

A New National Survey of Children

Presentation by

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A new national survey of children is, I believe, not only essential but overdue. The question I am focussing on therefore is: "How should it be designed?"

Some Design Essentials

I think the list of basic ingredients depicted in Exhibit One represent in some sense the definition of what I mean by a "national survey of children."

It cannot be a local study or a study concentrated in one or two states. We have numerous studies of local samples. What we need is a national survey of children.

It also cannot be a cross sectional study. We need to understand how children develop and what accounts for different patterns of development. This requires prospective information. A longitudinal survey.

A large sample is also necessary. The United States is a very diverse country, geographically, economically, and socially. We need to capture this great diversity in order to understand the factors that singly and in interaction affect the development and wellbeing of children. We cannot come to this understanding if we have a sample with only 49 adopted children, 45 children who live with their father, 100 African American children from affluent families with college-educated parents, and 60 children in joint custody arrangements. Many of the arrangements we need to better understand are relatively infrequent, and this necessitates a large sample.

We also cannot have a narrowly conceived study. We know that the development of children in one sphere is affected by what's happening in another domain. For example, health factors affect schooling, school success affects risk taking and delinquency, and these in turn affect health. We need to examine a range of measures of development and wellbeing, positive as well as negative.

Also, to examine this broad and inter-connected set of dependent variables, we need a broad range of independent variables. Family income and parent education generally work well in one's equations; they are statistically significant and they increase one's R-square. But they don't tell us much about how economic and educational resources, schools, peers, parenting, time use and neighborhood factors really work to enhance children's development.

We need to know how time and money and other resources are actually invested in children. We might even need to know about family values and attitudes and goals.

Certainly we should plan to include contextual information about the local community, state policies, and neighborhood characteristics in a new national survey of children.

To me, this broad definition of the subject requires inter-disciplinary development. We need economists, sociologists, child developmentalists, psychologists, psychometricians, and, yes, statisticians to develop constructs, measures, samples, and analytic approaches.

And we need the sponsorship of varied governmental Departments, to pool not only their resources but their substantive and methodological expertise.

Yet, the details are not so clear (see Exhibit Two).

- What is the appropriate age range?

One of my frustrations with existing data bases is that so much has already happened to the children before they ever enter the sample. This is even true in the JOBS evaluation, where the children are aged 3-5 at Baseline. But a lot happens to children in AFDC families during their first several years. And a lot happens to middle class children as well. So I have come to think that we need to start tracking children at birth, obtaining prenatal information and conducting interviews with the mother during the child's early months.

The down side of this strategy is that one has to make a truly long-term commitment to data collection, if these children are to be followed to an age where their developmental trajectory has become clear. Also, impatient policy makers will not have the information they need for decision-making for a decade or more. I think these are sufficiently important drawbacks that one should sample older children as well. But I don't think we should include teenagers in the initial sample. There are other surveys that focus on education, labor force, and fertility that include youth in their teens. We need a survey that starts with children when they are babies.

Frankly, if we had a recurring national survey of children in place, it would not now be necessary to sample older children. However, the first and only National Survey of Children was initiated 16 years ago, in 1976, and those "children" are now all in their twenties. In order to have some sample cases of children moving through adolescence, I think it is important to extend the sampling frame up to include children from birth up to age 10 or 11, at least at first.

- Should a continuous age range of children be sampled, or can we select a narrow age band?

I personally think it would be ideal to sample a continuous age range, such as all children from birth through age 10 or 11. Such a sample would permit one to make descriptive statements about all American children. In addition, one would have the sample needed to examine the impact of policy interventions. For example, if one wanted to examine the implications of the 1988 Family Support Act child support provisions, it would be important to have a representative sample of all children.

Alternatively, one could develop a plan like that developed by the Department of Education to focus on children within a single year of age, specifically, a birth cohort sample of children in their first year and a sample of children in kindergarten. The cost of this cohort strategy is that one does not have a representative sample of all American children available either for descriptive or analytic purposes.

Hence, if a major event or policy initiative occurs, such as a change in child support, school, or tax policy, the children in your sample may or may not be the desired age to observe the effects. Also, few siblings fall naturally into such a sample.

On the other hand, with a cohort design, there is the advantage of the very large sample size one can afford to examine within that narrow age range. If what you really want to know is how prepared kids are for kindergarten, then a very large sample of kindergartners is to be preferred.

Were I to select the "cohort" rather than the "all children" strategy, I would also select an additional older cohort, not just babies, kindergartners but also children aged 10. We would miss important information about the early years of these children, but we would have information on their transitions through adolescence in a more reasonable time frame.

- Should a new cohort be planned right from the start?

Yes. Given the pace of social change in the country, we need a new cohort approximately every five years.

Another advantage of the single year cohort strategy is that it lends itself to such a plan: a new birth cohort can be added when the last cohort begins kindergarten.

Alternatively, if an "all children" approach is taken, a new cohort should be initiated about once a decade. As the oldest respondents march off to work, college, and the "intermittent telephone interview" life cycle stage, a new representative sample should be initiated and followed.

- How long should children be followed?

One of the important lessons of Frank Furstenberg's Baltimore study, among others, is that development should be tracked well into adulthood. Sometimes delayed effects that are negative occur ("sleeper" effects), while, other times, initial stumbles are overcome with the passage of time. Therefore, it is useful to conduct occasional interviews for many years. However, less frequent data collection and telephone and mailed interviews can be employed.

The important thing is to plan on long-term follow-up right from the planning stage, so that every effort can be made to facilitate tracking and keep attrition low.

- Which sub-groups should be over-sampled?

Frankly, I think the answer to this question should be driven by cost. What can we afford? If we can afford it, we should not only over-sample African Americans, but Mexican Americans and Puerto Ricans and perhaps immigrants more broadly.

The idea of over-sampling low income groups is widely accepted; however, with one in five children in poverty, a study with a large sample may not need to over-sample low income families.

On the other hand, if we take seriously the idea of studying positive development as well as problem behavior, we should probably ponder the feasibility of identifying high-achieving sub-groups to over-sample. Perhaps we should over-sample Asian families, or children in families with college-educated parents. This is lower priority for me than sampling disadvantaged families; but I want to take every opportunity to emphasize the importance of studying positive development and successful outcomes.

- How often should data be collected?

There are real trade-offs between sample size and breadth and the frequency and intensity of data collection. I think that one place where we could hold the line on costs is thinking carefully about whether annual interviews, particularly annual in-home interviews, are essential.

Frequent in-home interviews are probably necessary for very young children; but I think we can collect data every two years with older children. Mainly, I think such a strategy is inevitable for reasons of cost. If we can't afford to do everything -- and I assume that in this time of tight budgets that we can't -- then this is one place to cut back.

In the original National Survey of Children, interviews were held in 1976, five years later in 1981, and then six years later in 1986. By comparison, two or even three-year intervals seem like heaven.

Also, to hold the line on cost, we should make better use of telephones, especially for children in the late elementary and junior high years who are very comfortable using the phone. In-person interviews may be necessary for very young children; but we can "keep in touch" with older children using less expensive data collection strategies.

Some thought should be given to examining contextual factors. One strategy is to append information about the community to the data file. Ideally this should be from a small, local area, so that it is really appropriate as a measure of the context for a particular family. This kind of information can come from the Census data.

While additional data about the local school or crime in the area could be collected, it would be very expensive to do so.

A somewhat more cost-effective strategy for obtaining local information is to include questions on the interview itself. The respondent or the interviewer or both can be asked to provide information about the block, neighborhood, and the community.

One idea that has intrigued me for years is the possibility of having community foundations fund over-samples of children in their particular community, say Cleveland or Tucson. The local community would then have rich information about their community at a relatively low incremental cost, which could be compared with the nation as a whole, and the survey would have additional cases for analysis purposes.

- Who should be interviewed?
Should all information be collected in person?
Should assessments be conducted?

I wish I could avoid this conclusion; but I think we have to interview moms. The non-sexist alternative flies in the face of reality. Mothers know more about their children and are more likely to retain custody if a marriage or cohabitation breaks up. Even before children are themselves able to participate, mothers can and should provide information about their activities, goals, time use, feelings, and their child's characteristics. And parents, probably moms, should continue to be interviewed as the study progresses.

Of course, children should also be interviewed or assessed, as appropriate to their ages. Children in the National Survey of Children as young as age seven provided useful data. In the National Longitudinal Survey of Youth - Child Supplement, data collected among toddlers did not prove reliable; but data on pre-school children are being successfully collected in the home in both the NLSY, in our JOBS study, and in the New Chance evaluation, among others.

So I recommend collecting data from children starting at age three. Methodological work is needed to develop and/or refine measures, of course; but I am confident that the success we are having collecting data among AFDC families in the JOBS evaluation who have children as young as age three augurs well for other data collection efforts among young children.

Although interviews with young children need to be conducted in person, older children are quite comfortable on the telephone. In a national survey I worked on for the National Commission on Children, we conducted telephone interviews with children as young as ten. These interviews were about 20-minutes long, and that is a real constraint; but data quality was very good.

- Should siblings be interviewed?

Research to evaluate the relative influence of family environment, genetic influences, gender and birth order makes good use of data on siblings -- full siblings, half siblings, step siblings, adoptive siblings. Siblings were interviewed in the original National Survey of Children and, frankly, the sibling data have not been analyzed very much. However, I think that reflects the state of research rather than the utility of sibling data. I think that many of the basic research questions to be addressed in the next decade involve issues of selectivity, and sibling data are needed for this research.

For me, the need for sibling data is one of the disadvantages of the cohort approach. It is virtually impossible to include a good sample of siblings if the sampling frame focusses on children in a single year of age.

On the other hand, the strategy followed in the National Longitudinal Survey of Youth - Child Supplement of interviewing or assessing all children in a family probably is not necessary for a new national survey of children. It is already being done, and it is very expensive. Selecting a maximum of two siblings per family represents a reasonable compromise.

A difficult question remains, though. Should siblings not born at the time of the survey be added to the survey? If they are not, sibling configurations could be biased. Here's a good issue for you statisticians to weigh in on.

- What should interviewers be asked to assess?

I'm often impressed by how smart and observant interviewers are. They get around and see all kinds of people in all kinds of communities, and they have a pretty good perspective on the diversity of America. Their presence in the homes of respondents for more than an hour seems to provide an unusual opportunity to obtain information about the home environment and the neighborhood.

Should we ask interviewers to go on and provide additional data on the child, the family, and the parent-child relationship?

We are doing this in the JOBS evaluation. Interviewers in the National Longitudinal Survey of Youth are also providing considerable information. However, as yet I do not know of any studies assessing the reliability or predictive power of these assessments relative to other information or particularly some standard. Studies of test-retest reliability are needed. Comparisons of one interviewer's ratings with the ratings of another interviewer in the same situation are needed.

Race and cultural differences among interviewers and between interviewers and respondents need to be addressed. Interviewer training needs to be standardized. Re-training needs to be implemented to ensure that interviewers maintain common standards over time.

In sum, I think we should be open to obtaining data from interviewers; but we should conduct careful methodological studies of measures and training procedures before we implement a set of measures in surveys of thousands of families.

Finally, I think the most difficult question of all is to decide what is the best organizational or decision-making structure for designing and fielding a new National Survey of Children.

Inevitably, what we could do and what we would like to do will outstrip both the budget and the patience of respondents. What can be compromised? Who makes the decisions? How are the competing interests of different disciplines to be reconciled?

There will be some hard calls. This discussion, I believe, represents a useful contribution to the planning for a new national survey of children.

Exhibit One

A New National Survey of Children

Design Essentials

- A nationally representative sample
- Longitudinal data collection
- Large sample size
- Broad range of dependent variables
- Broad perspective on independent variables
- Contextual, neighborhood, and policy information appended to the file from the outset
- Multi-Department sponsorship
- Multi-disciplinary design and analysis

Exhibit Two

The Details are Not so Clear

- Age range? Start with infants or pregnant women?
- A continuous age range or several sub-groups?
- What is the best sampling frame?
- Should a new cohort be planned right from the start?
- How long should children be followed?
- Should there be over-samples of particular sub-groups?
 - African Americans?
 - Hispanics? Overall or major Hispanic sub-groups?
 - Socioeconomically disadvantaged groups?
 - High-achieving groups?
- How frequently, or infrequently, can we afford to interview Rs?
- Should we obtain larger samples for some areas,
 - e.g., cities, to support local studies embedded within the larger study?
- What contextual and policy information should be incorporated?
- Who should be interviewed?
- Should all information be obtained in person?
- Should assessments be conducted with children?
- Should siblings be in the sample?
- Should interviewers be asked to assess:
 - Home environment?
 - Neighborhood?
 - Child's characteristics?
 - Family characteristics?
 - Parent-child relationships?
- What is the most workable organizational or decision-making structure for design and fielding such a survey?