AN EVIDENCE-BASED APPROACH TO THE CONSTRUCTION OF SUMMARY QUALITY-OF-LIFE INDICES*

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When Wolfgang Glatzer, President of the International Society for Quality-of-Life Studies, asked me to prepare a presentation for the Opening Session of the Fifth Conference of ISQOLS, I commenced by collecting my thoughts about the purpose of "opening sessions" for conferences of scholarly societies. It became clear to me that these sessions function in many ways like the meetings of religious organizations. That is, what we have here at the Conference is a gathering of diverse people from many academic disciplines and many regions of the world, all of whom are united by their common interest in studying the conceptualization of the quality of life, how to measure it, and how to track changes therein over time and social space. What we need, therefore, in an opening session is for presenters to remind us of our common values and beliefs – those ideas and things which we hold in common, the paths our predecessors have broken, where we are today, and where we can hope to be in the bright tomorrow.

These, then, are the objectives of my presentation. I will begin with a review of the "holy words" of the founding documents and founders of the social indicators and quality-of-life movements of the 1960s and 1970s. You will see that these statements are ambitious indeed. Then I will take up the question: Where are we now? I will review the current state of our knowledge base with respect to the goals of the founding figures of our field. As an illustration of current practice, I then will use some recent work in which I have been engaged on the development of an index of child and youth well-being in the United States and on the measurement of trends therein over the past quarter century. I will conclude by raising the question: Can we do more? I will briefly sketch some of the possibilities for future work.

WHERE DID WE BEGIN 30+ YEARS AGO?
A REVIEW OF THE FOUNDING GOALS OF SOCIAL INDICATORS AND QUALITY-OF-LIFE RESEARCH

To understand where we are today with respect to scholarly efforts to define and measure the quality of life and with respect to the development of social indicators for that purpose, it is useful to recall some key definitions from our predecessors. To begin with, the term *social indicators* was born and given its initial meaning in an attempt, undertaken in the early 1960s by the American Academy of Arts and Sciences for the National Aeronautics and Space Administration, to detect and anticipate the nature and magnitude of the second-order consequences of the space program for American society (Land 1983, p. 2; Noll and Zapf 1994, p. 1). Frustrated by the lack of sufficient data to detect such effects and the absence of a systematic conceptual framework and methodology for analysis, some of those involved in the Academy project attempted to develop a system of social indicators--statistics, statistical series, and other forms of evidence--with which to detect and anticipate social change as well as to evaluate specific programs and determine their impact. The results of this part of the Academy project were published in a volume (Bauer 1966) bearing the name *Social Indicators* and the following definition:

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

It should be noted that the appearance of the Bauer volume was not an isolated event. Several other influential publications commented on the lack of a system for charting social change and advocated that the U.S. government establish a "system of social accounts" that would facilitate a cost-benefit analysis of more than the market-related aspects of society already indexed by the National Income and Product Accounts (see, e.g., National Commission on Technology, Automation and Economic Progress 1966; Sheldon and Moore 1968).

The need for social indicators also was emphasized by the publication of the 101-page *Toward a Social Report (TSR)* on the last day of the Johnson administration in 1969. Conceived of as a prototypical counterpart to the annual economic reports of the president, each of its seven chapters addressed major issues in an important area of social concern (health and illness; social mobility; the physical environment; income and poverty; public order and safety; learning, science, and art; and participation and alienation) and provided its readers with an assessment of prevalent conditions. In an Appendix that addressed the question of how we can do better social reporting in the future, Mancur Olson, the principal author of *TSR*, put forward the following influential definition:

> "A *social indicator*… may be defined to be a statistic of direct normative interest which facilitates concise, comprehensive and balanced judgments about the condition of major aspects of a society." (USDHEW 1969, p. 97)

In brief, *TSR* firmly established the link of social indicators to the idea of systematic reporting on social issues for the purpose of public enlightenment about how we are doing with respect to certain social conditions.

Another major pathway and avenue of exploration to the measurement of social indicators was opened in 1976 with the publication of a book entitled *The Quality of American Life: Perceptions, Evaluations, and Satisfactions* by Angus Campbell, Philip E. Converse, and Willard L. Rodgers. As signaled in the subtitle of the book, these social psychologists proposed to monitor the conditions of life by attempting to measure the experiences of individuals with the conditions of life, or as they put it:

> "… we propose… to 'monitor the *quality of American life*' … our concern was with the experience of life rather than the conditions of life… [we] define the quality of life experience mainly in terms of satisfaction [with life and specific life domains]. (Campbell, Converse, and Rodgers 1976, pp. 7,9)

In brief, the key emphasis of this definition is on the measurement of human experiences of social conditions.

WHERE ARE WE NOW?
A REVIEW OF THE CURRENT STATE OF THE ART IN CONSTRUCTING SUMMARY QUALITY-OF-LIFE INDICES – WITH A FOCUS ON CHILD WELL-BEING

Various observers (e.g., Land 2000; Noll 2002) have noted that these "founding definitions" of the social indicators and quality-of-life concepts have led to two major lines of development over the past 30+ years.

Objective Social Indicators

This line of development began with the Bauer (1966) volume and extends to the present. The emphasis is on the development of statistics that reflect important "social conditions" and the monitoring of trends in a range of "areas of social concern" over time. The key undefined terms here require the identification of:

- the "social conditions" to be measured, and
- the "areas of social concern" for which trends are to be monitored.

Since the 1970s, the primary approach to the identification and definition processes has been through the creation of "expert" panels of social scientists, statisticians, and citizens. These panels have applied a variety of approaches to their work, such as:

- the "indicators of social change" approach (Sheldon and Moore 1968);
- the Swedish "level of living" approach (Erickson 1974); and
- the "goals commissions" approach (e.g., the *U.S. Healthy People 2010* Goals; see USDHHS 2000).

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

- the conditions and areas of concern to be measured;
- good and bad conditions; and
- the directions in which society should move.

These, of course, are strong requirements. And, in its reliance on "expert" panels, the objective social indicators tradition is always open to the criticism that the conditions identified have not been corroborated as relevant to how people actually experience

happiness, life satisfaction, and subjective well-being. This criticism motivates the other major tradition of work on the measurement of the quality of life.

Subjective Social Indicators, Subjective Well-Being, Happiness, and Satisfaction

This line of development commenced with the Campbell, Converse, and Rodgers (1976) volume cited above and the Andrews and Withey (1976) volume, *Social Indicators of Well-Being: Americans' Perceptions of Life Quality* published in the same year. As noted above, the key element of this approach is on the use of various social science research techniques, including in-depth interviews, focus groups discussions, clinical studies, and samples surveys to study how people define their happiness and satisfaction with life and the social conditions of life that they experience on a day-to-day basis.

In the more than two decades since the publication of the path-breaking studies by Campbell, Converse, and Rodgers (1976) and Andrews and Withey (1976) volumes, many studies of subjective well-being have been conducted. To put it simply, we today are the beneficiaries of these many studies, and, as a result, we know a lot more about what makes people happy and satisfied with life today than in the early-1970s. In particular, Cummins (1996, 1997) reached the following conclusions about the quality of life based on comparisons of findings across numerous subjective well-being studies:

- there is a potential for tremendous variety of assessments of satisfaction with life experiences, with individuals often differing in their ratings of importance of the key elements associated with their life satisfactions and happiness;

- but, at the same time, the accumulation of findings across many studies shows that certain domains of well-being occur over and over again;
- there also is a fairly high degree of similarity among individuals on the relative weightings given to these domains in determining overall life satisfaction;
- and, perhaps most interestingly, there is a lot of similarity between the domains of well-being identified in subjective well-being studies and the areas of concern identified by expert panels in objective social indicators studies.

This naturally leads to the:

Question: Can the empirical findings from subjective well-being studies about domains of well-being be used to inform the construction of summary quality-of-life indices? That is, can subjective well-being studies be used to make summary quality-of-life indices more *evidence-based* not only in the use of empirical data, but also in the selection of the domains of well-being and indicators used in their construction? Put more figuratively, can we bring these two social indicators/quality-of-life traditions into intersection so that we may construct summary social indicators that are more firmly grounded in what we have learned about subjective well-being over the past three decades. My answer to these rhetorical questions is "yes" and I will illustrate how this can be done by reviewing some of my recent work on the development of an index of child and youth well-being.

EXAMPLE: THE CHILD WELL-BEING INDEX

As an example of the possibility of using our current heritage of subjective well-

being studies to construct better social indicators, consider the Child Well-Being Index (CWI) recently developed by Land, Lamb, and Mustillo (2001) to measure changes in child and youth well-being in the United States over the period from 1975 to the present. The Child Well-Being Index is:

- a summary measure of trends over time in the well-being of America's children and young people
- that consists of several interrelated summary indices of annual time series of numerous social indicators of the well-being of children and youth in the United States.

The general objectives of the CWI summary indices are to:

- give a sense of the overall directions of change in the well-being of children and youth in the U.S. as compared to two base years, 1975 and 1985.

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

- Overall, on average, how did child and youth well-being in the U.S. change in the last quarter of the 20th century and beyond?
- Did it improve or deteriorate?
- By approximately how much?
- In which domains of social life?
- For specific age groups?
- For particular race/ethnic groups?
- For each of the sexes?
- And did race/ethnic group and sex disparities increase or decrease?

Methods of Construction

Annual time series data (from vital statistics and sample surveys) have been assembled on some 28 national-level Key Indicators in seven quality-of-life domains:

- Material well-being,
- Health,
- Safety/behavioral concerns,
- Productive activity (educational attainments),
- Place in community (participation in schooling or work institutions),
- Social relationships (with family and peers), and
- Emotional/spiritual well-being.

These seven domains of quality of life have been well-established as recurring time after time in over two decades of empirical research in numerous subjective well-being studies (Cummins 1996, 1997). They also have been found, in one form or another, in studies of the well-being of children and youths. The 28 Key Indicators used in the construction of the CWI are identified with brief descriptions in Table 1. A full description and justification for the use of the Key Indicators in the construction of the CWI is given in Land et al. (2001).

Insert Table 1 About Here

To calculate the CWI, each of the 28 time series of the Key Indicators is indexed by a base year (1975 or 1985). The base year value of the indicator is assigned a value of 100 and subsequent values of the indicator are taken as percentage changes in the index.

The directions of the indicators are oriented so that a value greater (lesser) than 100 in subsequent years means the social condition measured has improved (deteriorated). The 28 indexed Key Indicator time series are grouped into the seven domains of well-being by equal weighting to compute the domain-specific Index values for each year. The seven domain-specific Indices then are grouped into an equally-weighted Child Well-Being Index value for each year. Hagerty and Land (2003) show that an equal-weighting strategy for summary indicators of well-being is privileged in the sense that it minimizes disagreement among all possible individuals' weights.

Since it builds on the subjective well-being empirical research base in its identification of domains of well-being to be measured and the assignment of Key Indicators to the domains, the CWI can be viewed as *well-being-evidence-based measure of trends in averages of the social conditions encountered by children and youth in the United States across recent decades.*

Some Empirical Findings Using the CWI

With the Child Well-Being Index defined and operationalized as described above, it can be used to measure changes in child and youth well-being as Land et al. (2001) have shown. In the following sections, a number of findings on these changes are briefly sketched.

(1) *A Domain-Specific Report Card for 2001*. To begin with, for each year for which we have complete data on all of the 28 Key Indicators in the CWI, we can compute a "report card" that shows how each of the seven domain-specific indices is changing relative to the base year of the Index. For instance, the year 2001 is the last year for

which we have currently have complete data on all of the Key Indicators. With the data for 2001 in hand, we now can compare changes in the domain-specific indices from the year 2000 to 2001, with the changes taken as a percentage of the 1975 base year values of the Key Indicators. This report card shows the following:

Domain	*Change from 2000 to 2001 as a Percent of Base Year 1975 Value*
Material Well-Being	- 0.77
Health	- 1.68
Safety/Behavioral	+4.17
Educational Attainment	No Change
Place in Community	- 0.74
Social Relationships	+5.56
Emotional/Spiritual	+3.57

In brief, the material well-being domain index, which was affected by an economic slowdown/recession in 2001, declined by 0.77 percent from 2000 to 2001, where the changes are measured relative to 1975 base year values. The health domain and place in community indices similarly show slight declines in 2001. By contrast, the safety/behavioral, social relationships, and emotional/spiritual domain indices show substantial increases.

(2) *Trends in Child Well-Being From 1975 Into the Early 21st Century*. How do the domain-specific changes from 2000 to 2001, as shown above in the report card, combine to measure overall changes in child well-being in 2001, relative to the 1975 base year, and in comparison to other years since 1975? Figure 1 shows the overall summary Child Well-Being Index from 1975 to 2001 with projections for 2002. The projections are computed by modeling the time series behavior for each of the 28 Key Indicators and

then projecting these one year beyond the year for which observed data on all of the indicators are available. The projected values of each of the Key Indicators then are averaged to compute the domain-specific summary indices and these, in turn, are averaged to comprise the projected overall summary index for the projected year.

It can be seen from Figure 1 that the value of the Index for 2001 is about 104 – indicating that overall child well-being in the United States was a bit higher in 2001 than in 1975 (i.e., by about 4 percent). By comparison, the Index was about 102.5 in 2000 and is projected to rise to about 105 in 2002. Overall, the CWI shows a decline in child well-being that began in 1982 and bottomed out in 1993. Since 1994, the Index has been in a sustained uptrend.

To understand these changes in the overall summary Child Well-Being Index, it is useful to examine trends over time in the domain-specific summary indices. These are shown in Figure 2.

Insert Figure 2 About Here

The domain-specific indices in Figure 2 show that much of the decline in child well-being in the early-1980s was due to downturns in the social relationships and emotional/spiritual domains of well-being. In the mid-1980s, there also was a decline in the safety/behavioral concerns domain. By comparison, the material well-being domain index shows the imprint of the economic recessions of the early-1980s and the early-1990s, and the health domain index shows a sustained decline since about 1980 (more about this below). Since the early-1990s, however, several domain indices, including the

material well-being, safety/behavioral, place in community, and emotional/spiritual well-being domains, have shown fairly sustained increases. This movement, in concert, of these four domains of well-being is what accounts for the rise in the overall CWI shown previously in Figure 1.

As noted above, the health domain index has shown a general decline since the early-1980s. In an effort to understand this decline, Figure 2.1 reports the result of a sensitivity analysis. It shows the sensitivity of the health domain summary index to whether or not the obesity indicator – namely, the prevalence rate of overweight children and adolescents – is included in the domain index.

Insert Figure 2.1 About Here

In brief, Figure 2.1 demonstrates a relatively large impact of the inclusion/exclusion of the obesity indicator on the health domain summary index. Specifically, with the obesity indicator in the health domain, the index decreases by about 23 percent from 1975 to 2001. By contrast, with the obesity indicator not included, the health domain index increases to about 15 percent above 1975 base year values by the mid-1980s and then shows fluctuations in the range of about 10 to 15 percent above 1975 values through 2001.

The Key Indicators included in the CWI, as identified in Table 1, cover an entire age range of child and youth – from birth to young adulthood. Given this, another exercise in sensitivity analysis of the CWI consists of grouping the Key Indicators into smaller age ranges. Figure 3 shows the components of the CWI grouped into three age

groups, namely, infants/preschoolers (ages 0 to 5), childhood (ages 6-11), and the adolescent/teenage years (ages 12-19). Correspondingly, Figure 3.1 displays the results of a sensitivity analysis for the childhood well-being index in Figure 3 – with and without the obesity indicator.

Insert Figures 3 and 3.1 About Here

In Figure 3, it can be seen that the well-being index specialized to the infant/preschool years – wherein the main components of the index are health and material well-being indicators – shows a fairly steady increase over the years, up to about 15 percent above 1975 base year values by 2001. By comparison, the well-being index specialized to the adolescent/teenage ages exhibits the impact of declines in the safety/behavioral and emotional/spiritual domain components of the index during the period from the mid-1980s to the mid-1990s. And still more differently, the well-being index specialized to the childhood years shows a fairly sustained decline from the mid-1970s to recent years. Again, in order to better understand the elements of the sustained decline in the childhood index, Figure 3.1 reports the impact of including or excluding the obesity indicator in the childhood index. It can be seen that excluding the obesity indicator leads to a very different conclusion about trends overtime in the health domain for the childhood index. In brief, except for the impact of the increasing prevalence of overweight children, the overall health of children has improved in the 25-plus years since 1975.

Figure 4 displays the graphs of trends in the CWI for children and youth grouped into three major race/ethnic categories: whites, blacks, and Hispanics. Because the Key Indicator data series used in the construction of the CWI are available specific to these race/ethnic categories only back to the mid-1980s, the indices graphed in Figure 4 use 1985 as their base year. Also, note that the race/ethnic-specific indices plotted in Figure 4 are measured within-groups, that is, relative to the values of the Key Indicators within each race/ethnic group as of the base year 1985. Therefore, the indices measure improvements or deterioration across the years in the overall child well-being of each race/ethnic group relative to its value of 100 for the base year.

Insert Figure 4 About Here

Two main conclusions can be drawn from Figure 4. First, all three race/ethnic groups show improvements in child and youth well-being from 1993 to 2001 and all three groups have index values greater than those of the base year. This implies that overall child and youth well-being for all three groups is better in 2001 – by on the order of 10 to 12 percent – than in 1985. Second, the downturn in child and youth well-being from the mid-1980s to the early-1990s was more severe for black and Hispanic children and youth than for white youth. In fact, for white youth, this period evidences a slowdown in improvements in well-being but not an actual decline.

Insert Figure 5 About Here

Similar comparisons of trends in the CWI by sex are shown in Figure 5. Again, the Key Indicator data series used in the construction of the CWI are available specific to male and female children and youth only back to the mid-1980s. Therefore, the indices graphed in Figure 4 use 1985 as their base year. It can be seen that the trends in this overall summary index of child and youth well-being from 1985 to 2000 are roughly parallel. In fact, trends in the Key Indicator time series over this period of time show that females improved relative to their base year values at greater rates than males on some indicators of well-being and males improved better than females on others. But the summary indices plotted in Figure 5 show that neither sex improved at a greatly higher rate than the other over this 15-year period.

(3) *Summary of Findings on Trends in Child and Youth Well-Being*. In summary, the foregoing and related analyses of trends in the CWI (Land et al. 2001) show:

- The overall well-being of children and youth in the U.S. showed substantial improvements in the seven years from 1994 to 2000.
- Improvements continued in 2001, and likely in 2002, but at a slower pace.
- Child well-being in the U.S. deteriorated fairly steadily for a number of years in the 1980s and reached low points in 1992-94. They then began the upturn of the past several years.
- Recent increases in the CWI have pierced the 1975 base year level only in the past few years.
- The downturn in well-being that occurred in the 1985-1994 period was particularly severe for black and Hispanic children and youths.

- There have been overall improvements in well-being for both males and females since 1985, but there are some domains and indicators in which males have done better and some in which females have done better.
- Historical best-practice analyses (Land et al. 2001) using the best values on each of the component indicators of the CWI ever recorded for the U.S. show that the CWI could be 20 to 25 percent higher than its values in recent years.
- International best-practice analyses (Land et al. 2001) using the best values of the of the component indicators recorded in recent years by other nations show that the CWI could be 35 to 40 percent higher than its value in recent years.
- Sensitivity analyses of the CWI show that the Health domain sub-index is greatly impacted by the inclusion of the indicator for trends in obesity and this indicator also has a big impact on the childhood well-being index.
- The CWI also helps identify domains of well-being for which the data base needs to be improved (Land et al. 2001). Component indicators for the social relationships and emotional well-being domains are particularly weak.

CAN WE DO MORE?

SOME GOALS FOR THE FUTURE

In the preceding sections, I have sketched the heritage of the social indicators and quality-of-life research traditions. In particular, I have:

- described the founding definitions and goals of the social indicators and quality-of-life movements of the 1960s and 1970s;

- reviewed the current state of the art with respect to the objective social indicators and subjective well-being approaches to the measurement of well being;
- cited the results of recent literature reviews of the findings of numerous studies in the subjective well-being research tradition with respect to domains of subjective well-being that consistently and repeatedly have been found to be related to happiness and life satisfaction;
- suggested that these two research traditions can be fruitfully intersected in the sense that the results of these literature reviews can be used to inform the selection of domains of well-being and indicators to be used in the construction of well-being/quality-of-life indices;
- illustrated this process by describing how the Child Well-Being Index of Land et al. (2001) is constructed; and
- demonstrated how the CWI can be used to chart trends and produce a number of findings concerning child and youth well-being in the United States over the last quarter of the 20th century and into the early years of the 21st century.

In this final section, I will briefly outline some needed developments and possibilities for the future. Again, I will use the Child Well-Being Index as a point of departure. For the CWI, there are two needed developments for the near future.

First, we need to bring the Child Well-Being Index to levels of aggregation below the national level. In particular, we need to construct corresponding child well-being indices (insofar as databases permit) at the state and local levels. This involves the identification of the Key Indicators of the CWI for which there are suitable data bases at the state and local levels, the construction of indexed indicator time series from these data

bases, the aggregation of these into domain-specific summary indices, and, finally, the aggregation of the domain-specific summary indices into summary indices of overall well-being.

Insert Figure 6 About Here

Second, we need a further articulation and application of the teleological process described in Land and Ferriss (2002) to the Child Well-Being Index and its component indicators, as illustrated in Figure 6. That is, we need to develop the relationship of the Child Well-Being Index to a number of other products of social science research and policy formulation and analysis, as shown in Figure 6, which is adapted from Land and Ferris (2002). For instance, we need to identify how the CWI and its component indicators relate to national and community goals, such as those identified in the *Healthy People 2010* report (USDHHS 2000). Then we need to build the knowledge base of studies in the social sciences and epidemiology (experimental and nonexperimental) that help us to understand the causes and consequences of the trends we observe in the CWI and its component indicators. Such studies can be used in conjunction with the CWI and its indicators to develop policies and intervention programs designed to move the Index towards the goals that have been identified.

This is but a brief illustration of some of the possibilities for further work on the development of the Child Well-Being Index. If progress can be made along these lines, however, the Index can begin to fulfill the ambitious goals of the early social indicators movement – a statement of which began this essay. More generally, if similar

developments can be fostered for other summary social indicators of well-being for other populations and aspects of the quality of life, then these ambitious goals can be achieved more broadly. That is, we can begin to achieve the promise and ambitions of the social indicators/quality-of-life movement of the 1960s and 1970s. Of course, this will not signal the end of our tasks. For these initial efforts no doubt will leave much to be desired, and there will be a need for improved conceptualizations, measurements and indicators for decades to come.

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Table 1. Twenty-eight Key National Indicators of Child Well-Being in the United States.

Material Well-Being Domain:	1. Poverty Rate—All Families with Children
	2. Secure Parental Employment Rate
	3. Median Annual Income—All Families with Children
Material Well-Being and Health Domains:*	4. Rate of Children with Health Insurance Coverage
Material Well-Being and Social Relationships Domains:*	1. Rate of Children in Families Headed by a Single Parent
Social Relationships Domain:	2. Rate of Children Who Have Moved Within the Last Year
Health Domain:	1. Infant Mortality Rate
	2. Low Birth Weight Rate
	3. Mortality Rate, Ages 1-19
	4. Rate of Children with Very Good or Excellent Heath (as reported by their parents)
	5. Rate of Children with Activity Limitations (as Reported by their Parents)
	6. Rate of Overweight Children and Adolescents, Ages 6-17
Health and Behavioral Concerns Domains:*	1. Teenage Birth Rate, Ages 10-17
Safety/Behavioral Concerns Domain:	2. Rate of Violent Crime Victimization, Ages 12-17

Table 1, Continued

	3. Rate of Violent Crime Offenders, Ages 12-17
	4. Rate of Cigarette Smoking, Grade 12
	5. Rate of Alcoholic Drinking, Grade 12
	6. Rate of Illicit Drug Use, Grade 12
Productivity (Educational Attainments) Domain:	1. Reading Test Scores, Ages 9,13, 17
	2. Mathematics Test Scores, Ages 9, 13, 17
Place in Community and Educational Attainments Domains:*	1. Rate of Preschool Enrollment, Ages 3-4
	2. Rate of Persons Who Have Received a High School Diploma, Ages 18-24
	3. Rate of Youths Not Working and Not in School, Ages 16-19
	4. Rate of Persons Who Have Received a Bachelor's Degree, Ages 25-29
	5. Rate of Voting in Presidential Elections, Ages 18-20
Emotional/Spiritual Well-Being	1. Suicide Rate, Ages 10-19
	2. Rate of Weekly Religious Attendance, Grade 12
	3. Percent who Report Religion as Being Very Important, Grade 12

Note 1: A few key indicators can be assigned to two domains. For these, the * denotes the domain-specific index to which the indicators are assigned for computation purposes. Explanations for the domain assignments are given in the text.
Note 2: Unless otherwise noted, indicators refer to children ages 0-17.

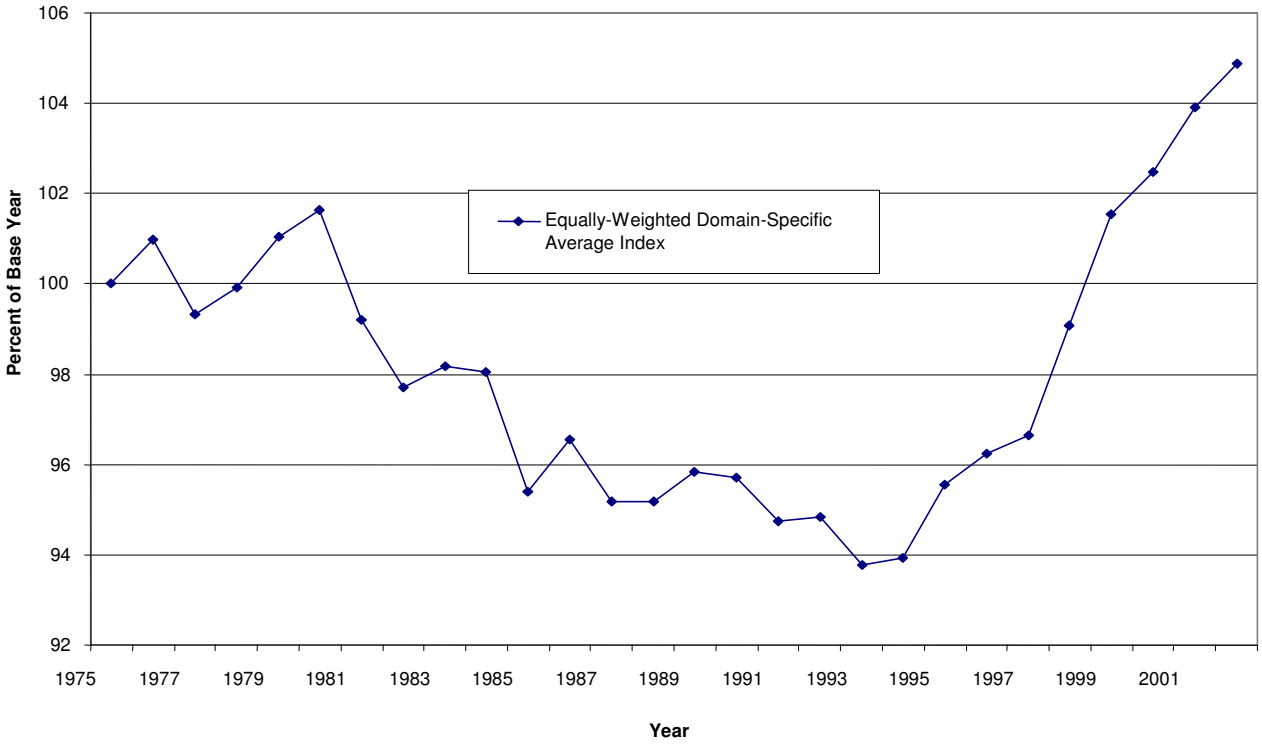

Figure 1. Summary Child Well-Being Index, 1975-2001, with Projection for 2002.

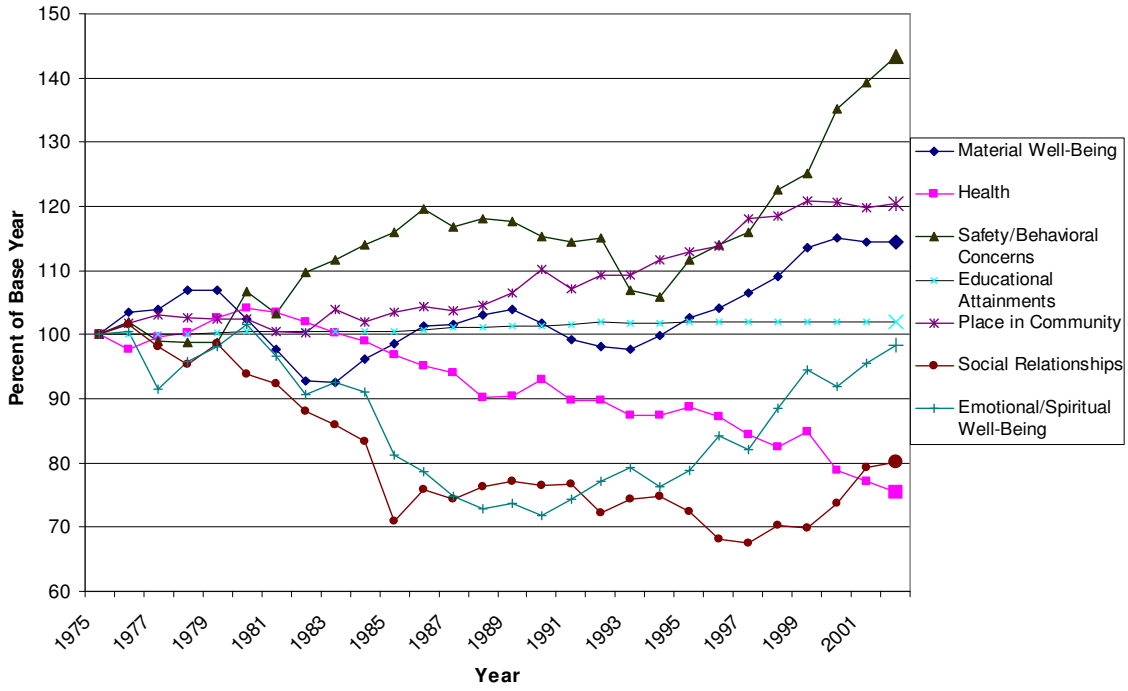

Figure 2. Domain-Specific Indices of Child and Youth Well-Being, 1975-2001, with Projections for 2002.

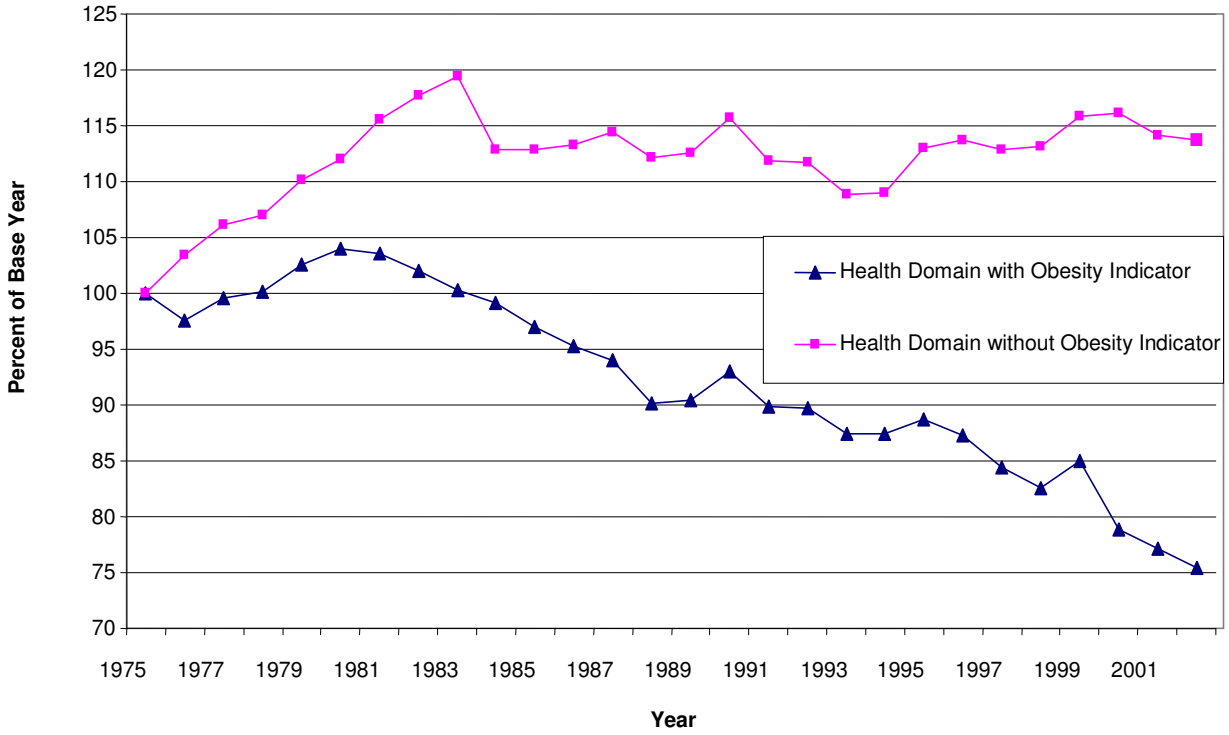

Figure 2.1. Health Domain with and without Obestiy Indicator, 1975 to 2001, with projections for 2002.

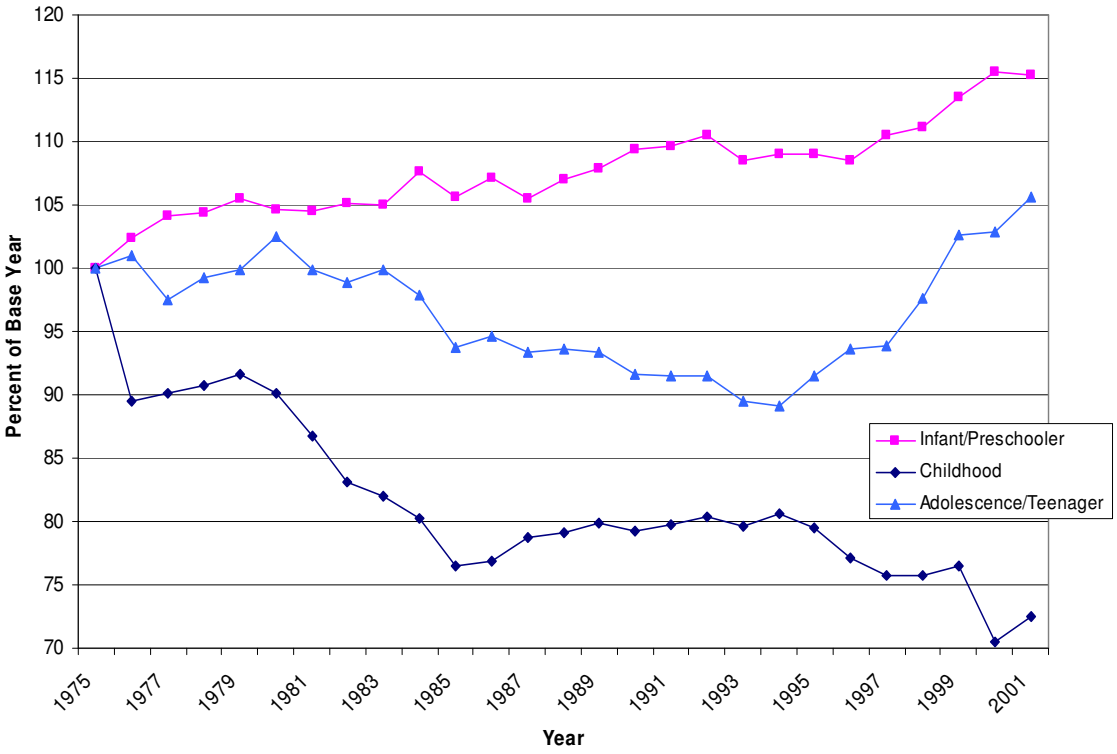

Figure 3. Age-Specific Summary Well-Being Indices, 1975-2001.

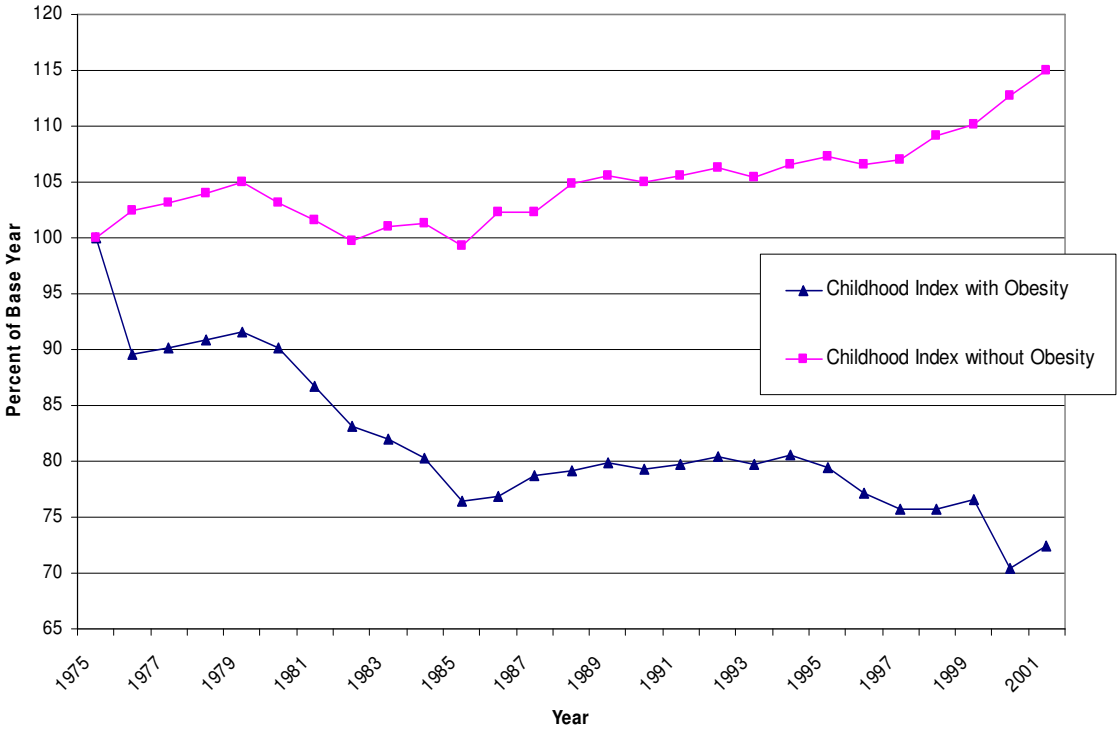

Figure 3.1. Childhood Well-Being Index with and without Obesity Indicator, 1975 - 2001.

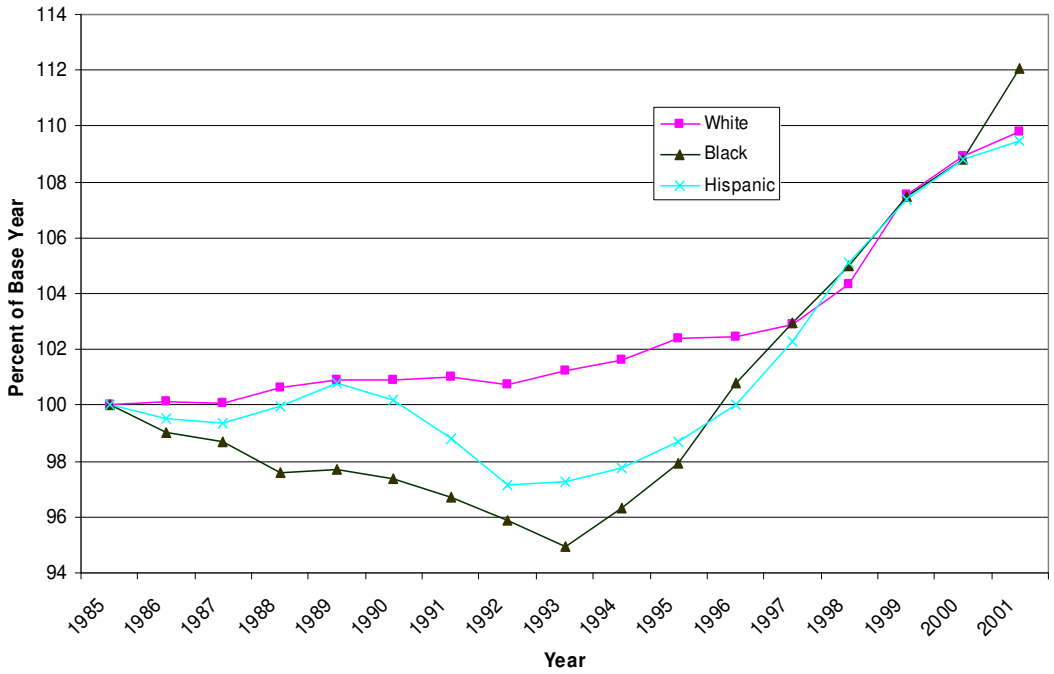

Figure 4. Race/Ethnic Group-Specific Child Well-Being Indices, 1985-2001.

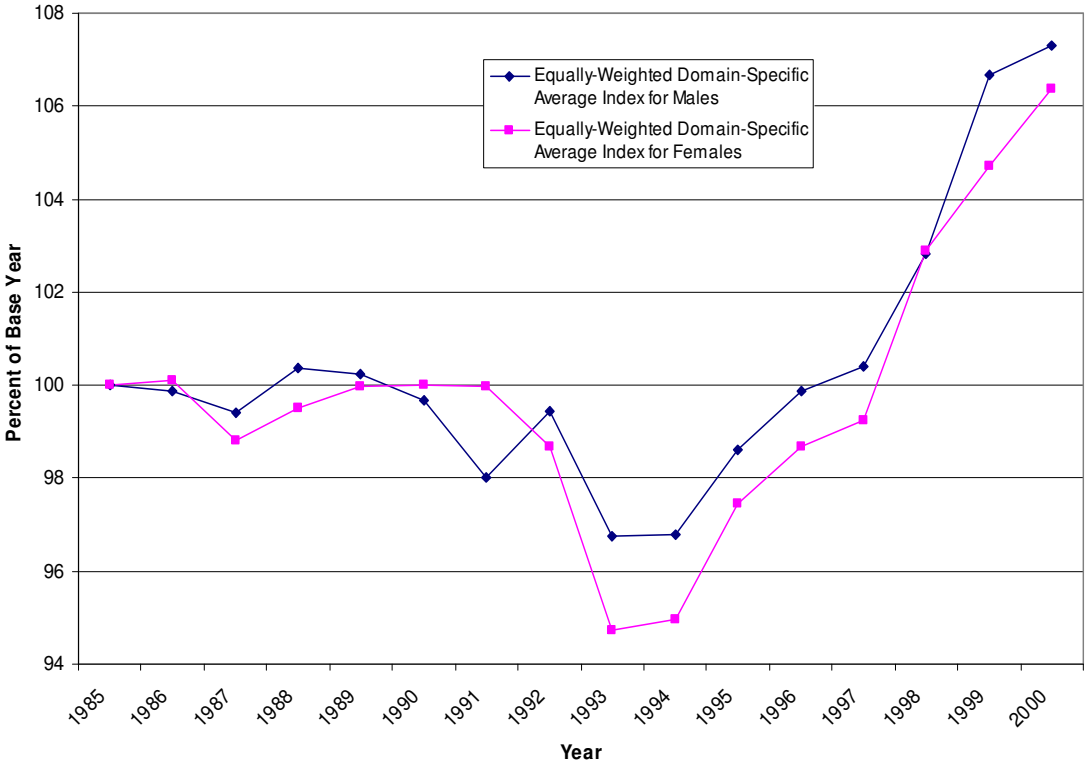

Figure 5. Male/Female Child Well-Being Indices, 1985 - 2000.

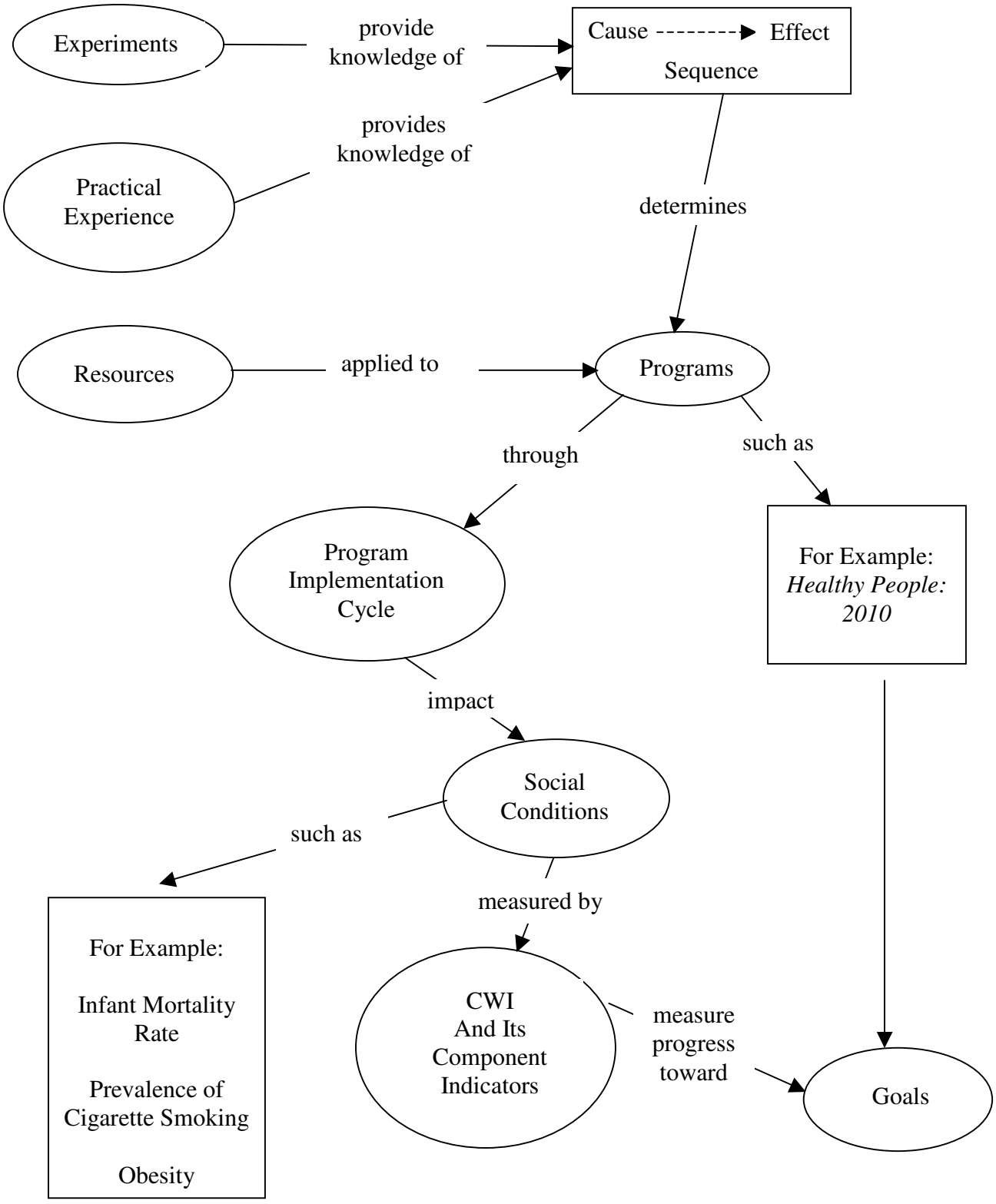

Figure 6. Illustration of The Teleological Process (Land and Ferriss 2002) Applied to the CWI.