survival to encompass child development and participation. Furthermore, the concept of children's rights was actually the basis for the growing concern in societal attitudes toward children

During early childhood, protection is a very high priority. Traditionally, child protection meant identifying and preventing risk factors, with its inherent focus on the negative aspects of children's lives. The shift to including more positive aspects of children's lives now means that researchers and others must identify and monitor a different, and additional, set of indicators. In this regard, early childhood is an easier period of life than middle childhood and adolescence to monitor because in early childhood, it is easier to agree on the positive aspects of children's lives. An example would be positive parenting practices or school-readiness, or a broader look at educational performance.

The well-being/well-becoming tension is especially problematic among young children. Early childhood is the heart of developmental psychology as well as the socialization theory. Most of the practices, professional services, and parental behavior are shaped by a desired outcome at middle childhood or later in life. The concept of children as a "natural" resource, one that must be nourished and invested in for society to reap "profits" in the future was (and still is) the basis for the well-becoming approach. And yet the field appears to be moving toward including the well-being perspective. I

would argue that this is true also in regard to young children. After all, the best way to secure a positive future for young children is to provide them high-quality early years. In other words, we should be more concerned with child happiness and, by doing so, we will enhance the chances of adult happiness. It seems safe to suggest that to the extent young children are generously provided with their needs in early childhood, their chances for a positive adulthood are enhanced.

The policy implications are a bit more complicated. On the one hand, the study of early childhood should be just as policy oriented as the study of childhood in general. On the other hand, experience has taught us that this is not the case. Studies of early childhood well-being tended to (and probably still do) focus on individual child development or the transition between stages. In part, this is because of the larger role the family plays in early childhood than in later stages of childhood and life (when school and work are introduced). Combined with an emphasis on developmental psychology, this created a focus on the inner circles of the ecological theory. A clear example is in public health studies. This focus may be changing today and there is reason to believe that the study of early childhood well-being will be much more policy oriented in coming years.

Finally, if measuring and monitoring children's well-being should include children in active roles (Ben-Arieh, 2005/b) and be based on a subjective perception of the child, then one must address the age question. How applicable is this new shift to young children and studies of their well-being? Some researchers argue that children differ from adults in cognitive ability, in their ability to comprehend research instructions, and to delay gratification, which leads to lower response rates and less reliability in

studies that directly involve children. Others argue that even if these differences exist, they are not enough to overcome the benefits of involving young children in studies of their well-being.

Clearly, children are different from adults, just as young adults are different from older adults and adults are different from the elderly. The age difference in itself, however, is insufficient to conclude that a different approach to research is necessary based on age. Even if we accept age as a determining factor in children's involvement in studying their well-being, there is still the issue of the "right age." Furthermore there is the question of an aggregate line (based on chronological age) and a personal line (based on developmental and psychological status). Studies that have looked at children's perceptions and understanding of complex concepts, such as human rights, are leaning toward the notion that children as young as age 5 or 6 can be used as reliable sources of information (Melton & Limber, 1992). Finally, in contrast to the reluctance to include young children in such studies, we found little, if any, concern over using one human being (an adult) to report on the daily activities of another (the child), especially when the study aims to move beyond the mere descriptive level. It is obvious that many studies did not even consider this aspect of who is the source of information.

As to the reliability and response rates—both of which are methodological challenges any researcher faces when conducting a study—different research populations pose different challenges, be they cultural, legal, physical, or age related. The question is, can the challenge be met? Can we do research that involves young children in a way that will generate reliable findings based on a good response rate? The answer is a definitive yes.

Several studies support this notion. Bianchi and Robinson have found children aged 8 through 11 are reliable enough to serve as the direct source of information, and they have suggested that children between ages 6 and 8 can be consulted by the adult who reports on their time use (Bianchi & Robinson, 1997). Posner and Vandell have interviewed children aged 8–10 as their source of information (Posner & Vandell, 1999), and Ibrahim (1988) has included boys aged 10–11 as interviewees in his study. Yet another study has used 2,200 children aged 7–12 as its source of information for children’s leisure activities (Harrell, Gansky, Bradley, & McMurray, 1997). Finally the German Youth Foundation has operated for the last five years what appears to be a very promising child well-being study that involves children as young as age 5 years (for more information see: <http://cgi.dji.de/cgi-bin/projekte/output.php?projekt=268>). Indeed, ample research exists showing that studies directly involving children yielded equally good response rates and reliability (and sometime even better) as those using adults to report on children’s well-being.

Conclusion and Relevance to the GMR

The GMR has adopted the definition of early childhood as birth to age 8. In this concluding section, I place current efforts to monitor and measure child well-being in the context of the GMR proposed framework for the 2007 report and its focus on early childhood care and education (ECCE), which is EFA goal number 1. The GMR proposed framework truly captures the complexity of the ECCE goal. This complexity derives from the diverse delivery schemes (home, centre, school, community, NGO), funding (public, private, mixed), and program content (education, psycho-social, health,

nutrition). Thus, an attempt to devise a monitoring effort that would adhere with all facets and cover all the above mentioned aspects of ECCE seems problematic. One way to deal with this problem would be to avoid the attempt to cover all those facets and instead stick with the current trend to use a child-centered perspective. Even though a growing number of policymakers recognize ECCE as important for children well-becoming, the inclusion of a well-being perspective will contribute to ECCE being viewed as an end in itself.

Furthermore, ECCE is multi-sectoral, combining education, health, nutrition, and family support. A traditional monitoring approach focused on one profession (education) will contribute less than a “new” approach focusing on children’s life skills or a set of integrated domains. Similarly an approach that would identify risk factors and their existence would fall short of monitoring children’s educational attainment.

It seems the major concern is availability of data, especially in a global effort. Although it is well recognized that there are many national and local bodies with knowledge and grass-roots experience regarding young children in their own countries, the GMR can add a unique inter-country and global perspective, alternative “best practices” grounded in child rights, and international comparisons. This should be provided in concert with other relevant international bodies such as the World Health Organization, UNICEF, Organization for Economic Cooperation and Development (OECD), and relevant human rights bodies. Given that most of the available comparative data from sources such as the WHO Health Behavior of School Children Survey, the OECD PISA, PIRLS and TIMMS surveys, the OECD health data, the Luxembourg Income Study, OECD Society at a Glance, the IEA Civic Education study, and many others, cover mainly school-aged children and adolescents, the challenge is even greater.

Nevertheless, these challenges must be met, and initial efforts are indeed underway around the world. Child Trends, in the United States, has created an indicators data-bank (<http://www.childtrendsdatbank.org>) as does the KidsCount project of the Annie E. Casey Foundation in the United States (<http://www.aecf.org/kidscount>). Recently, more attention is focusing on school-readiness and possible indicators to measure and monitor it (in the United States, a major effort is the Getting Ready initiative (see <http://www.gettingready.org/matriarch/> for details). Finally a different national perspective can be seen at the Australian report on key national indicators of children's health, development, and well-being (Australian Institute of Health and Welfare, 2004).

In the international context, as part of the World Bank conference on early childhood in 1997, I presented a list of possible indicators and their availability (Ben-Arieh, 1998). The multi-national project on Measuring and Monitoring Children's Well-Being developed a database of indicators including their age appropriateness and data availability (see <http://multinational-indicators.chapinhall.org>). UNICEF Innocenti Center is publishing reports cards on children well-being (see www.unicef-irc.org/research/) as do various other international bodies. In that regard, the GMR focus on ECCE is a welcome contribution in a most timely manner to a needy field.

References

- Aber, J. L. (1997). Measuring child poverty for use in comparative policy analysis. In A. Ben-Arieh & H. Wintersberger (Eds.), *Monitoring and measuring the state of children: Beyond survival*. Eurosocial Report No. 62 (pp.193-207). Vienna: European Centre for Social Welfare Policy and Research.
- Aber, J. L., & Jones, S. (1997). Indicators of positive development in early childhood: Improving concepts and measures. In R.M. Hauser, B.V. Brown, & W.R. Prosser (Eds.), *Indicators of children's well-being* (pp. 395-408). New York: Russell Sage Foundation.
- Alaska Committee on Children and Youth. *Children and youth in Alaska, the 49th state: Official report*. Juneau, Alaska: The Committee, 1959.
- Andrews, B.A. (1997). Assessing neighborhood and community factors that influence children's well-being. In A. Ben-Arieh & H. Wintersberger (Eds.), *Monitoring and measuring the state of children: Beyond survival* (pp. 127-142). Vienna: European Centre for Social Welfare Policy and Research.
- Andrews, B.A., & Kaufman, H.N. (Eds.) (1999). *Implementing the U.N. Convention on the Rights of the Child: A standard of living adequate for development*. Westport, CT: Praeger
- Ariès. P. (1962). *Centuries of childhood*. London: Jonathan Cape.
- Avard, D., & Tipper, J. (1997). Living a healthy life: A holistic approach to child health. In A. Ben-Arieh & H. Wintersberger (Eds.). *Monitoring and measuring the state of children: Beyond survival* (pp. 255-264). Vienna: European Centre for Social Welfare Policy and Research.

- Australian Institute of Health and Welfare (2004). *Key national indicators of children's health, development, and wellbeing*. Bulletin no. 20. AIHW cat. no. AUS 53. Canberra: AIHW.
- Bauer, R. A. (Ed.). 1966. *Social indicators* Cambridge: MIT Press.
- Ben-Arieh, A. (1998). The need for monitoring and measuring young children's well-being. In D. K. Behera (Ed.), *Children and childhood in our contemporary societies: A special volume of the Journal of Social Sciences* (pp.25-49).
- Ben-Arieh, A. (2000). Beyond welfare: Measuring and monitoring the state of children: New trends and domains. *Social Indicators Research*, 52(3), 235-257.
- Ben-Arieh, A. (2005). Measuring and monitoring children's well-being: The role of children. In C. Klöckner & U. Paetzel. *Kindheitsforschung und kommunale Praxis (Arbeitstitel): Praxisnahe Erkenntnisse aus der aktuellen Kindheitsforschung*. Wiesbaden, Germany: VS-Verlag für Sozialwissenschaften
- Ben-Arieh, A. (2005/b). Where are the children? Children's role in measuring and monitoring their well-being. *Social Indicators Research*.
- Ben-Arieh, A. (in press). Is the study of the "state of our children" changing? Revisiting after five years" *Children and Youth Services Review*.
- Ben-Arieh, A., Kaufman, H. N., Andrews, B. A., Goerge, R., Lee, B.J., & Aber, J.L. (2001). *Measuring and monitoring children's well-being*. Netherlands; Kluwer Academic Press.
- Ben-Arieh, A., & Goerge, R. (2001). Beyond the numbers: How do we monitor the state of our children" *Children and Youth Services Review*, 23(8), 603-631.

- Ben-Arieh, A., & Goerge, R. (in press). Measuring and monitoring children's well-being: The policy process. In A. Ben-Arieh & R. Goerge (Eds.), *Indicators of children's well-being: Understanding their role, usage, and policy influence*. Dordrecht, Netherlands: Springer.
- Bennet, M. (2004). Children and social identity. *Psychologist*, 17(9), 512-514.
- Bianchi, S. M., & Robinson, J. (1997). What did you do today? Children's use of time, family composition, and the acquisition of social capital. *Journal of Marriage and the Family*, 59, 332-344.
- Boli-Bennett, J., & Meyer J.W. (1978). The ideology of childhood and the state: Rules distinguishing children in national constitutions. *American Sociological Review*, 43(6), 797-812.
- Bradshaw, J., & Barnes, H. (1999). How do nations monitor the well-being of their children. Paper presented at the Child Well-being in Rich and Transition Countries, Luxemburg.
- Bronfenbrenner, U. (1992). Ecological systems theory. In Vasta, R. (Ed.), *Six theories of child development: Revised formulations and current issues*. (pp. 187-249). Philadelphia: Jessica Kingsley.
- Bronfenbrenner, U., & Evans, G.W. (2000). Developmental science in the 21 century: Emerging questions, theoretical models, research designs and empirical findings. *Social Development*, 9(1), 115-126.
- Brown, V.B., & Moore, K. (2001). *The youth indicators field in research and practice: Current status and targets of opportunity*. Washington, DC: Child Trends.

- Canada Dominion Bureau of Statistics, Health and Welfare Division. (1965). *Selected statistics on children*. Ottawa: Dominion Bureau of Statistics Census and Health and Welfare Divisions.
- Community Council of Greater New York. (1957). *Fact book on children in New York City: Characteristics of the child population and welfare, health, and education services for children*. A cooperative project of the research departments of New York City Departments of City Planning, Health, Hospitals, and Welfare, Board of Education, Court of Domestic Relations, Community Mental Health Board, Housing Authority, and Youth Board, with the Community Council of Greater New York. New York: Community Council of Greater New York Research Dept.
- De Lone, R.H. (1979). *Small futures: Children, inequality, and the limits of liberal reform*. New York: Harcourt, Brace, Jovanovich.
- Dolev, T., & Habib, J. (1997). A conceptual framework for developing indicators. In A. Ben-Arieh & H. Wintersberger (Eds.), *Monitoring and measuring the state of children: Beyond survival* (pp. 65-80). Vienna: European Centre for Social Welfare Policy and Research.
- Grant, J. P., & Adamson, P. (1979-1995). *The state of the world's children*. New York & Oxford: Oxford University Press.
- Flekkoy, M.G., & Kaufman, H.K. (1999). The social development of the child. In A.B. Andrews & N.H. Kaufman (Eds.), *Implementing the UN Convention on the Rights of the Child: A standard of living adequate for development* (pp. 117-132). Westport, CT: Praeger.

- Furstenberg, F.F. (2000). The sociology of adolescence and youth in the 1990s: A critical commentary. *Journal of Marriage and the Family*, 62(4), 896-910.
- Harrell, J. S., Gansky, S. A., Bradley, C. B., & McMurray, R. G. (1997). Leisure time activities of elementary school children. *Nursing research*, 46(5), 246-253.
- Hart, S. (1991) From property to person status: Historical perspective on children's rights *American Psychologist*, 46(1), 53-59.
- Hawes, J. M. (1991). *The children's rights movement: A history of advocacy and protection*. Boston: Twayne.
- Hauser, R. M., Brown, B. V., & Prosser, W. R. (Eds.). (1997). *Indicators of children's well-being*. New York: Russell Sage Foundation.
- Hodgkin, R., & Newell, P. (1998). *Implementation handbook for the Convention on the Rights of the Child*. New York: UNICEF.
- Ibrahim, H. M. (1988). Leisure among young Saudi males. *International Review of Modern Sociology*, 18, 57-60,
- Jensen, A.M., & Saporiti, A. (1992). *Do children count?* (Vol. 36/17). Vienna: European Center for Social Welfare Policy and Research.
- Land, K. (1975). Social indicators models: An overview. In Kenneth Land and S. Spilerman (Eds.), *Social indicators models* (pp. 5-35). New York: Russell Sage Foundation.
- Land, K.C., Lamb, V.L. & Mustillo, S.K. (2001). Child and youth well-being in the United States, 1975-1998: Some findings from a new index. *Social Indicators Research*, 56(3), 241-320.

- Limber, S.P., & Hashima, Y.P. (1999). An adequate standard of living necessary for children's cognitive development. In A.B. Andrews & N.H. Kaufman (Eds.), *Implementing the U.N. Convention on the Rights of the Child: A standard of living adequate for development* (pp. 69-86). Westport, CT: Praeger.
- Melton, G.B. (2005) Treating *children* like people: A framework for research and advocacy. *Journal of Clinical Child and Adolescent Psychology*, 34(4), 646-657.
- Melton, G., & Limber, S. (1992). What children's rights mean to children: Children's own views. In M. Freeman & P. Veerman (Eds.), *The ideologies of children's rights* (pp. 167-187). Dordrecht: Martinus Nijhoff.
- Meyer, J. (1987). Self and life course: Institutionalization and its effects. In G.Thomas et al (Eds.), *Institutional structure* (pp. 242-260). Beverly Hills, CA: Sage.
- Miljeteig, P. (1997). The international effort to monitor children's rights. In A. Ben-Arieh & H. Wintersberger (Eds.), *Monitoring and measuring the state of children: Beyond survival* (pp. 55-62). Vienna: European Centre for Social Welfare Policy and Research.
- Moore, K., Lippman, L., & Brown, V. B., (2004). Indicators of child well-being: The promise for positive youth development. *Annals of the American Academy of Political and Social Science*
- Nieuwenhuys, O. (1998) "Global Childhood and the Politics of Contempt" *Alternatives*, 23, pp. 267-289,
- Pittman, K., & Irby, M. (1997). Promoting investment in life skills for youth: Beyond indicators for survival and problem prevention. In A. Ben-Arieh & H. Wintersberger (Eds.), *Monitoring and measuring the state of children: Beyond*

- survival* (pp. 239-246). Vienna: European Centre for Social Welfare Policy and Research.
- Posner, J. K., & Vandell, D. L. (1999). After-school activities and the development of low-income urban children: A longitudinal study. *Developmental Psychology*, 35(3), 868-879.
- Prout, A. (1997). Objective vs. subjective indicators or both? Whose perspective counts? In A. Ben-Arieh & H. Wintersberger (Eds.), *Monitoring and measuring the state of children: Beyond survival* (pp. 89-100). Vienna: European Centre for Social Welfare Policy and Research.
- Qvortrup, J. (1994). Childhood matters: An introduction. In J. Qvortrup, M. Brady, G. Sgritta, & H. Wintersberger (Eds.), *Childhood matters: Social theory, practice and politics*. Vienna: Avebury.
- Qvortrup, J. (1999). The meaning of child's standard of living. In A.B. Andrews & N. H. Kaufman (Eds.), *Implementing the U.N. Convention on the Rights of the Child: A standard of living adequate for development*. Westport, CT: Praeger.
- Resnick, M. (1995). Discussant's comments. In *Indicators of children's well-being: Conference papers* (Vol. 2, special report series). Madison, WI: University of Wisconsin-Madison, Institute for Research on Poverty.
- Rushton, F.E., & Greenberg, R.E. (1997). The relationship between standard of living and physical development. In A.B. Andrews & N.H. Kaufman (Eds.), *An adequate standard of living necessary for children's cognitive development* (pp. 59-68). Westport, CT: Praeger.

- Settersten, R. A., Furstenberg, F. F., & Rumbaut, R. G. (Eds.) (2005). *On the frontier of adulthood: Theory, research, and public policy* Chicago: University of Chicago Press.
- Takanishi, R. (1978). Childhood as a social issue: Historical roots of contemporary child advocacy movements. *Journal of Social Issues*, 34(2), 8–28.
- Thompson, R.A., & Randall. B. (1999). A standard of living adequate for children's spiritual development. In A.B. Andrews & N.H. Kaufman (Eds.), *An adequate standard of living necessary for children's cognitive development* (pp. 87-104). Westport, CT: Praeger.
- Torney-Purta, J. (1999). The meaning of standard of living adequate for moral and civic development. In A. B. Andrews & N. H. Kaufman (Eds.), *Implementing the U.N. Convention on the Rights of the Child: A standard of living adequate for development* (pp. 105-116). Westport, CT: Praeger.
- Zill, N., Sigal, H., & Brim, O.G. (1982). Development of childhood social indicators. In E. Zigler, S.L. Kagan and E. Klugman (Eds.), *America's unfinished business: Child and family policy* (pp.188-222). New York: Cambridge University Press.

Final version

Appendix 1. Distribution of State of the Child Reports across different Variables by Period of Publication and Geographic Region (%) N = 199

| Content variables | Total | Geographic Region | | | | | Period of Publication | | | | | |
|---------------------|-------|-------------------|---------------|----------------|-------------------|----------------|-----------------------|-----------|-----------|-----------|-----------|-----------|
| | | North-America | Other Western | Eastern Europe | Rest of the world | Inter-national | 1950-1959 | 1960-1969 | 1970-1979 | 1980-1989 | 1990-1999 | 2000-2005 |
| Total | 100.0 | 56.3 | 20.6 | 1.5 | 16.1 | 5.5 | 0.5 | 1.5 | 2.5 | 15.1 | 49.2 | 30.7 |
| Type of publisher | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Advocacy | 20.6 | 23.2 | 14.6 | 0 | 25.0 | 9.1 | 100.0 | 0 | 0 | 16.7 | 19.4 | 24.6 |
| Academic | 15.7 | 12.5 | 29.3 | 0 | 12.5 | 9.1 | 0 | 0 | 0 | 20.0 | 18.4 | 11.5 |
| Government | 34.2 | 46.4 | 31.7 | 33.3 | 6.3 | 0 | 0 | 66.7 | 60.0 | 26.7 | 30.6 | 41.0 |
| International | 12.1 | 1.8 | 2.4 | 0 | 14 | 63.6 | 0 | 33.3 | 0 | 20.0 | 12.2 | 8.2 |
| Other | 17.6 | 16.1 | 22.0 | 66.7 | 12.5 | 18.2 | 0 | 0 | 40.0 | 16.7 | 19.4 | 14.8 |
| Scope | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| One domain | 30.8 | 31.5 | 39.0 | 0 | 28.1 | 9.1 | 0 | 33.3 | 40.0 | 26.7 | 32.0 | 31.1 |
| Multiple domains | 69.2 | 68.5 | 61.0 | 100.0 | 71.9 | 90.9 | 100.0 | 66.7 | 60.0 | 73.3 | 68.0 | 68.9 |
| Target population | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Whole | 73.4 | 65.2 | 75.6 | 100.0 | 90.6 | 90.9 | 100.0 | 66.7 | 100.0 | 83.3 | 71.4 | 68.9 |
| Segment | 26.6 | 34.8 | 24.4 | 0 | 9.4 | 9.1 | 0 | 33.3 | 0 | 16.7 | 18.6 | 21.1 |
| Time span | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| One time | 80.4 | 75.9 | 80.5 | 66.7 | 96.9 | 81.8 | 100.0 | 66.7 | 100.0 | 86.7 | 86.7 | 65.6 |
| Periodical | 19.6 | 24.1 | 19.5 | 33.3 | 3.1 | 18.2 | 0 | 33.3 | 0 | 13.3 | 13.3 | 34.4 |
| Geographic level | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Local | 4.5 | 6.3 | 4.9 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 3.1 | 8.2 |
| Regional | 21.6 | 36.6 | 0 | 0 | 6.3 | 0 | 100.0 | 0 | 20.0 | 26.7 | 19.4 | 21.3 |
| National | 62.3 | 53.6 | 85.4 | 100.0 | 81.3 | 0 | 0 | 66.7 | 80.0 | 53.3 | 68.4 | 57.4 |
| International | 11.6 | 3.6 | 9.8 | 0 | 12.5 | 100.0 | 0 | 33.3 | 0 | 16.7 | 9.2 | 13.1 |
| Unit of observation | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Child | 65.8 | 55.4 | 75.6 | 100.0 | 75.0 | 100.0 | 100.0 | 33.3 | 60.0 | 83.3 | 66.3 | 57.4 |
| Family | 19.1 | 25.9 | 7.3 | 0 | 18.8 | 0 | 0 | 33.3 | 40.0 | 13.3 | 19.4 | 19.7 |
| Community | 8.5 | 11.6 | 7.3 | 0 | 3.1 | 0 | 0 | 0 | 0 | 0 | 6.1 | 18.0 |
| Social services | 4.0 | 5.4 | 2.4 | 0 | 3.1 | 0 | 0 | 0 | 0 | 0 | 5.1 | 4.9 |
| Other | 2.5 | 1.8 | 7.3 | 0 | 0 | 0 | 0 | 33.3 | 0 | 3.3 | 3.1 | 0 |
| Perspective | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Child | 4.0 | 1.8 | 12.2 | 0 | 0 | 9.1 | 0 | 0 | 0 | 0 | 7.1 | 1.6 |
| Adults | 86.9 | 91.1 | 73.2 | 100.0 | 87.5 | 90.9 | 100.0 | 100.0 | 100.0 | 96.7 | 83.7 | 85.2 |
| Both | 9.0 | 7.1 | 14.6 | 0 | 12.5 | 0 | 0 | 0 | 0 | 3.3 | 9.2 | 13.1 |
| Perspective | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Subjective | 2.0 | 1.8 | 2.4 | 0 | 3.1 | 0 | 0 | 33.3 | 0 | 0 | 1.0 | 3.3 |
| Objective | 82.3 | 82.9 | 73.2 | 100.0 | 84.4 | 100.0 | 100.0 | 66.7 | 100.0 | 100.0 | 80.4 | 75.4 |
| Both | 15.7 | 15.3 | 24.4 | 0 | 12.5 | 0 | 0 | 0 | 0 | 0 | 18.6 | 21.3 |
| Survival # Beyond | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Survival | 40.9 | 36.0 | 36.6 | 100.0 | 65.6 | 18.2 | 0 | 100.0 | 80.0 | 73.3 | 42.3 | 18.0 |
| Beyond | 12.1 | 13.5 | 7.3 | 0 | 12.5 | 18.2 | 0 | 0 | 20.0 | 6.7 | 13.4 | 13.1 |
| Both | 47.0 | 50.5 | 56.1 | 0 | 21.9 | 63.6 | 100.0 | 0 | 0 | 20.0 | 44.3 | 68.9 |
| Positive # negative | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Positive | 1.5 | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 3.3 |
| Negative | 66.7 | 64.9 | 61.0 | 100.0 | 84.4 | 45.5 | 0 | 100.0 | 100.0 | 90.0 | 74.2 | 39.3 |
| Both | 31.8 | 32.4 | 39.0 | 0 | 15.6 | 54.5 | 100.0 | 0 | 0 | 10.0 | 24.8 | 57.4 |
| Being or Becoming | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Well-being | 1.0 | 0.9 | 2.4 | 0 | 0 | 1.0 | 0 | 0 | 0 | 0 | 1.0 | 1.6 |
| Well becoming | 71.2 | 67.6 | 63.4 | 100.0 | 87.5 | 81.8 | 100.0 | 100.0 | 100.0 | 96.7 | 82.5 | 37.7 |
| Both | 27.8 | 31.5 | 34.5 | 0 | 12.5 | 18.2 | 0 | 0 | 0 | 3.3 | 6.5 | 60.7 |