

**IMPROVING GIRLS' SCHOOL ATTENDANCE AND ACHIEVEMENT
IN DEVELOPING COUNTRIES:**

A GUIDE TO RESEARCH TOOLS

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1 Overview and Summary

Introduction

The development community is beginning to realize that women's levels of literacy and basic education have important consequences for the success of development programs and projects. The effectiveness of projects to increase health service utilization in a community, increase agricultural production, increase child survival or improve nutritional status are affected, in part, by the level of schooling attained by women. More educated women are more efficient users of contraceptives, agricultural innovations and health services, yet in the poorest areas of the world many girls do not enter school or, even if they do enter, fail to stay long enough to gain any significant benefit from schooling.

Marked differences in educational access, achievement, and attainment persist between men and women in many countries of the world. For example, in Afghanistan, Mali, Somalia and Nepal less than 20 percent of girls in the relevant age cohort are enrolled in primary school.¹ In Rwanda, Burkina Faso, Mali and Chad (among others) less than 5 percent of the relevant age cohort is enrolled in secondary school.² These are countries in which many boys also have little access to formal education; however, girls have less than half the chance of completing primary schooling compared to boys. In Mali and Chad the secondary school enrollment ratio of boys is 10 percent and 11 percent, respectively, but the corresponding rates for girls are 4 percent and 2 percent. In other countries these differentials may occur at higher levels or be reflected in the subjects studied.

The next few pages summarize the many benefits to educating women, describe some of the issues involved and outline possible

¹World Bank. 1988. World Development Report. Washington, DC: The World Bank.

²ibid.

strategies for increasing educational participation for females. Subsequent sections describe a variety of research tools that can be used to evaluate initiatives, measure the effectiveness of programs, or simply give us more information about the educational process and how it affects girls and women.

Why Raise Female Access to Education?

Gender is often regarded as a legitimate area of discrimination in access to education, based on the premise that formal education is preparation for non-domestic activities and that proper roles for women are primarily domestic. However, research shows that education has positive effects on women's domestic lives. Families, especially children, benefit from having a mother with formal schooling. The survival, health and scholastic performance of children have been clearly linked to the levels of a mother's education in a number of studies. Research from Nigeria³ and Mexico⁴ clearly indicates that one of the strongest predictors of a child's survival beyond its first year is its mother's level of education. A study of parental influences on reading achievement in Morocco found that mothers' literacy was one of the strongest predictors of children's reading achievement.⁵ An inverse relationship between level of education and fertility is consistently found in most societies.⁶

Even if women only functioned in the domestic sphere, the benefits to educating females would be significant. However, abundant evidence

³Caldwell, J.C. 1979. "Education as a Factor in Mortality Decline: An Examination of Nigerian Data." Population Studies, 33:395-413.

⁴Levine, R. 1987. "Women's Schooling, Patterns of Fertility, and Child Survival." Educational Researcher, 16:21-8.

⁵Wagner, D.A. (Ed.) 1987. The Future of Literacy in a Changing World. New York: Pergamon.

⁶Cochrane, S. 1979. Fertility and Education: What Do We Really Know. Baltimore, Md: John Hopkins University Press.

indicates that women frequently take on additional roles in the public sphere. For a variety of reasons, many women are obliged to support themselves and their children at some point in their lives. Food production and food processing are two areas in which women have traditionally earned an income. Agricultural production is an important area of female activity--Dixon⁷ calculated that women constitute an average of 46.1 percent of the agricultural labor force in sub-Saharan Africa. Unfortunately, little recognition is given to women's role in agriculture in many parts of the developing world.

The link between farmer efficiency and farmer education⁸ suggests that higher levels of education for women could be expected to bear fruit with improved nutritional status and child health through higher agricultural yields. In sub-Saharan Africa where women's educational levels are particularly low and a high proportion of food production is done by women, food shortages continue. There may be a link between the low educational status of African women and the failure of food production in the region to keep up with population growth.

When females do succeed in gaining an education and entering the wage sector, the labor market payoff (in terms of higher productivity and earnings) is usually as great as that for men and in some countries it is higher, partly because girls' education is less costly.⁹ A more complete review of the determinants and effects of female schooling in sub-Saharan Africa is available.¹⁰

⁷Dixon, R. 1982. "Women in Agriculture: Counting the Labor Force in Developing Countries." Population and Development Review, 8:539-66.

⁸Moock, P. 1976. "The Efficiency of Women as Farm Managers." American Journal of Agricultural Economics, 58:831-5.

⁹Schultz, T. Paul. 1989. Returns to Women's Education. WID Background Paper 89-1. The World Bank.

¹⁰Hyde, Karin A.L. 1989. Improving Women's Education in Sub-Saharan Africa: A Review of the Literature. Background Series 89-15; Education and Employment Division. The World Bank.

What We Know about Female Educational Access

We know a great deal about the factors that increase female access to and persistence in educational institutions. For example, rural girls and urban girls have different educational opportunities and the difference can be very great. Social class also is linked to educational opportunity with girls from upper class families forming a majority of the female student body in secondary and tertiary institutions.¹¹ In contrast, the distribution of family backgrounds of male students more closely reflects the distribution of society. For example, in the Ivory Coast in 1981 a girl with a university-educated father had 35 times the probability of entering an academic secondary school than a girl whose father had no education. The comparable figure for boys was 3.5.¹²

Income is also associated with lack of access for girls; parents appear to view girls' education as a luxury and boys' as a necessity. So, for example, girls are more likely to be withdrawn from school and not allowed to repeat a class if the family experiences financial problems.

In some countries religion makes a difference, with daughters' opportunities for education being more affected than boys' by parental views on appropriate secular or religious education.

¹¹Biraimah, K.L. 1987. "Class, Gender and Life Chances: A Nigerian University Case Study." Comparative Education Review 31:570-82. and

Weis, L. 1981. "Schooling and Patterns of Education in Ghana." Canadian Journal of African Studies, 15:311-22.

¹²Assie, N. 1983. "Educational Selection and Social Inequity in Africa." Unpublished Ph.D. dissertation. University of Chicago.

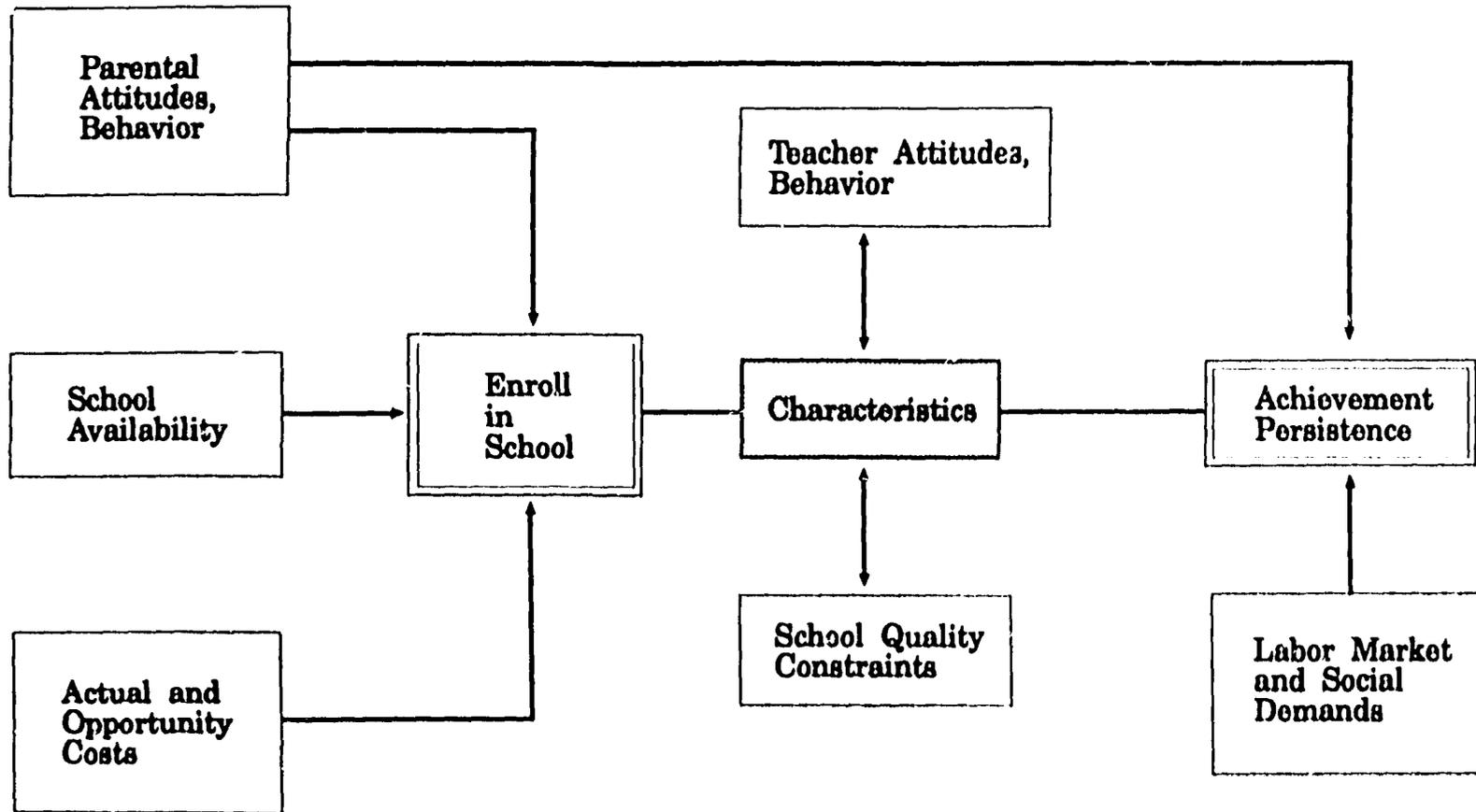
However, for the researcher, educator, or policymaker who is concerned with the consequences of low female access to education, the known relationships--i.e., the association of such variables as region of residence, social class, income and religion with levels of educational access--are not sufficient planning tools. We need to get a firmer grip on the underlying processes that lead to low female participation within particular country settings. Is it unavailability of schools or undeveloped non-agricultural labor markets that make rural residence such a barrier to female education? Is it that rural girls are too busy to go to school? Do girls from upper class families go to, and stay in, school because their parents are able to help them with homework and thus improve their performance, or because they can afford to dispense with household labor? Do these privileged girls go to school for their own sake or to make them suitable for their future husbands? Is it the case that investments in children are driven by traditional patterns of lineage and inheritance? The answers to these and many other questions have implications for policy-making and/or interventions aimed at raising levels of female education.

What We Need to Know

Let us look at the current state of knowledge within a framework that summarizes what we know and indicates areas in which further research is needed. Figure 1 serves such a framing purpose. The double boxes contain the dependent variables, the phenomena we are interested in explaining; the single boxes contain the independent variables, the factors that we suspect determine levels of female participation; and the arrows indicate the direction in which the independent variables act. "Characteristics" refer to factors like social class, religion, place of residence, sibling position, and personality traits that may affect both dependent and independent variables but may not in themselves have implications for policy because they are difficult to manipulate. They do constitute pieces of information that will help in framing more effective policy.

As we move through Figure 1, it should become clear how it helps us ask research questions and how such a process can add to our understanding of the way in which the educational process affects girls. Starting on the left, enrollment is the first point at which the child

Figure 1:
Model for Framing Research Questions
on the Causes of Low Female Access to Education



and school come in contact. Figure 1 suggests that there are three major groups of variables that affect whether or not a child is enrolled. First, parents' or guardians' beliefs about school. Do they believe school will be useful and beneficial to their child? Do they feel their daughter will be safe? The second area, school availability, brings in such factors as the size of the school or whether there is one nearby. What kind of school is it and of what quality? Finally, costs like school fees, books, uniforms, and transportation can be substantial. In addition, the parents may actually lose needed services that the child in school can no longer provide. The parents may then need to pay for these lost services or do without (opportunity costs).

After the child has enrolled in school, a number of other factors come into play which will determine whether she stays in school and how she performs there. The teachers, other pupils, and the organization of the school may all influence the pupil's progress and performance. As she grows older, factors outside the school, like opportunities for jobs or social demands (e.g., that a girl marry at puberty) can affect how long she stays in school. Her parents' attitudes and economic and social conditions continue to have an impact throughout her school life.

The Purpose of This Guide

This guide is intended to assist practitioners and researchers in thinking more carefully about, and collecting data on, the causes of low female access to education. We need to know much more about the mechanisms that keep girls out of school; we need to shed light on the relative importance of different factors in the underlying processes of educational disadvantage. This guide also serves as an introduction to work that has already been done in the area.

Such research will suggest fruitful strategies for increasing girls' access to education. The data can be used for any of the following purposes.

- **Description and documentation** of existing gender differentials, in teaching practices, school availability or child-rearing. Statistical measures like the mean, mode, median and standard deviation can be used to describe the essential dimensions of each phenomenon.
- **Aid in evaluation.** Measuring the situation before and after an intervention to improve girls' access is an excellent way to assess progress and effectiveness. Cross-tabulations by sex, by region of residence before and after an experimental change can give quick, summary illustrations of an intervention's effectiveness. Cross-tabulations can also be used to compare regions, education levels, and genders.
- **Aid to decision-makers.** What kind of schools are most effective? What sort of teacher training leads to effective teachers? These are examples of questions administrators need to answer for sound organization of school systems. Multivariate analysis, like regression analysis, gives the most reliable answers to such questions. Such analyses can help the researcher estimate the effect of each factor taking the effect of other factors into account.

Contents of This Guide

The instruments included in this guide come from a variety of disciplines, namely--child psychology, human development, economics, demography, anthropology, education, and sociology. They come in a wide variety of forms, including large scale survey research, personal interviews, inventories, and observation guides. The aim is not to provide a single best instrument, but to acquaint the reader with the breadth of research instruments available and tested. In a few cases, instruments have been replicated and revised through use in a number of countries, and this will be noted when the instrument is discussed. Some of the instruments have been used explicitly to explore gender issues; others have collected gender-specific data but have not used this data explicitly. Still others were not used for looking at sex differences but can easily be modified to be suitable for such research.

This guide aims to encourage cross-disciplinary research. For example, the consequences of certain parent-child interactions for school demeanor or of academic performance for eventual educational attainment. Each research tool is described under the following headings:

- Object of instrument;
- Type;
- Principal investigator/developer;
- Place and date used;
- Subjects;
- How administered;
- How pretested;
- Description;
- Commentary; and
- Bibliography.

The instruments are not included here, but the Appendix contains a list of addresses from which they can be obtained. The instruments will be grouped by subject--child, parents, teacher or school and community. However, some of the more comprehensive survey instruments were designed to collect information from all four subjects.

The next section contains instruments that collect information on the child's characteristics; the third elicits data on parent attitudes and behaviors towards children; the fourth, those on teacher, school and classroom variables; and the fifth, community or societal level data.

2 Child's Characteristics

The instruments in this section measure the child's intellectual, psychological and demographic characteristics that will have an effect on her functioning in school. Most of the instruments have been used explicitly to link the child's characteristics with school performance, but generally have not looked at boys and girls separately.

- A. Social Competence Scale
- B. Primary School Records Schedule
- C. Secondary School Student Survey
- D. Class, Gender and Life Chances: A Nigerian University Case Study
- E. Home Behavior Inventory, Classroom Behavior Inventory

A. SOCIAL COMPETENCE SCALE

Object of Instrument: To obtain a measure of social-emotional functioning. This instrument is designed to assess the child's mastery of a kindergarten or pre-school setting.

Type: Rating scale.

Investigator/Developer: Martin Kohn, the William Alanson White Institute, 20 West 47th Street, New York, NY 10023.

Place/Date Used: Developed with pre-school children in New York in early 1970s.

Subjects: The scale is designed for use with teachers of children aged 3 to 6 years.

How Administered: Child is observed by teacher at six-month intervals.

How Pretested: The test was developed on 407 children in public day-care centers in New York City. Only two of the original six rotated factors were retained after pre-testing. Scores were reported stable across situations and over time.

Description: The scale has 64 statements about the child, describing behavior or characteristic attitudes. The teacher then assesses the child's position on a 5-point scale, "hardly ever, never" to "very often or always", based on the child's behavior during the most recent week. The child receives a score on two bi-polar scales, interest-participation versus apathy-withdrawal and cooperation-compliance versus anger-defiance.

A. SOCIAL COMPETENCE SCALE, contd.

Commentary: Two versions of the instrument are available--a 72-item schedule for full-day centers and a 64-item for half-day centers. The instructions emphasize that the teacher is not to consult with others on the rating, to answer every item, and to base ratings on in-classroom behavior.

Bibliography: Kohn, M. and B.L. Rosman. 1973. "Cognitive Functioning in Five-Year-Old Boys as Related to Social-Emotional and Background-Demographic Variables. Developmental Psychology 8 :227-294.

Kohn, M. and B.L. Rosman. 1972. "A Social Competence Scale and Symptom Checklist for the Preschool Child: Factor Dimensions, Their Cross-Instrument Generality and Longitudinal Persistence. Developmental Psychology 6:430-444.

Kohn, M. and B.L. Rosman. 1974. "Social-Emotional, Cognitive, and Demographic Determinants of Poor School Achievement: Implications for a Strategy of Intervention." Journal of Educational Psychology. 66:267-276.

B. PRIMARY SCHOOL RECORDS SCHEDULE

Object of Instrument: To get information on attendance, performance and identity of child's principal caretaker. Data was collected on the child's gender also.

Type: Schedule.

Investigator/Developer: Professor Caroline Bledsoe, Department of Anthropology, Northwestern University, Evanston, IL 60208.

Place and Date Used: Used to collect data from primary schools in the Eastern Province of Sierra Leone.

Subjects: Children enrolled in primary schools.

How Administered: Principal Investigator reviewed school records.

How Pretested: Not applicable.

Description: The following information was collected from school records: Class number, child number, sex of child, child's caretaker, child's examination scores, child's class position, number of days child attended school during the school year.

Commentary: A similar schedule was used to collect information from a girls' secondary school in the same area. This schedule also included an item on whether the girl was African, Lebanese, or Afro-Lebanese. Subsequently, the PI discovered that approximately 10% of the records were fictitious. Schools attempted to increase government subsidies by inflating enrollments.

C. SECONDARY SCHOOL STUDENT SURVEY

Object of Instrument: To gather educational and demographic data on secondary school students.

Type: Personal interview.

Investigator/Developer: Professor Caroline Bledsoe, Department of Anthropology, Northwestern University, Evanston, IL 60208.

Place and Date Used: Eastern Province, Sierra Leone.

Subjects: Secondary school students.

How Administered: Questions were asked directly of students.

How Pretested: No details.

Description: Gathered basic demographic information on student, education of both parents, principal occupation of both parents, who paid school fees or who paid for most of school expenses, education of principal caretaker, residence of mother and father and whether still alive, educational and occupational aspirations, up to four problems encountered in getting an education.

Commentary: A similar schedule used to collect information from primary schools in the area.

D. CLASS, GENDER AND LIFE CHANCES: A NIGERIAN UNIVERSITY CASE STUDY

Object of Instrument: To assess the effects of class and gender on the career and educational expectations of Nigerian university students.

Type: Questionnaire.

Investigator/Developer: Dr. Karen Biraimah, College of Education, University of Central Florida.

Place and Date Used: University of Ife, Nigeria, in 1983 and 1984.

Subjects: Random sample of 300 male and 200 female students (out of 10,000) enrolled in the University's 11 faculties.

How Administered: Self-administered.

How Pretested: Four hundred male and female Nigerian university students were administered a pilot open-ended instrument.

Description: Students were asked to respond to about 40 questions, including basic demographic information, occupation and education of parents, age and activities of siblings, own educational and occupational aspirations, indicators of areas of academic interest and current performance, sources of occupational guidance and encouragement, plans for retirement.

D. CLASS, GENDER AND LIFE CHANCES: A NIGERIAN UNIVERSITY CASE STUDY, contd.

Commentary: This study was built on earlier work done by the University of Lagos on the socioeconomic background and attitudes of its male and female students as well as a number of other studies of female participation in education in other parts of Nigeria.

Bibliography: Biraimah, K.L. 1987. "Class, Gender and Life Chances: A Nigerian Case Study." Comparative Education Review 31 4:570-582.

E. HOME BEHAVIOR INVENTORY, CLASSROOM BEHAVIOR INVENTORY

Object of Instrument: To report on various dimensions of a child's personality including verbal intelligence, curiosity, creativity, instrumental independence, task orientation, considerateness, and extraversion.

Type: Inventories.

Investigator/Developer: Earl S. Schaefer, May Aaronson, M. Edgerton, M. Hunter. Several similar inventories developed by Schaefer and colleagues are discussed here.

Place and Date Used: Extensively in the United States with findings replicated in Israel.

Subjects: Pre-school and elementary school children.

How Administered: Parents or teachers rate individual children on a five point scale, "almost always - almost never" or "not at all like - very much like."

How Pretested: The inventory items were generated to correspond to traits on the American Classroom Behavior Checklist. Factor analysis was used to refine the inventory and keep only those items that served to discriminate between traits.

Description: The responses generate scores for academic competence and social adjustment. The classroom version has 42 items, and generates 10 scales; the home behavior inventory and the child behavior inventory have 30 items with a smaller number of scales.

E. HOME BEHAVIOR INVENTORY, CLASSROOM BEHAVIOR INVENTORY, contd.

Commentary: The inventories contain similar items. The scales can be used to compare sex-typing of parents and teachers at these early ages. The classroom behavior inventory scales correlated with child-rearing beliefs, values and demographic characteristics of parents.

Bibliography: Datta, L., E.S. Schaefer and M. Davis. 1968. "Sex and Scholastic Aptitude as Variables in Teachers' Ratings of the Adjustment and Classroom Behavior of Negro and Other Seventh Grade Students." Journal of Educational Psychology 2:94-101.

Schaefer, E.S. 1981. "Development of Adaptive Behavior: Conceptual Models and Family Correlates." In M.J. Begab, H.C. Haywood and H.L. Garber (Eds.). Psychosocial Influence in Retarded Performance: Volume I. Issues and Theories in Development. Baltimore: University Park Press.

3 Parent Behavior and Attitudes

A continuing interest among child development scholars and others has been the linking of child-rearing practices with child outcomes. Several of the following questionnaires emphasize the linking of certain features of parent-child interactions with child learning outcomes and school performance.

- A. Communication Strategy Administration and Coding Manual
- B. The Family Belief Interview Schedule
- C. Fosterage and Proximate Determinants of Fertility
- D. Household Survey: Nutritional Status and Absent Mothers
- E. Concepts of Development
- F. Implicit Parental Learning Theory (IPLET I-V)
- G. Home Observation for Measurement of the Environment
- H. Morocco Literacy Project
- I. Adults' Conceptions of Children's Cognitive Abilities (1-4)
- J. Construction of the Child Interview
- K. Kohn's Rank Order of Parental Values (Schaefer and Edgerton Revision)
- L. The Elementary School Years Study
- M. The Parenting Dimensions Directory (PDI)
- N. Cross-Cultural Mathematics Study
- O. Parental Modernity Scale

A. COMMUNICATION STRATEGY ADMINISTRATION AND CODING MANUAL

Object of Instrument: To explore how communication strategy preferences and self-predictions are influenced by situational factors.

Type: Schedule.

Investigator/Developer: Developed by McGillicuddy-Delisi, Johnson, Sigel, Epstein and Boyles of the Educational Testing Service.

Place and Date Used: Written in 1977 and revised in 1980. It is based on use in the U.S.

Subjects: Parents.

How Administered: Interviewer.

How Pretested: No details.

Description: This schedule looks at interactions between parents and 4 year-old children by presenting 12 hypothetical situations. The schedule is designed to be sex-neutral with half of the situations including a male parent and half a female parent. Six of the children represented are boys and six, girls. The settings and toys depicted are also designed to be sex-neutral.

4 situations - teaching facts and principles.

4 situations - social skills and interactions.

4 situations - management of child's behavior.

Half are positive situations, i.e., focused on exchange of cognitive information to child; half

A. COMMUNICATION STRATEGY ADMINISTRATION AND CODING MANUAL, contd.

are negative i.e., child is given information after expressing confusion or misunderstanding.

Parent has four response options to choose from, each representing one of the following dimensions of parent-child interactions:

1. distancing - verbal inquiry directed towards child to elicit response
2. rational-authoritative - statement including a logical explanation
3. direct-authoritative - repeat observable fact without explanation
4. diverting - no demand made on child

Administration of questionnaire needs rapport, careful avoidance of certain statements and intimations or repetitions while conducting interview. The schedule includes several alternative probes for interviewer.

Commentary: This schedule can be used explicitly for comparison of gender differences in interactions between fathers and mothers, sons and daughters by manipulating the sex of the actors in the situations. This schedule has been used in Tanzania.

Bibliography: Laosa, L.M. and I.E. Sigel (Ed). 1982. Families as Learning Environments for Children. New York: Plenum Press.

B. THE FAMILY BELIEF INTERVIEW SCHEDULE (FBIS)

Object of Instrument: Developed to assess the extent of agreement between beliefs that parents and/or teachers have about a child and the child's own self-beliefs and the child's awareness of parental or teacher beliefs.

Type: Interview.

Investigator/Developer: Developed by Steven M. Alessandri and Robert H. Wozniak of the Department of Human Development, Bryn Mawr College.

Place and Date Used: Schedule has been used in four administrations, each administration had similar families but the families used differed, i.e., in ethnicity, race and socioeconomic status. Used on U.S. population.

Subjects: Children of school age over 10 and their parents.

How Administered: Interviewer.

How Pretested: A pilot study determined the traits parents often used to characterize their children's personalities. Twenty-five parents were asked "in what ways are your children different from one another?" From the list, 15 traits were selected which appeared to be independent. Next, vignettes were developed using each trait and tested on 15 families. Children younger than 10 found it difficult to put themselves in another's place and take on another person's view. Therefore, the developers recommend that this schedule be used only with children over 10.

B. THE FAMILY BELIEF INTERVIEW SCHEDULE (FBIS), contd.

Description: The schedule contains 15 short vignettes which present a situation that a child might encounter at home or at school. The parent is asked to report on the child's probable reactions and the child is asked either to report on a parents reactions or on what the child would do in the circumstances. Neither is asked to make an explicit value judgement, they are presented with concrete situations, almost any answer for the vignettes chosen can be socially desirable. Developers recommend starting with two particular vignettes that respondents find easy to answer and the other 13 in a random order.

Commentary: The authors recommend using a tape recorder. An administration usually takes 20-30 minutes. Two sessions are needed for the families. The instrument produces measures of 5 sets of beliefs: mothers/fathers about child, child's beliefs, child's beliefs about mothers/fathers that can be used to generate 8 agreement measures:

Bibliography: Alessandri, S.M. and Wozniak, R.H. 1987. "The Child's Awareness of Parental Beliefs Concerning the Child: A Developmental Study." Child Development 58:316-323.

_____ "Continuity and Change in Intrafamilial Agreement in Beliefs Concerning the Adolescent: A Follow-Up Study." Child Development. April 1989.

_____ "Perception of the Family Environment and Intrafamilial Agreement in Beliefs Concerning the Adolescent." Journal of Early Adolescence. In press.

C. FOSTERAGE AND PROXIMATE DETERMINANTS OF FERTILITY

Object of Instrument: To investigate the practice of fosterage, i.e., giving babies and younger children to women other than their mothers for rearing, and its effect on fertility.

Type: Household Survey.

Investigator/Developer: Professor Caroline Bledsoe, Northwestern University, Evanston, Illinois.

Place and Date Used: Used in Bo, the second largest urban area in Sierra Leone in December, 1985.

Subjects: All women in the household aged 15 to 60.

How Administered: Interviewer administered.

How Pretested: No details.

Description: The survey used a life history format to collect information on marriage, pregnancy and live birth histories for up to 13 children. The schedule asks the sex of the child, how child was fed, whether the child was fostered and whether the child has survived. While there is no information on the child's education, there are questions on the mother's education and the child's nutrition, survival, and fosterage.

Commentary: While the focus of the study was on fostering and its relationship to the mother's fertility, information on children was collected by sex and the PI was able to identify fact that girls were more likely to be fostered out, less likely to be taken to the

C. FOSTERAGE AND PROXIMATE DETERMINANTS OF FERTILITY, contd.

doctor when they were sick, fostered children were more likely to be sent to homes with fewer modern amenities when young. The data gathered from these questions could be linked to data on children's school attendance or performance to investigate how fostering affects girls' school participation.

Bibliography: Bledsoe, C. 1988. "The Social Management of Fertility: Child Fosterage Among the Mende of Sierra Leone." Draft.

D. HOUSEHOLD SURVEY: NUTRITIONAL STATUS AND ABSENT MOTHERS

Object of Instrument: The object of the study was to collect data on the nutritional status of children and relate it to the presence or absence of their biological mothers within the home.

Type: Household survey.

Investigator/Developer: Professor Caroline Bledsoe, Northwestern University, Evanston, Illinois.

Place and Date Used: Used in a town of 4,500 in Eastern Province of Sierra Leone in 1982.

Subjects: The sample consisted of a one in seven sample of 547 households in the town, approximately 78 households with an average size of 8 people. After the household had been selected, a letter signed by the Paramount Chief was sent round to the household heads which requested their cooperation. There was a 10% refusal rate.

How Administered: Used English-literate interviewers. The interviewers had higher levels of literacy in English than in Mende, so the interview was written in English with key concepts written in Mende. The translation was a group effort which took three months, with repeated back-translation.

How Pretested: No details.

Description: The survey had six parts. (1) Data on the house. (2) Data on each household within the house. (3) Data on household head, source of income

D. HOUSEHOLD SURVEY: NUTRITIONAL STATUS AND ABSENT MOTHERS, contd.

including type of farming, completed years of education, number of wives for males. (4) Data on each woman aged 18-45 in the household, pregnancy history, live births. (5) Data on each unmarried child under 18 whose mother was not present. (6) Data on each unmarried child aged less than 18 whose mother was present. Information was sought on the comparative living conditions of the foster home and natal home, and household tasks assigned to children. School attendance and promotion records were obtained from school records.

Commentary: Despite the fact that household heads had given their permission, interviewers encountered resistance from women household members who were reluctant to give detailed marriage histories and details of the fatherhood of all their children.

Bibliography: Bledsoe, C.H., D.C. Ewbank and U.C. Isiugo-Abanihe. 1988. "The Effects of Child Fostering on Feeding Practices and Access to Health Services in Rural Sierra Leone." Draft.

E. CONCEPTS OF DEVELOPMENT

1. Concepts of Development Questionnaire

Object of Instrument: To assess levels of parental thought.

Type: Questionnaire, rating scale.

Investigator/Developer: A.J. Sameroff and L.A. Feil, of the University of Illinois at Chicago.

Place and Date Used: U.S. and England.

Subjects: Parents.

How Administered: Self-administered.

How Pretested: Used in a standardization study with English and American mothers. The original 45 items measuring 4 levels were reduced to 20 measuring 2 levels through factor analysis.

Description: The questionnaire has 20 sentences which the parent has to rate on a 4-point "strongly disagree" - "strongly agree" scale. Examples: "Difficult babies will grow out of it," "Fathers cannot raise their children as well as mothers." The scores generate a perspectivistic score and a categorical score. The first indicates the degree to which the parent sees a specific developmental outcome as an example of a number of possible outcomes or sees the family as a dynamic, reciprocal network of relationships. A categorical score focuses on the identification of people with their role labels or single explanations of behavior based on either environment or constitution.

E. CONCEPTS OF DEVELOPMENT, contd.

Commentary: This instrument is a precursor to the Concepts of Development, Vignettes (CODV) instrument. The CODV was developed to try and tap parents' actual thoughts about development. In the United States, it was used on Anglos, Chicanos and, in translation, on Mexican-Americans and Mexicans in America. Scoring instructions are available with the questionnaire.

Bibliography: Sameroff, A.J., R. Seifer, R. Barocas, M. Zax and S. Greenspan. 1987. "Intelligence Quotient Scores of 4-Year-Old Children: Social-Environmental Risk Factors." Pediatrics 79:343-50.

Sameroff, A.J. and L.A. Feil. 1985. "Parental Concepts of Development." In Parental Concepts of Development edited by I. Sigel, pp. 83-105. Hillsdale, NJ:Lawrence Erlbaum Associates.

2. Concepts of Development Vignettes

Object of Study: To elicit parents' actual thoughts on development without depending on researchers' assumptions about their thoughts.

Type: Interview.

Investigator/Developer: L.A. Feil and A.J. Sameroff, University of Illinois at Chicago.

Place and Date Used: U.S.

Subjects: Parents.

E. CONCEPTS OF DEVELOPMENT, contd.

How Administered: Interviewer.

How Pretested: Used a sample of 80 mothers of pre-school children.

Description: Six vignettes are read aloud to the parent, three describing a problem behavior of some kind, inattention in school, and three describing some parental action such as excessive spanking. Each vignette ends with a question, "How would you explain (name)'s behavior/problem/ reaction?" Interviewer is asked to probe in a non-specific manner for codable responses. There are six levels of thinking ranging from atheoretical; no differentiation between influences and outcomes, to an explanation which gives a full, dynamic explanation of the behavior.

Commentary: A lengthy scoring manual is available with the vignettes.

Bibliography: Sameroff, A.J. and L.A. Feil. 1985. "Parental Concepts of Development." In Parental Concepts of Development edited by I. Sigel, pp. 83-105. Hillsdale, NJ: Lawrence Erlbaum Associates.

F. IMPLICIT PARENTAL LEARNING THEORY (IPLET I-V)

Object of Instrument: To measure child-rearing practices and the types of behaviors parents encourage in their children and the ways in which they discourage undesired behaviors. It also attempts to assess the teaching techniques favored by the parent.

Type: Individual interview questionnaire.

Investigator/Developer: Bettye M. Caldwell, Alice S. Honig, IPLET I-IV; R. Lally, J. Wright, Alice Honig and Bettye Caldwell, IPLET V.

Place and Date Used: Developed in the United States in late 1960s.

Subjects: Parents of children from birth to six years of age.

How Administered: The questionnaire is administered as a personal interview. There are five questionnaires, depending on the age of the child.

How Pretested: No details.

Description: The interviewer reads a number of specific child behaviors; the parent's reactions are recorded and then coded.

Commentary: The coding sorts parents' responses into three categories: (1) direct manipulation of environment (e.g., provision or deprivation of privileges, parental positive response); (2) symbolic manipulations (e.g., promise or threat of deprivation, verbal reproach undermining self-esteem; and (3) absence of response. The IPLET

F. IMPLICIT PARENTAL LEARNING THEORY, contd.

questionnaires have been used in India, Sweden, France and Korea as well as the U.S. (Honig, 1979).

Bibliography: Honig, A.S. 1979. Cross-Cultural Study of Child Rearing in Five Urban Groups. Paper presented at SRCD Meeting, San Francisco, CA.

Honig, A.S., B. M. Caldwell and J. Tannenbaum. 1970. "Patterns of Information Processing Used By and With Young Children in a Nursery School Setting." Child Development 41:1045-1056.

G. HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT

Object of Instrument: To collect data on child's development. This inventory is regarded as a supplementary instrument, designed to supply additional background information on the child.

Type: Inventory, to be completed through interview.

Investigator/Developer: Bettye M. Caldwell and Robert H. Bradley.

Place and Date Used: Developed at the University of Little Rock.

Subjects: There are two inventories, one for children aged 0-3 and the second for pre-schoolers aged 3-6.

How Administered: The interviewer comes to the child's home and through an unstructured interview, gains information for scoring the various categories.

How Pretested: No information on pretesting or the development of the instrument.

Description: The inventory describes a variety of behaviors, conditions and interactions which the interviewer must code yes/no. For example describing whether or not mother kisses the child, whether child is taken out of the home into a stimulating environment, whether child has certain kinds of toys. The scores in the six sub-scales in the 0-3 inventory, (emotional and verbal responsiveness of mother; avoidance of restriction and punishment; organization of the physical and temporal environment; provision of appropriate play materials; maternal involvement with the child, opportunities for variety in daily stimulation)

G. HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT, contd.

are given percentile rankings as is the total score. The preschool inventory has seven sub-scales – stimulation through toys, games and reading materials; language stimulation; physical environment: safe, clean and conducive to development; pride, affection and warmth; stimulation of academic behavior; modeling and encouragement of social maturity; variety of stimulation; and physical punishment.

Commentary: Although the inventory has apparently been used in several countries, the tenor of many of the questions suggests that there are many countries where it would be quite unsuitable. For example, items on whether or not the child visits a doctor regularly or whether or not the child has a walker, kiddie car or tricycle.

H. MOROCCO LITERACY PROJECT

Object of Instrument: The study was designed to investigate the family's role in the intergenerational transmission of literacy.

Type: Interviews and tests.

Investigator/Developer: Literacy Research Center, University of Pennsylvania and Universite Mohamad V (Rabat, Morocco).

Place and Date Used: The 5-year research project was started in 1982 in one urban and one rural site in Morocco.

Subjects: The sample consists of 350 6- to 7- year old children and their parents and 500 12-year old children in the 5th grade in Morocco.

How Administered: All instruments are interviewer-administered.

How Pretested: No details.

Description: The instruments are a sociodemographic background questionnaire administered to the parents, a survey designed to elicit attitudes about the development and education of their children, several reading tests in Arabic during the school year, and an assessment of the children's beliefs about reading success.

Commentary: There were three questions on the parent's attitude survey which discriminated between the mothers of high and low readers. Those mothers who believed that parents were as important as teachers for providing guidance, that reading aloud was better, and that a modern preschool was superior to

H. MOROCCO LITERACY PROJECT, contd.

Quranic school, were more likely to have children with high reading achievement.

Bibliography: Wagner, D.A., B.M. Messick and J.E. Spratt. 1986. "Studying Literacy In Morocco." In The Acquisition of Literacy: Ethnographic Perspectives edited by B.B. Schieffelin and P. Gilmore. Norwood NJ: Ablex.

Wagner, D.A. (Ed.). 1987. The Future of Literacy in a Changing World. New York: Pergamon.

Wagner, D.A. and J. E. Spratt. 1987. "Cognitive Consequences of Contrasting Pedagogies: Effects of Quranic Preschooling in Morocco." Child Development 58, 1207-1219.

Wagner, D.A., J.E. Spratt, I. Gal and S.G. Paris. 1987. "Reading is Believing: Beliefs, Attributions, and Reading Achievement Among Moroccan School Children." Paper presented at the National Reading Conference, St. Petersburg, Florida.

I. ADULTS' CONCEPTIONS OF CHILDREN'S COGNITIVE ABILITIES (1-4)

1. Object of Instrument: To assess adult conceptions of the intellectual abilities of children.

Type: Assessment scales.

Investigator/Developer: Professor Scott Miller, Department of Psychology, University of Florida, Gainesville, FL 32611.

Place and Date Used: In the U.S. in 1980.

Subjects: A sample of parents and non-parents, equally divided between the sexes.

How Administered: Interviewer administered.

How Pretested: No information.

Description: Adults are given a verbal description of 13 Piagetian concepts and shown the typical method of administering tasks representing the concepts to children. The adults were then asked to assess the average age of mastery, age range of mastery, and degree of sex differences. They then rate the importance of parental teaching, school teaching, interaction with peers, self discovery, and inborn knowledge in contributing to knowledge of the concepts.

Commentary: Care is taken to give adults the correct answers so the questions are not seen as a test.

I. ADULTS' CONCEPTIONS OF CHILDREN'S COGNITIVE ABILITIES (1-4), contd.

Bibliography: Miller, S.A., N. White and M. Delgado. 1980. "Adults' Conceptions of Children's Abilities." Merrill-Palmer Quarterly 26:135-51.

2. *Object of Instrument:* To investigate parent's beliefs about their children's cognitive abilities.

Type: Assessment scales.

Investigator/Developer: Professor Scott Miller, Department of Psychology, University of Florida, Gainesville, FL 32611.

Place and Date Used: Mid 1980s.

Subjects: First-grade children and their parents.

How Administered: Interviewer administered.

How Pretested: Modification of above instrument.

Description: There were two separate tasks, a test of the child and an interview with the child's parent. Each child received one of two tests, either a Piagetian battery or an IQ test (Stanford-Binet or Peabody). Each mother was shown the specific battery her child had answered and asked for her judgment of the child's performance and what evidence she used to come to her conclusions. They are then asked to rate the importance of parental teaching, school teaching, interaction with peers, self discovery, and inborn knowledge in contributing to a knowledge of the concepts.

I. ADULTS' CONCEPTIONS OF CHILDREN'S COGNITIVE ABILITIES (1-4), cont'd.

Bibliography: Miller, S.A. 1986. "Parents' beliefs about their Children's Cognitive Abilities." Developmental Psychology 22:276-84.

3. *Object of Instrument:* To investigate the relationship between parental beliefs, parental accuracy and children's development.

Type: Assessment scales.

Investigator/Developer: Professor Scott Miller, Department of Psychology, University of Florida, Gainesville, FL 32611.

Place and Date Used: 1988, 1989. U.S.

Subjects: Elementary school children and their parents.

How Administered: Interviewer.

How Pretested: Modification of 1980 instrument.

Description: Each child is given five cognitive tests--mathematics, triangles, vocabulary, memory and matrices--and then asked to rank tests in order of preference. Parents are shown tests as administered. They are then asked to rate their own child's performance, and the group's performance. They then completed a questionnaire adapted from McPhee's Catalog of Previous Experience to obtain data on parent's previous experience with children.

I. ADULTS' CONCEPTIONS OF CHILDREN'S COGNITIVE ABILITIES (1-4), contd.

Commentary: While PI used all instruments together, it is possible to use a simpler version of the overall design.

4. *Object of Instrument:* To see whether parents can predict their children's preferences.

Type: As above.

Investigator/Developer: Professor Scott Miller, Department of Psychology, University of Florida, Gainesville, FL 32611.

Place and Date Used: U.S. 1989 ongoing.

Subjects: Elementary school children and their parents.

How Administered: Interviewer.

How Pretested: Modification of 1980 instrument.

Description: Children are given 26 open-ended questions on a variety of preferences. They are then asked to draw something they really like and choose three pictures, in order of preference, from eight representing hobbies, interests, in- and out-door activities.

Commentary: As above.

J. CONSTRUCTION OF THE CHILD INTERVIEW

Object of Instrument: To establish the parent's view of whether or not the child has attained a concept or ability at the age in question and elicit the parent's beliefs about developmental processes that have or will lead to such an attainment.

Type: Questionnaire and sets of probes.

Investigator/Developer: Ann V. McGillicuddy-Delisi, J. Polymeropoulos, E. Stinson and S. Kraft of Educational Testing Service.

Place and Date Used: United States, Tanzania.

Subjects: Parents.

How Administered: Interviewer.

How Pretested: No details.

Description: The interview is built around 12 stories (each illustrating a concept) that are followed by probes designed to elicit information on the parent's beliefs about how the concept or ability is developed in children. Different versions of several stories, focused on two age groups, 3-4 year olds and 6-7 year olds. The parent's responses are scored for frequency and intensity of reference to each of 16 constructs of child states and processes. The constructs, e.g., absorption, accumulation, deficiency, cognitive processes, direct instruction, experimentation, exposure, identification, and impulsivity are described in the coding manual. The coder then sums the total number of constructs scored across all probes.

K. KOHN'S RANK ORDER OF PARENTAL VALUES (SCHAEFER AND EDGERTON REVISION)

Object of Instrument: To obtain a conformity score, a self-directing score, a social score.

Type: Interview, rating scale.

Investigator/Developer: Originally developed by M.L. Kohn, revised by E. Schaefer and M. Edgerton.

Place and Date Used: U.S.

Subjects: Parents.

How Administered: Interviewer.

How Pretested: No details.

Description: There are three sets of cards, each containing five brief descriptions of values parents feel their children ought to learn. Parents are handed each set of orders which they arrange in order of importance. The interview notes the order for each set.

Commentary: The test has been validated, it is brief and reportedly is highly correlated with measures of child competence.

Bibliography: Schaefer, E.S. and M. Edgerton. 1985. "Parent and Child Correlates of Parental Modernity." In Parental Belief Systems: The Psychological Consequences for Children edited by I.E. Sigel, pp. 287-318.

L. THE ELEMENTARY SCHOOL YEARS STUDY

Object of Instrument: To obtain information on activities and characteristics of elementary school children and their parents and their expectations for the future.

Type: Interviewer administered and self-administered questionnaires.

Investigator/Developer: Achievement Research Laboratory, Institute of Social Research, University of Michigan.

Place and Date Used: U.S. 1987, 1988.

Subjects: Elementary school children and their families.

How Administered: Parents are interviewed. There are also self-administered parent and family questionnaires.

How Pretested: No details.

Description: The survey grew out of an earlier study on the impact of parents on their children's achievement self-concept. Over 75 constructs are measured which include achievement in English, mathematics, and athletics, parental efficacy, family cohesion, health problems, and parental mathematics performance. The 1987 parent interview asks about the child's organized after-school activities, including the parent's level of financial and emotional involvement. The second module concerns parent's sex role beliefs and to what they attribute sex differences. The third module concerns employment status of each parent, marital history and number of children from the marriage. The final section probes for parents' beliefs about the connections between genetic inheritance and learning ability.

M. THE PARENTING DIMENSIONS DIRECTORY (PDI)

Object of Instrument: To measure nine dimensions of parenting in three categories: support--nurturance, sensitivity and non-restrictive attitude; control--type of control, amount of control, maturity demands; and structure--involvement, consistency and organization.

Type: Inventory.

Investigator/Developer: Mark Slater and Thomas Power, University of Houston.

Place and Date Used: Developed in U.S. in mid 1980s.

Subjects: Parents of children aged between six and eleven.

How Administered: Self-administered.

How Pretested: The inventory was a much-expanded version of an existing inventory (Kobayashi and Power 1984) with additional items selected from existing instruments and generated from a review of the literature by a team of researchers. The final items selected after administering the resulting instrument to 112 parents. Separate confirmatory factor analyses were performed for each scale and items that did not conform to unidimensional models were dropped. Additional statistical tests confirmed that the PDI was internally consistent and had the intended factor structure. Further validation took place with a sample of 140 parents.

M. THE PARENTING DIMENSIONS DIRECTORY (PDI), contd.

Description: The instrument has seven parts. (1) Asks for age and sex of each child, (2) Makes 26 statements which the parent is to rate on a 6-point scale: "not at all descriptive of me - highly descriptive of me." For example, "My child convinces me to change my mind after I have refused a request;" and "I encourage my child to be curious, to explore and to question things." (3) Parents are given pairs of sentences with contrasting positions and asked to endorse the one most similar to own position. (4) This section asks about activities. Parents are asked to rate the frequency of different activities on a four-point scale, from never in past month to five times a week or more. (5) Contains four sentences characterizing the family, that are rated on a six-point scale, "always" to "never." (6) Chores the target child is responsible for, indicating both type and frequency. (7) The last section elicits the parent's response to specific child behaviors.

Commentary: Developers do not use the instrument for gender specific analysis but it can be done because the sex of the target child is collected. Such an instrument can be used to relate to child-rearing practices to the child's personality traits or child's classroom behavior.

Bibliography: Slater, M.A. and T.G. Power. 1987. "Multidimensional Assessment of Parenting in Single-Parent Families." Advances in Family Intervention, Assessment and Theory 4:197-228.

N. CROSS-CULTURAL MATHEMATICS STUDY

1. Father's Questionnaire (U.S. version)

Object of Instrument: To measure father's attitudes to child's academic performance and how he assesses his child's ability in mathematics and other areas.

Type: Questionnaire.

Investigator/Developer: James Stigler, University of Chicago, and Harold Stevenson, University of Michigan.

Place and Date Used: 1986. Cook County, Illinois; Taipei, Taiwan; Sendai, Japan and Peking, China.

Subjects: Fathers of 1st and 5th grade children.

How Administered: Self-administered.

How Pretested: No details.

Description: In addition to getting information on the father's opinions of his child's abilities, one section attempts to get ratings of the father's own mathematics performance in school. The father is also asked about his educational expectations for his child and whether he feels there are gender differentials in math or reading ability.

Commentary: The wording of the questions is the same as on the mother's, but this questionnaire is much shorter.

N. CROSS-CULTURAL MATHEMATICS STUDY, contd.

2. Mother's Interview (U.S. version)

Object of Instrument: To collect data on mathematics taught in the home and mother's attitudes towards mathematics.

Type: Interview.

Investigator/Developer: James Stigler and Harold Stevenson.

Place and Date Used: 1986. Cook County, Illinois; Taipei, Taiwan; Sendai, Japan and Peking, China.

Subjects: Mothers of 1st and 5th grade children.

How Administered: Interviewer.

How Pretested: No details.

Description: The mother is asked what math concepts she has tried to teach her child, time she spends on schoolwork with the child. The interviewer then asks about her attitudes towards working with her child, how she assesses her child's ability with respect to other children. She is asked about gender differences and how education can be improved. The mother is also asked for background demographic information about herself, the child, and the child's father.

Commentary: This instrument makes use of 20 cards with pictorial representations of scales or lists of categories the mother can look at as she answers the questions. In general the questions for fathers are the same as those for mothers so they can be compared.

O. PARENTAL MODERNITY SCALE

Object of Instrument: To obtain a measure of parental modernity, using a traditional/progressive scale.

Type: Interview, rating scale.

Investigator/Developer: E.S. Schaefer and M. Edgerton.

Place and Date Used: U.S.

Subjects: Parents.

How Administered: Interviewer.

How Pretested: No details.

Description: The parent is read 30 statements and indicates his position using cards he has been handed on a strongly disagrees - strongly agrees continuum. Examples: "Children should always obey their parents," "Children have a right to their own opinion and should be allowed to express it."

Commentary: The scale includes scoring instructions.

Bibliography: Schaefer, E.S. and M. Edgerton. 1985. "Parent and Child Correlates of Parental Modernity." In Parental Belief Systems: The Psychological Consequences for Children edited by I.E. Sigel, pp. 287-318.

4 School, Teacher and Classroom Characteristics

The ways in which pupils and teachers interact in the classroom and organizational features of the school have implications for what and how children learn in school. The instruments in this section try to capture different aspects of the impact the schooling process has on students.

- A. Classroom ABCs: Affect, Behavior and Conditions in Botswana Classrooms**
- B. Malawi School Quality Study: Classroom Observation Tool**
- C. Second IEA Mathematics Study: Teacher Questionnaire**
- D. Classroom Environment Study (Thailand)**
- E. IEA Classroom Environment Study**
- F. Classroom Observation Guides**

A. CLASSROOM ABCs: AFFECT, BEHAVIOR AND CONDITIONS IN BOTSWANA CLASSROOMS

Object of Instrument: To collect data on what happens in Botswana classrooms.

Type: Classroom observation guide.

Investigator/Developer: Developed by A.I.D. Principal Investigators: Conrad W. Snyder, Dwight Allen, and Bruce Fuller.

Place and Date Used: Used in Botswana schools in 1987.

Subjects: 154 junior secondary and 127 primary teachers and their classrooms in urban and rural schools.

How Administered: Twelve graduate students from the University of Botswana recorded their observations of the classrooms in three 35-minute periods over three months.

How Pretested: No details.

Description: The observation tool had four parts: 1) An assessment of the classroom context; 2) objective data on the class, i.e., number of students, description of the room, etc.; 3) teacher qualifications, explicit teacher assignments, and frequency of question-asking and 4) ten-minute pupil observation segments based on the entire class.

A. CLASSROOM ABCs: AFFECT, BEHAVIOR AND CONDITIONS IN BOTSWANA CLASSROOMS, contd.

Commentary: The study was preceded by ethnographic work (Prophet and Rowell 1988) on the form of social interaction and information characteristics of teacher-pupil relationships in Botswana classrooms. Observer bias is a danger in the scoring of this instrument. Fifteen percent of the observations had to be dropped because of observer bias.

Bibliography: Fuller, B. and C.W. Snyder, Jr. 1989. "Vocal Teachers, Silent Pupils? Life in Botswana Classrooms." Paper prepared for Comparative and International Education Society, Harvard University, April 1989.

Prophet, R. and P. Rowell. 1988. Curriculum in Action: Classroom Observations in Botswana Junior Secondary Schools. Gabarone: U.S. Agency for International Development (mimeo).

B. MALAWI SCHOOL QUALITY STUDY: CLASSROOM OBSERVATION TOOL

Object of Instrument: To collect data on: 1) availability of instructional materials; (2) how these materials are used by teachers; (3) teaching methods and (4) the extent to which instructional materials and teaching practices raise pupil achievement.

Type: Pupil interview, teacher and head teacher questionnaires, and classroom observation.

Investigator/Developer: Bruce Fuller and Anjimile Kapakasa, A.I.D. and Malawi Ministry of Education and Culture, respectively.

Place and Date Used: Malawi, 1988.

Subjects: Sixty teachers from 20 schools, the head teachers, and their classes. Two boys and two girls from each class were selected for the pupil interviews.

How Administered: The teachers and classrooms were observed over 2 periods on 3 occasions over 4 months.

How Pretested: Based on the Botswana "Classroom ABCs".

Description: Pupil Interview: 1) identification of the student; 2) questions on home and parents; and (3) school questions on extent of homework, parental

B. MALAWI SCHOOL QUALITY STUDY: CLASSROOM OBSERVATION TOOL, contd.

involvement in school, whether textbooks are available. Teacher Interview: 1) information on the teacher's education, social background, present living standards and training; 2) curriculum and teaching resources; 3) teaching practices and pupil achievement. Head Teacher Interview: 1) The head teacher is asked about his educational and social background, and is asked to give basic facts about his school and pupils; 2) curriculum of the school, the extent of his teacher supervision and the frequency and nature of teacher meetings; 3) figures on financial resources, per pupil expenditures, qualifications of teachers, repetition rates and number of dropouts. Classroom Observation: 1) the classroom: its physical appearance, material resources of pupils; 2) teacher behavior during a 10-minute segments; and 3) class behavior.

Bibliography: Fuller, B and A. Kapakasa. 1989. "What Factors Shape Teacher Quality? Evidence from Malawi". International Journal of Educational Development.

C. SECOND IEA MATHEMATICS STUDY: TEACHER QUESTIONNAIRE

Object of Instrument: To investigate levels of students' achievement in mathematics and school and home factors which might influence this achievement.

Type: Teacher Questionnaires.

Investigator/Developer: International Association for the Evaluation of Educational Achievement.

Place and Date Used: Nigeria and Swaziland, 1981, 1982.

Subjects: Grade 8 pupils, their teachers and schools.

How Administered: Self-administered.

How Pretested: No details

Description: Items on teacher qualifications, teaching methods, courses taken, and other school duties. Asks for information on class size, and amount and intensity of math instruction. Asks for assessment of time spent on different activities, which aids used by students and in what context; Asks about teacher attitudes to different teaching methods, then about attitudes towards mathematics and its importance in the curriculum and daily life.

C. SECOND IEA MATHEMATICS STUDY: TEACHER QUESTIONNAIRE, contd.

Commentary: Similar instruments were used in many other countries and at 12th grade level.

Bibliography: Lockheed, M. and A. Komenan. 1988. School Effects on Student Achievement in Nigeria and Swaziland. PPR Working Paper, World Bank, Washington, D.C.

D. CLASSROOM ENVIRONMENT STUDY (THAILAND)

Object of Instrument: To gather information on: 1) classroom organization and management; 2) lesson development; 3) teacher questioning; and 4) teacher feedback and correction.

Type: A mixture of rating scales, real time estimates and frequency counts was used.

Investigator/Developer: Department of Teacher Education, Ministry of Education, Thailand and International Development Research Center, Ottawa, Canada.

Place and Date Used: 1983-84 in Thailand.

Subjects: Teachers.

How Administered: Used by trained observers. Each observational form was used once during each of six instructional units.

How Pretested: Prior research and the results from the Thailand replication of the IEA Classroom Environment Study governed the inclusion of constructs.

Description: Items in the classroom organization and management form contain five-point scales, each point of which is associated with a specific description. For example Item 2 "How well did the teacher utilize the space of the classroom had the following associated scale: 1 = Poorly; heavy concentrations in particular areas; 2 = Fairly; a half part of room used well; 3 = Good; most parts of room used but lacking orderliness; 4 = Better; most parts of room used well and looking orderly; 5 = Excellent; all parts of room used well and with creative arrangement.

D. CLASSROOM ENVIRONMENT STUDY (THAILAND), contd.

Commentary: Training of observers was in two parts, an initial four-day workshop and five months later, a 3-day refresher course.

The study for which this instrument was used followed and built on the IEA Classroom Environment Study conducted in Thailand beginning in June 1981 and ending in March 1982.

Bibliography: Nitsaisook, M. 1987. Report of the Primary School In-Service Teacher Training in Thailand: An Experiment (Classroom Environment Study: Phase II). Bangkok: Ministry of Education.

Nitsaisook, M. and L. Anderson. (In press). "An Experimental Investigation of the Effectiveness of In-Service Teacher Education in Thailand." Teaching and Teaching Education.

E. IEA CLASSROOM ENVIRONMENT STUDY

1. Student Questionnaire

Object of Instrument: To elicit students' attitudes to mathematics and English and to the classroom environment.

Type: Questionnaire.

Investigator/Developer: Ontario Institute for Studies in Education.

Subjects: Grade 8 students.

How Administered: Self-administered.

How Pretested: No details.

Description: 1) 17 statements about the characteristics of the classroom and the teacher-student interaction that the student is to rate on a 5-point "almost never - almost always" scale; 2) student's attitude towards mathematics; 3) student's attitude towards English; and 4) intensity of activity in the classroom.

Commentary: Responses are recorded on a computer readable answer sheet.

2. Principal Questionnaire (Ontario Grade 8 English)

Object of Instrument: To gather basic information about schools in the study and the communities they serve.

Type: Questionnaire.

E. IEA CLASSROOM ENVIRONMENT STUDY, contd.

Investigator/Developer: Ontario Institute for Studies in Education.

Subjects: Principals.

How Administered: Self-administered.

Description: A two-page questionnaire on the size and organization of the school, and the social class of the students.

3. Teacher Questionnaire (Ontario Grade 8 English)

Object of Instrument: To gather information on teachers' qualifications, class schedule, their target class, ability to make classroom decisions, teaching materials, evaluation practices, and teaching methods.

Type: Questionnaire.

Investigator/Developer: Ontario Institute for Studies in Education.

Subjects: Grade 8 teachers of English.

How Administered: Self-administered.

How Pretested: No details.

Description: Questionnaire is a mixture of rating scales and open-ended questions in six sections, the longest of which is on teaching methods and practices.

F. CLASSROOM OBSERVATION GUIDES

1. Students Off-Task Seating Chart

Object of Instrument: To measure time students are off-task during a class period.

Type: Chart.

Investigator/Developer: J. Stallings, G. Sparks, M. Needels.

Place and Date Used: U.S.

Subjects: Students.

How Administered: An observer, another teacher or teacher's aide, makes visual scans of the classroom frequently.

How Pretested: No details.

Description: A chart shows the layout of the classroom and the position of each child. After each scan, the observer enters codes for the off-task activity being engaged in by each child, the activity he or she is supposed to be involved in and the time period in which the observation was made. A more general observation of the teacher is also conducted to indicate her activity during different time periods.

Commentary: The observer would need to see all the children. If the number of the students is large or the room very crowded, the observation will be incomplete. The developers have included suggestions for analysis of data.

F. CLASSROOM OBSERVATION GUIDES, contd.

Bibliography: Stallings, J., G. Sparks and M. Needels. nd. "Observation for Improvement of Classroom Learning." Mimeo. University of Houston.

2. Stallings Observation System

Object of Instrument: To gather data for an analysis of teacher-student interactions.

Type: Chart.

Investigator/Developer: Stallings Teaching and Learning Institute.

Place and Date Used: U.S.

Subjects: Students.

How Administered: Observer makes a note of every teacher-student interaction.

How Pretested: No details.

Description: Armed with a chart of the classroom and desks with each child's name, the observer records the appropriate code in the box labelled with the student's name each time the teacher speaks to him. An additional code indicates whether the interaction was student-initiated.

Bibliography: Stallings, J., G. Sparks and M. Needels. "Observation for Improvements of Classroom Learning." Mimeo. University of Houston, Texas.

F. CLASSROOM OBSERVATION GUIDES, contd.

3. Narrative Record

Object of Instrument: To get a detailed picture of the behavior of a single child.

Type: Narrative.

Place and Date Used: U.S.

Subjects: Students.

How Administered: An observer records every activity engaged in by the child.

How Pretested: Not applicable.

Description: The continuous record will often yield 30 typewritten pages that then require additional coding and summary.

Commentary: Not effective on more than one child at a time and requires a lot of time.

Bibliography: Stallings, J., G. Sparks and M. Needels. "Observation for Improvements of Classroom Learning." Mimeo. University of Houston, Texas.

5 Community and Societal Characteristics

With the information collected through the instruments in this section, the researcher can link individual and school data to community and social characteristics to obtain a richer and fuller model of the way in which school processes work and the factors that jointly affect the schools, teachers, pupils and their families.

- A. 1978 and 1983 Bicol Multipurpose Survey
- B. International Survey of Marriage and Fertility in the Life Cycle
- C. The Malaysian Family Life Survey
- D. Ghana Living Standards Survey
- E. Survey on Work Patterns

A. 1978 AND 1983 BICOL MULTIPURPOSE SURVEY

Object of Instrument: To collect data and assess the impact of the Bicol River Basin Development Program and the component Integrated Area Development projects on the urban and rural population in the provinces of Albay, Camarines Sur and Sorsogon in the Philippines.

Type: Household survey, large-scale panel design.

Investigator/Developer: Research Division of the Bicol River Basin Development Program and USAID Office of Regional and Agricultural Development. A number of additional researchers from the University of the Philippines, Los Banos and Diliman, were also involved. The project was coordinated by Barry M. Popkin.

Place and Date Used: Bicol River Basin, Philippines, 1978 and 1983.

Subjects: Representative sample of households.

How Administered: Interviewer.

How Pretested: The 1983 instrument was modified from the 1978 instrument.

A. 1978 AND 1983 BICOL MULTIPURPOSE SURVEY, contd.

Description: The survey consisted of three sections: 1) socioeconomic survey, 2) individual nutritional and health status profiles, and 3) barangay survey (an inventory of physical infrastructure and social services provided in each barangay). The questionnaire contains 31 modules with subjects ranging from migration and pregnancy history, to corn production and fish pond culture. A module on educational expenditures asks for the enrollment status of each child. The household head is asked for expenditures on tuition, books, and transportation for those children living at home and board and lodging costs for those living elsewhere. The module closes by asking about course-taking by other family members and how the household head feels about the education the children have received or will receive.

Commentary: The 1983 survey was a revised but compatible version of the survey used in the same area in 1978; household samples can be matched.

Bibliography: King, E. and L. Lillard. 1983. Determinants of Schooling Attainment and Enrollment Rates in the Philippines. The Rand Corporation. N-1962-AID.

_____. 1987. "Education Policy and Schooling Attainment in Malaysia and the Philippines." Economics of Education Review 6:167-81.

B. INTERNATIONAL SURVEY OF MARRIAGE AND FERTILITY IN THE LIFE CYCLE

Object of Study: To gather information on marriage and fertility and attitudes towards same.

Type: Household survey.

Investigator/Developer: Coordinated by East-West Center, Honolulu, Hawaii.

Place and Date Used: Indonesia, Philippines, Pakistan, Thailand.

Subjects: Husbands and wives in households that had a married woman under age 45.

How Administered: Interviewer.

How Pretested: No details.

Description: Opens with a household roster. The interview then records all marriages/unions of the respondent's parents and the number of children produced. Asks for demographic data on all full and half siblings, parents' occupational and educational histories, the respondent's education and marriage history, work, fertility and marriage history, characteristics of present spouse. Asks about courting, her natal household's economic position and composition, and her feelings about an appropriate age for marriage. Subsequent questions deal with attitudes

B. INTERNATIONAL SURVEY OF MARRIAGE AND FERTILITY IN THE LIFE CYCLE, contd.

to divorce, remarriage and sexual behavior. There are also sections on desired number of children, and aspirations for children. The final section deals with the respondent's views on decision-making power in the household and whether men have more control.

Commentary: An initial interview is conducted for all selected households but only those with ever-married women under age 45 are administered the whole questionnaire. With this method, some data is collected on all sampled households and instructive comparisons can be made between those who are in the final sample and those who are not.

Bibliography: King, E., J. Peterson, M. Adioetomo, L. Domingo and S. H. Syed. 1986. Change in the Status of Women Across Generations in Asia. Santa Monica, CA: The Rand Corporation.

C. THE MALAYSIAN FAMILY LIFE SURVEY

Object of Instrument: To gather data on factors affecting birth spacing, family size and fertility outcomes.

Type: Household survey.

Investigator/Developer: Rand Corporation for A.I.D., Department of Statistics, Government of Malaysia, Survey Research

Place and Date Used: Peninsular Malaysia, 1976-7.

Subjects: 1,262 private households containing at least one ever-married woman below 50 from 52 areas of peninsular Malaysia. Principal subjects were the women and their present husbands.

How Administered: Female interviewer.

How Pretested: Several rounds, first in the offices of the Department of Statistics in the Kuala Lumpur, then in urban and rural areas in and around Kuala Lumpur. Tests in fishing villages and in a west coast padi village followed. Further modifications were adopted by Survey Research Malaysia during the final training and field-test phase.

Description: Eleven questionnaires were administered to different respondents in three different rounds. The

C. THE MALAYSIAN FAMILY LIFE SURVEY, contd.

questionnaires included the household roster, the female retrospective, the male retrospective, migration and urban assimilation, male and female time budgets, female and male attitudes and expectations, income and wealth, and networks of economic support. Throughout the survey, selected knowledgeable individuals in the community such as chiefs and midwives, were asked to respond to questionnaires on the community.

Commentary: Respondents were given small gifts at the second and third rounds and, whenever possible, the same interviewer was used for all three rounds.

Bibliography: Butz, W.P. and J. DaVanzo. 1975. Economic and Demographic Family Behavior in Malaysia: A Conceptual Framework for Analysis. Santa Monica: Rand Corporation.

_____. 1976. The Malaysian Family Life Survey: Summary Report. Santa Monica: Rand Corporation.

Fain, T. and T.P. Kheong. 1982. The Malaysian Family Life Survey: Appendix E, Master Codebook. Santa Monica: Rand Corporation.

King, E. and L.A. Lillard. 1987. "Education Policy and Schooling Attainment in Malaysia and the Philippines." Economics of Education Review 6:167-81.

D. GHANA LIVING STANDARDS SURVEY

Object of Instrument: To produce data over a five-year period starting in September 1987 to monitor the impact of the economic recovery program including the Program of Actions to Mitigate the Social Costs of Adjustment.

Type: National longitudinal survey with a rotating panel design.

Investigator/Developer: The World Bank, Washington, D.C. and the Government of Ghana.

Place and Date Used: Ghana, starting in September 1987.

Subjects: A nationally representative sample of 3,200 Ghanaian households.

How Administered: Interviewer administered. Interviewers operate in groups of two and travel from area to area.

How Pretested: No details.

Description: Data are collected at three levels--individual, household and community. The household head supplies information on demographic characteristics, education, health, employment, time use, and migration for each individual in the household. The

D. GHANA LIVING STANDARDS SURVEY, contd.

community section gathers information on public services provision, communication, transportation, food and commodity prices, demographic, religious, economic and social characteristics.

Commentary: Similar surveys have been conducted in Peru and Cote d'Ivoire, and will be conducted in other African countries.

Bibliography: Republic of Ghana Statistical Service and the World Bank Social Dimensions of Adjustment Project Unit. 1988. Ghana Living Standards Survey: Preliminary Results, 1988.

Scott, C. and B. Amenuvegbe. 1989. Sample Designs for the Living Standards Surveys in Ghana and Mauritania. LSMS Working Paper No. 49, The World Bank: Washington, D.C.

Newman, J. L. 1987. Labor Market Activity in Cote d'Ivoire and Peru. LSMS Working Paper No. 36, World Bank: Washington, D.C.

Gertler, P. and Paul Glewwe. 1989. The Willingness to Pay for Education in Developing Countries: Evidence from Rural Peru. LSMS Working Paper No. 54, The World Bank: Washington, D.C.

King, E. and R. Bellew. 1989. School Policies and Education Levels in Peru. PPR Working Paper. The World Bank: Washington, D.C.

E. SURVEY ON WORK PATTERNS

Object of Instrument: To gather data on gender stratification patterns in family, education and employment.

Type: Questionnaire.

Investigator/Developer: Professor Mary C. Brinton, Department of Sociology, The University of Chicago, Chicago, Illinois.

Place and Date Used: Three Japanese cities, 1984.

Subjects: Four independent samples of 1200 men and women.

How Administered: Mailed survey.

How Pretested: On a small sample of individuals in Tokyo.

Description: Collected data on employment, family background, educational background, marital and birth information, educational aspirations for children and plans for relying on children in old age.

Commentary: Available only in Japanese.

Bibliography: Brinton, M. 1989. "Gender Stratification in Contemporary Urban Japan." American Sociological Review (August).

_____. 1989. "Intrafamilial Markets for Education: An Empirical Example." In Social Institutions: Their Emergence, Maintenance and Effects. Edited by Michael Hechter, Karl Dieter Opp, Reinhard Wippler. New York: Aldine.

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