Child Care Policy Research Guidebook

Parental Use of Child Care

A Guide for Constructing Parent Surveys

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This Guidebook is accessible through Child Care & Early Education *Research Connections* at www.researchconnections.org/location/ccrca7992

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About the Oregon Child Care Research Partnership

The Oregon Child Care Research Partnership has more than 10 years' experience working together on policy-focused child care research. Partners include researchers from Portland State University and Oregon State University and representatives from the Oregon Child Care Division, the Oregon Department of Human Services, the Oregon Child Care Resource and Referral Network, the Oregon Progress Board, the Head Start Child Care Collaboration Project of the Oregon Department of Education, and Parent Voices, an organization of parents who work on child care policy in Oregon.

About Child Care & Early Education Research Connections

Research Connections is a free and comprehensive resource for researchers and policymakers that promotes high-quality research in child care and early education and the use of that research in policymaking. *Research Connections* and its Web site (www.researchconnections.org) are operated by a partnership among the National Center for Children in Poverty at the Mailman School of Public Health, Columbia University; the Inter-university Consortium for Political and Social Research at the Institute for Social Research, University of Michigan; and the Child Care Bureau, Administration for Children and Families of the U.S. Department of Health and Human Services.

About the Child Care Policy Research Consortium

The Oregon Child Care Research Partnership and its Residency Roundtables are part of the Child Care Policy Research Consortium, an initiative of the Child Care Bureau in the Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services. In its unique approach to policy-relevant research, the Consortium brings together researchers, state child care administrative staff, and child care practitioners to identify key research questions, carry out research projects, and disseminate findings. Residency Roundtables have been one strategy the Consortium has used to increase understanding of policy-relevant child care topics.

About the Residency Roundtables

One activity of the Oregon Partnership has been facilitating the Residency Roundtable, a strategy to support learning and research development regarding child care. The roundtables are designed to promote understanding on critical policy issues. During roundtables, researchers, state staff, and child care practitioners from across the nation come together with Oregon partners for 3 to 4 days of learning and problem solving. Invitees are selected because of their specific knowledge and expertise on the issue being considered. Between 1997 and 2002, 11 roundtables were held on topics with direct relevance to state policy-makers. Roundtable results appear in various publications that range from policy briefs to guidebooks on state-level child care research and on accountability for results.

About the Residency Roundtable on Child Care Surveys

In September 2002, eight participants representing researchers, state child care administrative staff, and child care resource and referral agencies worked together in Skamokawa, Washington, to pull together knowledge and experience related to surveying parents about child care. Participants included:

- Arthur C. Emlen, Regional Research Institute for Human Services, Portland State University, Portland, Oregon

- Richard N. Brandon, Human Services Policy Center, University of Washington, Seattle, Washington
- Richard Chase, Wilder Research Center, St. Paul, Minnesota
- Cindy L. Creps, Abt Associates, Cambridge, Massachusetts
- Patricia L. Divine, Child Care Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services
- Mary Nemmers, Oregon Child Care Resource and Referral Network, Salem, Oregon
- Deb Swenson-Klatt, Minnesota Department of Children, Families & Leanring, Roseville, Minnesota
- Roberta Weber, Oregon Child Care Research Partnership, Oregon State University, Corvallis, Oregon

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List of Tables

This paper builds upon a number of child care surveys. We use the following abbreviations of the titles of the instruments.

Abbreviation	Full name and citation of survey
Abt Com	Abt Associates. (2000). *National Study of Child Care for Low-Income Families, Community Survey*. Cambridge, MA: Abt Associates.
Abt Par	Abt Associates. (2001). *National Study of Child Care for Low-Income Families: Parent Interview (In-Person with Users of Family Child Care).* Cambridge, MA: Abt Associates.
HSPC	Brandon, Richard N., Erin J. Maher, and Jutta M. Joesch. (2001). *Household Child Care Survey for IL*. Seattle, WA: University of Washington, Human Services Policy Center.
NCCS	Hofferth, Sandra, April Brayfield,Sharon Deich, Pamela Holcomb, and Frederic Glantz. (1991). *National Child Care Survey 1990: Parent Study*. Los Altos, CA: Sociometrics Corporation.
NHES	National Center for Education Statistics. (2001). *National Household Education Survey 2001. Early Childhood Program Participation [Questionnaire].* Washington, D.C.: National Center for Education Statistics.
OPS	Oregon Progress Board. (2000). *2000 Oregon Population Survey*. Salem, OR: Oregon Progress Board.
PCCS	Kisker, Ellen Eliason, and Valerie Piper. (1992). *Profile of Child Care Settings: Center-Based Programs*. Los Altos, CA: Sociometrics Corporation. Kisker, Ellen, and Valerie Piper. (1992). *Profile of Child Care Settings: Home-Based Programs*. Los Altos, CA: Sociometrics Corporation.
RRI Emp	Emlen, Arthur. (1994). *Employee Survey*. Portland, OR: Portland State University, Regional Research Institute for Human Services.
RRI Qual	Emlen, Arthur, Paul E. Koren, and Kathryn Schultze. (2000). *A Packet of Scales for Measuring Quality of Child Care from a Parent's Point of View: With summary of method and findings*. Portland, OR: Portland State University, Regional Research Institute for Human Services.
SIPP	United States. Bureau of the Census. (1996). *Survey of Income and Program Participation*: *Child Care Topical Module Questionnaire*. Washington, D.C.: U.S. Bureau of the Census.
Wilder	Chase, Richard A., and Ellen Shelton. (2001). *1999 Statewide Household Child Care Survey*. St. Paul, MN: Wilder Research Center.

Readers can find detailed information on each instrument within the Child Care & Early Education *Research Connections* collection. In most cases, readers can access the instrument itself. When reading an electronic version of this Guide, one need only click on the instrument abbreviation above or the url link in the references to get to the citation, and—once at the citation—click the Full Text link to see the instrument. Readers of a hard copy of the Guide must first go to *Research Connections* (www.researchconnections.org) to locate the instrument's citation. At *Research Connections*, readers can link directly to most of the instruments or, in a few cases, learn how to get a copy of the instrument.

Researchers have produced papers based on findings from use of each of the surveys. References to these papers are included at the end of this Guide. Many of these papers are also in the *Research Connections* collection. If reading an electronic version of this Guide, clicking on the link in the references will give readers access to that paper's detailed citation and, in most cases, to the paper itself.

Parental Use of Child Care:
A Guide for Constructing Parent Surveys

Introduction

Focus. This document is a guide for constructing surveys that are designed to provide information about the factors driving parental use of supplemental child care arrangements. That is our focus. And yet, for an adequate understanding, the scope of our inquiry must be sufficiently comprehensive to understand how parents deal with work, family, and neighborhood, as well as with decisions about child care. This is true for those who have an interest in policy and programs in a community of any size or definition. We focus on the key, top-priority variables one needs to have at one's disposal, all in one set of data, so that the critical analyses can be carried out.

Process and product. The Guide is a product of a group of eight researchers and state child care administrators, all of whom had either conducted parent surveys as principal investigators or had a major administrative role and policy interest in such surveys. The work was sponsored by the Oregon Child Care Research Partnership, in collaboration with the Child Care Policy Research Consortium of the U.S. Child Care Bureau. The group met for 4 days following Labor Day 2002 in a remote setting on the lower Columbia River to pool their experience and reach agreement on the essential information, including the variables, wording of questions, survey purposes on which choice of wording depends, and technical issues. The Guide will be made accessible through Child Care & Early Education *Research Connections*.

Subject matter. We identified variables that describe the characteristics of parents; of their family and household composition, and neighborhoods; of their work shifts and schedules, as well as personal and household income; of their children, including not just ages but possible disabilities; of child care arrangements, including hours and types of care; of the providers of care; and finally of parent decision-making, including reported values and preferences, needed flexibility, options and choices, and expressed satisfaction and assessments of quality of care.

Format. The body of this Guide is divided into six sets of *characteristics*, which are the major general domains of what the variables are about. The six sets of characteristics are: *household, parent, work, child, child care arrangement,* and *parent choice*. Within each of these, we identify *constructs*, such as location and neighborhood, household composition, household income, and other characteristics at the household level. For each construct we identify possible *variables*, such as, for location and neighborhood: state, county, city, zip-code area, school district, and U.S. Census tract. Nested within the six domains of characteristics, the constructs, variables, and sources of sample questions are laid out in table form, followed by text. In the text we discuss the purpose and analytical benefits of using a variable as well as issues that arise in the choice of wording and response categories for that variable, with an occasional warning.

Research questions cut across domains. It almost goes without saying that in any study you might design, you would be drawing on variables from across many of these general domains. For example, suppose you were most interested in learning about children with an emotional or behavioral problem or other disability. Along with age of child, disability falls under child characteristics. But the level of difficulty it may or may not pose for parents, household, and caregivers, current or potential, will lead you to ask questions from those other domains. How much supplemental child care is found for these children, and which types of care are including them? In these households,

who is employed, and how much is spent on child care? Do the parents of these children find the work, family, and caregiver flexibility they need in order to manage?

Guide is not a blueprint. In this Guide we do not design a study or even a research instrument. It's a market basket. It contains more than you will want to buy and less. Your study surely will contain other questions and variables we do not discuss. You're just window-shopping—getting ideas for variables you could use. Although the Guide is not exhaustive, it contains more than can be stuffed into any one data collection project. Don't be greedy! When you start down the road, thinking of all the things you want to know, don't forget to ask who will pay for it and who will be willing to answer all the questions. To shape a coherent study you have to be selective.

Scope and focus of your study. We are simply putting before you a set of variables related to child care policy issues that are worth considering for the study you have in mind. Some of these variables might be considered core variables that, if included in many studies and based on questions asked in the same way, would be useful to have for comparison. Other variables are designed to provide depth on some aspect of behavior that needs detailed analytical study. The choice is yours. We hope we have helped you in the process of sharpening your focus and widening your lens just enough.

Applicability to different research methods. With adaptation, depending on your purpose and strategy, the variables are applicable to written questionnaires, face-to-face interviews, or telephone surveys. Each of these methods lends itself to a different way of drawing a sample, creating an opportunity and situation favorable for data collection, and strategy for presenting the questions. When purposes, methods, and sampling differ, so may the order in which questions are asked or the detail that can be delved into.

Who will bake the cake? We assume that your survey will be designed and carried out by a research partnership. The authors of this Guide are members of research partnerships who believe in the importance of combining the diverse skills, experience, and perspectives of technically qualified researchers who possess the necessary analytic skills, along with those of program administrators, service practitioners, parents, and child care professionals who understand the child care, family, program, and policy issues that should frame the questions.

Kinds of samples. To inform policy, you need information from many kinds of samples. We intend this survey Guide to be applicable to *special samples* such as:

- An employee survey of a single employer;
- Employees of a group of employers in a community;
- A survey of parents receiving public child care assistance;
- Surveys of parents receiving services from a child care resource and referral agency.

In addition, this Guide may be especially applicable to broadly *representative population surveys* of all families and children statewide or in a local community. Invaluable added perspective is gained from comparing special samples to the population at large or to families who do not receive services, from comparing those who may or may not be using supplemental child care at all, and from learning about all of the types of child care that parents are using.

Integration of data on supply and demand. When the data in population surveys come from the users of child care—the parents—the survey also yields data on the supply of care being used. Supply and effective demand are two sides of the same coin. Analytic power comes from comparison of population data with data from special samples such as providers of care, licensed or regulated facilities, recipients of child care assistance, or both the families and providers receiving child care resource and referral services. With information coupled from both the demand and supply sides of child care, you can piece together the

comprehensive picture needed to give direction to policy and program.

Reliability, validity, legitimacy, and usefulness. This Guide may improve, but not perfect, the quality of your surveys. The reliability of your measures depends on the clarity of the questions and also on whether the allowable answers seem plausible and acceptable to those who answer. Even the validity of the answers and interpretations of answers depends on trust in the questioner, trust in how the answers will be interpreted, and trust in the use that will be made of the answers. The same may be said for answers from providers of care or from professionals. Not all "self-report" data are equally objective or subjective. Some, like family composition, income, numbers and ages of children, and types of child care, are more factual, though not without hazards to understanding and reliability. Others, like the reported flexibility parents have in their situation at work, stated preferences, general satisfaction with care arrangements, or reported perceptions and assessments of specific aspects of care arrangements, have a larger perceptual and evaluative component, though they too can be made reliably and with some validity. These more subjective answers are useful for what they are, perceptions and assessments. After surgery they convince you they don't want you to be in pain because if you're fighting pain you won't be healing. They ask, "On a scale from 1 to 10, how badly does it hurt?" The answers may be somewhat unreliable, but they don't try to second guess you. It is the perception that counts. The point is: How else will they know? There is no other practical source of data. The question is useful, and, in context, the answers are reliable and valid enough.

Characteristics

Household Characteristics

Introduction to Household Characteristics

The decision-making process involved in a parent's choice of child care is complicated, and we deal with that last. For the main variables driving use of child care, we start with characteristics of the family, or, not to define its boundaries too narrowly, of the household—its composition, number of parents, and stage of family development. Add who works, how much, and on which shifts. Ask too about other adults in the household, related or significant, whose presence makes them a resource for child care or help in emergencies; then add the proximity of grandmother or other extended-family relationships available in the neighborhood. You now have the main predictors for use of supplemental non-parental child care, on either a paid or unpaid basis.

The relationships between constructs shown in our tables and the variables used to measure them are not all at the same level of complexity or abstraction. Sometimes we are talking about a straight-forward construct like *household income* that can be measured in multiple ways: by total household income as a continuous variable, by ordered categories of income that can be percentage, by using the mid-points of income categories, or by transforming the categories into an estimated continuous variable. Sometimes you need a more complex construct like *stage of family development*, which is based on ages of the children but which requires construction of a "derived variable" as an intermediate step, either by categorizing families as all pre-school, mixed ages, or all school-age; or by calculating age ratios or percentages for samples being compared. Stage of family development is useful when you want to capture the current child-rearing environment of the family in addition to characteristics of a particular child of a specified age.

In general, it is better to collect age data as a continuous variable. Collecting date of birth provides the most flexibility for later analysis. With a continuous variable, you are prepared with the basic building blocks for any age cut, analysis, and possible grouping of ages. Age cut-off and age groupings generate dispute, because purposes vary. Are we talking about age in relation to family responsibilities, developmental needs, child care arrangements, or eligibility for a program? This topic will come up again and again.

For these reasons and for other analytical purposes, a research strategy in data collection that is preferred by many investigators is to be sure that all the building blocks exist for multivariate analysis. Detailed rosters of respondent characteristics are important, as are basic variables and detailed response categories. This allows analysts to assess the independent and combined effects of predictors, overall and within important sub-samples.

Nevertheless, higher-level constructs and derived variables are useful in creating compelling data for policy and for easy public understanding. Two variables, for example, marital status of parents and employment status of parents, are more predictive when combined; together they capture differences in types of families associated with demand for supplemental child care. To see a progression in the use of paid child care, consider the following four types of households: Couple, one parent employed; Couple, both parents employed; Employed single parent in shared housing; Employed single parent living solo. That progression also reflects diminished flexibility

Table 1. Constructs, Variables, and Sources of Sample Questions Related to Household Characteristics *(table continues on pages 10 and 11)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Location and neighborhood	State, county, city, zip, U.S. Census tract, school district	x	x	x	x	x	x	x	x	x	x	x
Household composition	Relationship to respondent, name, age, gender, health status, race/ethnicity, immigration status (where born, how long in state or in U.S.)	x	x	x		x	x					x
Dependent children (if not collecting data on each household member)	Relationship to respondent, name, age, gender, health status, race/ethnicity, immigration status (where born, how long in state or in U.S.)	x	x	x	x	x	x		x	x		x
Home language	Specify which language			x		x						x
Household income	Annual total income, Monthly total income	x	x	x	x	x	x	x	x	x	x	x
Income support	Child Support, WIC, Food Stamps, Medicaid, TANF, Earned Income Tax Credit, housing support		x	x		x						x
Household expenses	Housing, utilities, transportation, food, clothing		x				x					
Household child care expenses	Amount spent per time period (i.e., week, month) for all arrangements for all children	x	x	x	x	x	x		x		x	x

*Note: See page 4 for full titles and see references for links to the instruments.

within the household to manage home, work, and child care. Coupled with inflexibility of job and workplace, the pressure is on parents to find flexibility from elsewhere, such as from an accommodating child care provider.

Integration of both kinds of research strategy, collection of data on basic variables and creation of higher-level constructs at time of analysis, will be fruitful in creating and testing the predictive benefits of different combinations of variables. This should lead to stronger, more useful constructs that add to public understanding of the issues related to child care policy.

Although it may stretch the concept of household a bit, we include a neighborhood dimension. Households live in the context of a neighborhood, which may be rich or poor in its resources.

Discussion of Household Characteristics Constructs and Variables

Location and neighborhood. Since households live in the context of a neighborhood, location may create a distinguishing variable associated with the safety of neighborhoods or with the economic viability of child care centers. Location can be identified by address, county, ZIP code, or school district, although use of addresses raises privacy issues. ZIP code boundaries can cross county lines, so it is valuable to ask both ZIP code and county. Families know their ZIP code but are unlikely to know the Census tract in which they reside. Researchers can identify the Census tract if they have the household address. If reverse directories are available, they may be able to work from phone number to address to Census tract.

Table 1 ***(continued from page 9, continues on page 11)***

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Financial assistance with child care	This can be a yes/no question or researcher can ask more detailed question about sources of child care assistance. In either case, use of child care and earned income tax credits is typically asked apart from use of other types of assistance	x	x	x	x	x			x		x	x
Who pays	Parent, absent other parent, government, tax credits—do they claim them? Employer pre-tax benefit, employer, provider—reduction in child care price, discount, sliding fee scale, other—e.g., grandmother, godmother	x	x	x	x	x			x	x	x	x
Non-cash payment	Yes/no question				x							
Flexibility—sources of help in family or household	Someone can share home and care responsibilities or help in raising a child? Who takes responsibility for child care arrangements?		x	x						x		x

*Note: See page 4 for full titles and see references for links to the instruments.

Location, as identified by ZIP code or the smaller Census tract, may create a distinguishing variable associated with the safety of neighborhoods or with the economic viability of child care centers. Other units of geographic location, such as county and state, are useful because they are jurisdictions of collective responsibility, governmental and community. Geographical location will enable you to link parent data to social indicators from other data sets. Mapping capability is now increasingly available, especially if the address is known, and this can link child care demand and supply data in a community context as a tool for planning.

Household composition. Use of child care is related to makeup of household and characteristics of adults in the household, such as employment and whether or not they share in the care of the child. Researchers commonly collect data in a roster of household members. Key information to collect in the roster includes: relationship to respondent, age, and gender. Depending on the purpose of the survey, you may collect little to no information other than the number of adults and children in the household. Some researchers include questions about other parent or adults and one child but not all household members. Selection of a focal child is discussed in the child care arrangement section of this paper.

If interest is in understanding the child's environment, then knowing a lot about household members is valuable. It may be highly desirable to get detailed information on each member of the household. Depending on the purpose of the study, other variables such as race/ethnicity, health, or immigration status may be collected for each household member or just for parents and selected child. In some surveys, race/ethnicity and other characteristics are collected for the respondent only. Respondent burden is a serious issue to consider when deciding how much information to collect.

Dependent children. If only limited information on household composition is to be collected, it will be important to get information on the household's children (or focal child)

Table 1 *(continued from page 10)*

Construct	Possible Variables	Sources of Survey Questions*										
		Abt Com	Abt Par	HSPC	NCCS	NHES	OPS	PCCS	RRI Emp	RRI Qual	SIPP	Wilder
Social Support	Proximity to a relative (number of minutes or miles from home) Availability of relative to help (Is there a relative to help on a regular basis?) Availability of friend to help (Do you have a friend to help on a regular basis?)			x	x				x	x		x
Stage of family development	A derived variable classifying families as: • Only children under age 6 • Only school-age children • Family of mixed ages. Meaning enhanced by analyzing samples or sub samples to compare percentage of families of each type						x					

*Note: See page 4 for full titles and see references for links to the instruments.

through ages 12, 14, or 18 years. Age cut-off depends on purpose of the survey. Child Care and Development funds may be spent on children through age 12, older if a child has special needs.

In the child-care module of the Survey of Income and Program Participation, the U.S. Census Bureau collects data on children through age 14. Availability of older children as caregivers may be relevant and then data may be collected through age 18. It may be sufficient to simply get the number of children in the household or the number of children in non-parental care rather than detailed information on each child. If you are selecting a child randomly or based on place in family (i.e., youngest), then detailed data on the child and the child care arrangements of the child may be collected only for that child. Instead of name, the researcher may use an initial or may just rely on the relationship to the parent and age to identify the specific child.

Key data to be collected on all children in the household include relationship to respondent and age. Age may be collected as of a certain date or as birth date. Birth date provides greater analysis options than age in months or years and age in either months or years can be created from a birth date. You may want age in terms of years and months for children under 5 or 6 and simply years for older children.

Home language. If asked, home language could be a household variable or it could be included as a parent or child characteristic. Without special supplements targeted to specific language groups, general population surveys are likely to get a small number of any given non-English speaking households. One challenge of surveying non-English speaking households is that the survey unit will have to have staff capable of interviewing in multiple languages.

Household income. Total household pre-tax income for the last calendar year is the most basic variable. You may collect more detailed income information on the respondent and other adults as well as total household income but total household income is essential for analysis. You may get a higher rate of response by asking for the income category in which their household income falls rather than actual income. Roundtable participants suggest asking first for actual dollar amount and only going to categories if refused, because a continuous

variable is better than a categorical one in the analysis stage. There is an econometric program which enables the researcher to estimate the dollar amount when data are collected in income categories (Bhat, 1994).

Income support. If survey findings are focused on issues of low-income families, it may be beneficial to collect data on the types or amounts of financial assistance the family receives.

Household expenses. As with income supports, some researchers may want to identify household expenses in some studies.

Household child care expense. Child care expense data can be collected for an arrangement, child, or household. Household is the most critical since it is most meaningfully compared to income, a variable typically collected as a household variable. If collecting expenditure data on the arrangement or child level, one has to collect the data for every child in order to aggregate it to the household level. In a family with more than two children, this could be burdensome. An advantage of collecting data per arrangement is that you can analyze the relationship of type and cost of care. If collecting data at the arrangement or child level, it may be valuable to also collect it at the household level, especially if data are not being collected on all children.

The time period is important. The response will be most accurate if it covers the most recent week or month. Household income is typically collected as an annual amount; however, you may want to collect both income and child care expenses for the same time period. Alternatively, you can create a variable of annual child care expense from a monthly or weekly child care expenditure variable, although some amount of error may be introduced transforming a weekly or monthly variable into an annual one.

It will be important to know whether the amount reported is that which is charged by the provider or the amount paid by the parent. Researchers frequently prompt the parent to report only the amount they pay from their income, not to include cost for which the family was reimbursed.

Financial assistance with child care. Who pays? If one looks only at household income and amount spent on child care, the reader gets an incomplete understanding of child care expenditures. Society has created numerous ways to decrease the cost burden for parents in order to increase affordability of child care. The challenge is in measuring the extent of that help.

Determining whether a household gets help paying for child care is more challenging than it would first appear because 1) there are so many different ways parents *get* financial help and 2) there are so many different ways parents *think of* that help. For instance, does a parent perceive assistance through a pre-tax dependent care plan as assistance from an employer, from the government, or not as assistance at all since it is their money? When receiving a child care voucher or certificate, parents may not understand the source of the help they receive. For instance, if the parent receives the voucher through a child care resource and referral agency, they may not be aware that government is the source of the financial assistance. The challenge is to collect valid and reliable information, given the many ways parents think about financial assistance.

If the researcher is willing to live with some level of unreliability, two key variables increase understanding of child care financial assistance. The first is whether or not a household receives help paying for child care; the second is the source of that help. The second may be the most important because a list of financial assistance sources may trigger parent memory of assistance. It will probably be best to separate use of child care or earned income tax credits from use of other types of financial assistance, since these amounts are typically received only when completing tax returns, but are the most commonly received type of assistance.

Non-cash payments. Parents sometimes barter services as a means of paying for child care. If this question is of value to the research purpose, it can be asked as a yes/no question.

Flexibility from family/household and social support. A parent's perception of flexibility from family/household, work, or from a caregiver has been associated with both the type of care chosen and parent perception of the quality of arrangement (Emlen & Koren, 2000). The sheer availability of another adult in the house makes a difference in the use of paid care for a single parent. A respondent's perceived flexibility from household members is a household characteristic.

The two constructs, flexibility from family/household and social support, are highly related. Social support includes availability of people within and outside the household to help a parent carry out her or his home and child care responsibilities. It is broader than flexibility from within the household. The researcher will need to determine whether to treat these as one or two constructs.

Social support: proximity, availability, and perceived helpfulness. Help provided by persons living outside the household is referred to here as "social support." This help may be provided by relatives, friends, or unrelated neighbors. At issue, of course, is the combination of proximity, availability, and willingness to help out. Proximity influences whether or not care by a relative is an option for the family. The danger with a proximity variable is that some romanticize the helpfulness of relatives when, in fact, not all relatives are available or appropriate caregivers. A relative may be close but not a child care option. You could ask about availability for care as a follow-up if the relative is within a set number of minutes from the family. Friends, like relatives, are common providers of child care or of back-up in case of emergency. This question measures a household's access to social support as permanent child care, back-up, or assistance.

In terms of measures of proximity, Roundtable participants prefer minutes for two reasons: parents are apt to think in terms of minutes it takes to travel, and minutes are standard, whereas traveling a mile in an urban area is far different than doing so in a rural setting.

Parent Characteristics

Introduction to Parent Characteristics

In our framework, most of what is important about parents for policy reasons is captured either as characteristics of family and household, or as characteristics of parent decision-making and choice. However, some parent variables, such as wage rate or salary of mothers or fathers, are likely to make a unique explanatory difference beyond overall household income. This is because mother's and father's earning power or career commitments can be key factors in decisions made within the family about child care and labor force participation. Similarly, characteristics of a parent's education, health, or mental health may make a difference. We treat parent values and preferences related to child care under the characteristics not of parents but of parent choice, for reasons that will become apparent.

Discussion of Parent Characteristics Constructs and Variables

Marital status. Marital status in itself may not be as important as household relationships captured in a roster or in the household composition section. The distinction between a spouse or partner may not have much effect on child care. However, having another parent outside the household may be important to capture, since this may be a source of care or of financing for care. Although a "spouse or partner" variable does a better job of capturing the child-caring capacity of the household, adding "marital status" as a variable in a survey may turn out to be fruitful in exploring other possible effects. Marital status represents a level of commitment between parents that may be associated with continuity of family relationships, patterns of child rearing, and patterns of parental employment.

Race/ethnicity. Race/ethnicity may be treated as a household variable or collected for parents and/or children. In either case, Roundtable participants recommend that the U.S. Census Bureau categories be used. If race/ethnicity is treated at the household level, there will be a level of unreliability as mixed-race families will be categorized as the race/ethnicity of the respondent.

In order to reach some ethnic populations, the researcher needs to deal with other languages and may have to over-sample some populations. Interpretation of race and ethnicity is fraught with uncertainty. Essentially a cultural variable, race/ethnicity may be confounded with other variables such as education or income. Racial categories may mask wide cultural differences. Caution is urged in attributing meaning to race/ethnicity, unless the sample allows adequate multivariate analysis.

*Education. T*he level of education may be collected when completing a household roster. It is more important to collect education level for parents than other members of the household and hence may best be considered a parent characteristic. Typically, the respondent is asked for the highest level of education achieved and may commonly be asked the same question for a spouse/partner.

Immigration status and duration. Like race/ethnicity, citizenship information may be collected only for parents and children in care. Although immigration status may be of interest, there are challenges in asking it directly. Most researchers who include this construct ask first where the person was born, and if not in the U.S., then how long the person has lived in the state or country.

Health status. The National Survey of American Families (Abi-Habib, Safir, Tripplett, and Cunningham, 2002) includes scales to measure both physical and mental health of parents. Health status affects both availability of a parent to care for a child and child well-being. Other instruments that address health have questions about general health status.

Table 2. Constructs, Variables, and Sources of Sample Questions Related to Parent Characteristics

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Marital status	Status: married, never married, divorced or annulled, separated, widowed Are you and your spouse living together or living as a couple? Do you have a spouse or partner who lives in your household?		x	x	x	x	x		x			x
Race/ethnicity	All that apply: Latino or Hispanic, Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander, White, some other race (specify)	x		x	x	x	x					x
Education	Highest level achieved by the mother unless mother is not in the household	x	x	x	x	x	x					x
Immigration status and duration	Where born? How long in state or U.S.			x	x	x	x					
Health status	How would you describe your health status?			x								
Disability	Do you have a lasting disability?						x					

*Note: See page 4 for full titles and see references for links to the instruments.

Work Characteristics

Introduction to Work Characteristics

Work, like income, is hard to classify under one set of characteristics. Under household variables we include whether two employed parents work split shifts in order to cover parental care within the family. Work characteristics can be measured with a direct question or can be built up from variables on each individual parent with a number of questions about jobs and the workplace. Gender, which was included as part of the household roster, is important here because work patterns, hours worked, and absenteeism rates of mothers and fathers can differ sharply depending on the amount of responsibility each one has for care of the children or daily arrangements. Some parents have difficult shifts; some even have rotating shifts that make hash of child care arrangements. Some jobs allow flexibility with regard to emergencies or a sick child, and some don't. The same is true of the work schedules and policies of some employers. The flexibility, or lack of it, that a parent has from an employer affects how much flexibility is needed from other sources.

If you are interviewing a household member other than the mother when collecting information on work characteristics, some questions may be problematic. Adults other than the mother may not be able to answer some questions or their answers may not be reliable.

Discussion of Work Characteristics

Employment status of respondent and spouse or partner. The employment status of a mother is a core construct because child care use is so closely associated with her work. Most researchers collect data on employment status of both parents. Both employment and partner status (spouse or partner within the household) are associated with child care use. These two constructs can be combined into a construct called family type whose values are: couple with one employed, couple with both employed, single parent living with adult(s), single parent living alone, and other. This derived variable teases out high levels of variance in child care usage. Adding number of hours employed, or full-time or part-time employment status, contributes further discrimination in the amount of family flexibility and the amount of non-parental child care required.

Employment stability. If you are modeling child care demand, the employment behavior of mothers is important and you may want to ask the beginning and ending dates of the mother's last employment. This information is important primarily to determine degree of employability for a mother who is not currently working.

Earnings. If you have already collected data on household income, you may not want to collect earnings data. Parents commonly consider earnings potential in making the decision of whether to use child care or to have one parent stay out of the paid labor force to care for the child. Researchers typically ask salary or total earnings from job(s). If you collect both salary and hours employed, you can compute a wage rate.

Benefits of respondent and spouse/partner. There is a wide range of variables within the benefits construct. Typically researchers ask parents about child care related benefits such as access to dependent care plans that allow them to use pre-tax dollars for child care costs, cafeteria plans, on-site child care, or sick-leave benefits that can be used for a sick child. Less frequently, researchers collect data on benefits of spouse/partner. Data on the general level of benefits is sometimes collected.

Work schedule of respondent. Use and type of child care is associated with the work or school schedules of the respondent and the spouse/

Table 3. Constructs, Variables, and Sources of Sample Questions Related to Parent Work Characteristics *(table continues on page 18)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Employment status of parent	During the past week (month) did parent work at a job for pay or income? Are you employed?	x	x	x	x	x	x			x		x
Employment status of spouse/partner	During the past week (month) was your partner/spouse employed? Is your partner/spouse employed?	x	x	x	x	x	x		x	x		
Employment stability	Dates of employment Work status: permanent, temporary, seasonal	x	x	x								
Earnings	Salary Total earnings from job(s) Can impute wage rate from salary if you also ask hours employed.	x	x	x	x		x					x
Benefits	Benefits such as medical, dental Benefits that help with child care: pre-tax dependent care plan, cafeteria plan, access to sick leave, on-site child care, child care allowance		x	s	x	x	x		x	x		

*Note: See page 4 for full titles and see references for links to the instruments.

partner. It is unlikely that you will be able to discern which is the driver—work/school schedule or type of care—since it appears that employment and child care decisions are typically made simultaneously. Caution is required during analysis in inferring causal relationships between the two.

Still, work/school schedules are important because they are so closely associated with use and type of care. It is possible to ask for actual hours worked per day per week. This provides detailed information, but the analysis is complicated. Researchers sometime ask parents to report in broad categories.

School/training/job search schedule of respondent. The definition of "work" could be broadened to include activities related to education/training/job search instead of having a separate construct. It is common for researchers to treat educational activity as a separate construct since there are important differences between work and school responsibilities and constraints.

Work schedule of spouse/partner. It is the combined work schedules of both parents (if the second parent is involved in the care of the child) that affects child care, so it may be important to collect work schedule information for the other parent, whether living in the household or not.

School/training/job search schedule of spouse/partner. Similar to work schedule, the school schedule of the other parent will affect child care usage and type of care used.

Flexibility—in job and work schedule. The flexibility construct measures parents' perception of the impact of their work and school schedule on their caregiving. In a sense, work flexibility questions enable the parent to report what effect work/school schedule, shift, and policies have on child rearing. This is important because the same scenario may affect different parents differently. Questions need to measure how a respondent perceives the amount of work flexibility they experience.

Table 3 *(continued from page 17)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Benefits of spouse/partner	Benefits such as medical, dental Benefits that help with child care: pre-tax dependent care plan, cafeteria plan, access to sick leave, on-site child care, child care allowance				x				x	x		
Work schedule of respondent	Work schedule by job for all jobs Part-time, full-time can be a variable or can be imputed from work schedule Does parent work between 6:00 am and 6:00 pm? Does parent work: swing, night, weekend, variable, or rotating shifts?	x	x	x	x hrs only	x hrs only	X hrs only					x
School/training/job search schedule of respondent	On average (or in the last week), how many hours a week do you attend school or participate in job search/readiness activities? How many of these hours were in the evening? On the weekend?	x	x	x		x						x
Work schedule of spouse/partner	Work schedule by job for all jobs Part-time, full-time can be a variable or can be imputed from work schedule Does parent work between 6:00 am and 6:00 pm? Does parent work: swing, night, weekend, variable, or rotating shifts?	x	x	x	x hrs only	x hrs only						
	• Times late • Times left early • Times interrupted at work Ask reason for absence as a separate questions											

*Note: See page 4 for full titles and see references for links to the instruments.

Work absence and reasons for work absence. One of the major sources of flexibility for parents is in their work schedule. Flexible schedules vary depending on occupation and employer policies. A related variable is the amount of time loss tolerated formally or informally by employers. Missing whole days from work frequently results from employee or dependent health problems, and such absenteeism rates have been found higher for parents of a child with a disability (Neal, Chapman, Ingersonll-Dayton, & Emlen, 1993, p. 82). More common than days missed, however, are late arrivals, early departures, and work interruptions. These may be the most common forms of work flexibility either given by an employer or informally allowed. Interruptions during the work day, often in the afternoons, are associated with use of out-of-home care and especially with having a child in self-care or care by an older brother or sister (Emlen, 1984). Researchers commonly ask parents about absences from work and the reasons for these absences. Use of these questions depends on the purposes of the survey.

Child Characteristics

Introduction to Child Characteristics

Beyond their contribution to the family composition as a characteristic of households, children have unique individual characteristics, starting with age. Age is a continuous variable and is more versatile when collected that way. You may need just infants for one study and ages 0–4 for another. Where do 5-year olds who go to kindergarten belong—with preschool or school-age children? By age 6, most children are in school, but at what age do they stop using "child care" as commonly understood? If you extend the age grouping past 12, when its use drops off, you distort the percentages of children in care. Many states use a cut-off such as age 12, but what about before- or after-school programs that neither parent nor child calls "child care?" Or what if your interest is in children with a disability whose care needs may extend well beyond age 12? Disputes arise about age categories for different analytical purposes. Children are categorized by age to correspond to common developmental characteristics and needs, and they are categorized by age eligibility for centers, schools, programs, and funding. Age and developmental need categories do not necessarily fit together, and the research team will need to determine which fits their purpose.

The other child characteristics of program or policy interest are those that make a child different and unique within its age cohort and therefore require a unique response. Gender, perhaps. The child's race or ethnicity may challenge the cultural similarity or responsiveness of a child care environment. Another challenge may be differences in health, emotional health, behavior, or physical condition. Here too, the challenge is to the inclusiveness of child care settings, to the capacities of caregivers, and to the accessibility of child care for those families. Children having a disability or an emotional or behavioral problem may pose a higher level of difficulty with respect to child care. Their parents have more difficulty finding child care and more difficulty keeping their child in the care arrangements they have made.

Difficulty arises in defining the population at risk or defining what is commonly called "special needs" in some functional way with implications for child care. "Special needs" connotes some extra level of effort, sensitivity, or knowledge called for in the care of the child. There are many kinds of "disability." Using a tightly defined term will produce samples showing lower disability prevalence rates. Broadly defining problem behaviors produces samples showing higher prevalence rates and captures conditions that have not been diagnosed as a disability but nonetheless are too great a challenge for many caregivers. In the following description of possible constructs and variables, we try to help researchers think about wording of questions and the issues involved.

Discussion of Child Characteristics Construct and Variables

Age. The researcher will have decided to collect data on each child or a select child and whether to collect the information when completing a roster of all household members or when asking about a specific child. Instead of identifying each child by name, the researcher may use an initial or may just rely on the relationship to the parent and age to identify the specific child. If data are to be collected on a child, key data include relationship to respondent and age. Age may be collected as of a certain date or as birth date. The researcher may want year and month for children under 5 or 6 and simply year for older children.

The age problem appears in the analysis stage. Child care use varies with age; use of child care increases through age 4 and declines incrementally during the school years. The child's age affects the arrangements parents make for a child's care. Five-year-olds present a special challenge since they may be preschoolers or kindergarteners attending full or half-day. Should 5-year-olds be combined with children under 5, children over 5, or be placed in a category by themselves? State school rules are one factor, but parents typically have discretion as to when they send their child to kindergarten, so no decision will be perfect.

Assuming that an age group begins at age 6, one can argue that the next logical place for a break be at ages 9, 10, 11, or 12. Part of the rationale is found in when parents allow children to stay home alone. Only 19% of Minnesota parents think that 9-year-olds or younger children can be safely in self-care, while 82% think 13-year-olds can (Chase & Shelton, 2001). If Minnesota parent opinions are similar to those of parents in the rest of the country, one age break could be under 13 years. Roundtable participants agreed that elementary children need to be broken into two groups, but the age for the break is not clear. One solution is 6–9 and 10–12. If the researcher is collecting data on children through age 14, then it would be desirable to create a group of 13- to 14-year-olds for comparison with children in groups under age 13. This age grouping would make it possible to compare their findings with surveys that collect data only on children through age 12. The appropriate maximum age for a child with a disability is through age 17.

If the researcher collects actual ages, by months, years, or birth date, any set of age groups can be created in the analysis stage. Age groupings will be discussed again when describing issues related to types of care.

Grade. Most researchers collect age rather than grade. The association of grade and age varies by state, so caution is needed for cross-state comparisons. A researcher will want to

Table 4. Constructs, Variables, and Sources of Sample Questions Related to Child Characteristics ***(table continues on page 21)***

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Age	Date of birth Years (or months) as of a certain date such as January 1 of the survey year	x	x	x	x	x	x	x	x	x	x	x
Grade	Grade is most relevant for children over four years of age					x						
Race/ethnicity	All that apply: Latino or Hispanic, Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander, White, some other race (specify)	x	x	x	x	x	x					x
Citizenship	Where born How long in state/US		x			x	x					
Gender	Male Female			x		x	x		x	x		x
Health Status	Perception of general health Perception of specific type of health problem		x		x							
Special needs or disability	Categories of disabilities: temporary, permanent	x	x	x		x	x					x

*Note: See page 4 for full titles and see references for links to the instruments.

Table 4 *(continued from page 20)*

Construct	Possible Variables	Sources of Survey Questions*										
		Abt Com	Abt Par	HSPC	NCCS	NHES	OPS	PCCS	RRI Emp	RRI Qual	SIPP	Wilder
Child limitation	Does (name of child) have a physical, emotional, developmental, or behavioral condition that affects the type of care you chose for (him or her)?			x						x		x
Treatment	Is child currently receiving services related to the special need?					x						x
Special needs identification	Was parent awareness of the child's special needs: • Prior to placement in child care? • Due to report of provider after placement in the arrangement? • The result of testing done by community provider of services for children with special needs, a diagnosis by health provider, or other? If other, please specify.											

*Note: See page 4 for full titles and see references for links to the instruments.

consider collecting grade as well as age for children over age 4, especially if the research purpose includes informing policy or programming for school-age children.

Race/ethnicity, citizenship, and gender. The discussion for these variables is included in the Parent Characteristics section of this paper.

Health status. A number of researchers ask parents to report on children's health status. Variables and measures range from a simple question to a questionnaire designed to assess children's social and emotional well-being.

Special needs or disability, special needs identification, and treatment. One of the most challenging areas in child care is the care of children with special needs. Roundtable participants proposed three related constructs: presence of a special need or disability, identification of a special need, and treatment of special need.

Researchers have found that parents of children with special needs experience more difficulty in finding and maintaining child care and perceive the quality level to be lower than that reported by parents of normally developing children (Emlen & Weit, 1997). Child care usage patterns also are different (Oregon Childhood Care and Education Data Project, 2001, 2002). There is considerable agreement that child care surveys should include questions about children's special needs, but there is much to learn about which constructs, variables, and measures will elicit the most meaningful information. There is not yet agreement on the terms to be used in describing the conditions that limit children. Considerable work has been done by Hogan and Wells (2002) on developing measures of limitations, but they focus on children 6 years and older. Assessing limitations in younger children is complex because development in the early years is more variable, and hence, especially detailed measures are needed for younger children.

Some researchers have a construct on the existence of a special need and ask parents to report if the child has a physical, mental, or developmental disability. Others ask more detailed questions about a child's development.

Disability prevalence rates increase as the child ages, because limitations frequently are not recognized until it becomes evident that the

child cannot perform certain tasks. Identification of limitations is an important aspect of special needs care. There may be value in focusing on identification of the child's special needs, specifically on who identified the limitation and when they did so. Another construct that may be relevant deals with treatment, focusing on whether or not the child receives specialized health or development services.

Because prevalence rates for disability are relatively low, researchers may be faced with small numbers of children with disabilities in any given survey (most surveys find approximately 5% to 10% prevalence rate), thus limiting the reliability of findings. But the small number of households having a child with a disability enables researchers using a telephone interview to ask more detailed questions about those children and their special needs without greatly increasing survey costs. One strategy for addressing the small number is to over-sample parents of children with known disabilities.

What is to be collected varies with purpose of the survey. If findings will be used as a basis for program design, researchers may consider creating a large sample of children with disabilities and use a large number of specific categories to gain precision. Roundtable participants recommend that a brief be commissioned on issues related to collecting survey data on children with special needs.

Child limitations. One strategy for dealing with the challenges of accurately measuring children's disabilities is to focus instead on parent perceptions of child limitations. In other words, let the parent set the threshold. A challenge is the conceptual definition of threshold: serious, severe, long-term. Of relevance is the effect of the child's limitation on choice of child care, and parents can reliably report the extent to which they perceive that their child care choices are limited by the child's special needs.

Caution is needed if the researcher includes "challenging behavior" as a special need or limitation, because that term is not clearly defined. Parents can report if they think their child care options are limited by the child's challenging behavior. The challenging behavior issue is confounded by skill limitations of some caregivers and by mismatches of temperaments. Roundtable participants reported ongoing discussions about the possibility that some behavioral challenges in children were related to inappropriate matches between a child and his or her caregiving environment. Perhaps there are variables or measures that would shed light on this issue, but participants were not aware of any.

Child Care Arrangements

Introduction to Child Care Arrangements

Describing child care arrangements is complicated and requires a complex set of variables. Is it paid for or not paid for by the parents? Is it care at home or in an out-of-home setting, and is that setting a center or family home? Is the caregiver a relative or non-relative? Is this the child's primary non-parental care arrangement or a secondary one for fewer hours? Is the arrangement used on a regular basis or on occasion, and how many hours per week is enough to count it as an arrangement? Is the provider accredited or licensed or registered, or is it what is sometimes referred to as an "informal arrangement"? Are you sampling care during the school year or summer? Is the child care arrangement with a caregiver or in a setting that specializes in a particular age group, or are the ages mixed? How many children are in care at any one time, and what is the ratio of children to adult caregivers? How many hours of care per day or week is this child in this arrangement? How long has the arrangement lasted in this setting, or is there continuity of caregiver/child relationships within that setting? How much difficulty do parents have in finding child care if they have to enter the out-of-home child care market, or in managing the arrangement as measured by the distance they have to go, the time it takes, or the transportation required?

Characteristics of the caregiver or provider of care are a subset of the characteristics of the child care arrangement and need to be seen in that context. Household surveys don't sample child care settings; they sample parents or households. Other kinds of research specialize in observing the quality of care within a child care setting, and they sample particular settings among the many kinds that parents use. Parents usually are not in a position to make those kinds of observations of caregiver-child interaction in a care setting. However, parents do make observations and judgments based on their perspective and experience. We deal with parent assessments in our last section, on parent decision-making and choice. Here, under child care characteristics, we simply point to some provider characteristics and variables that are more easily measured by data from household surveys.

For these surveys, you are sampling parents and households, not child care facilities, therefore you are dependent on what parents can tell you, in the words they understand and are familiar with, and on their definitions of what they are doing expressed in ordinary language. If they are not using "day care" outside the child's home, they may not even think of themselves as using one of the arrangements you classify as "child care." So it may be necessary to follow the child and the child's whereabouts and relationships with careful understanding, and not assume that parents can use a checklist of jargon categories.

For purposes of policy formulation and program planning, you are seeking to get a complete picture of where the children are and what families are doing. Your policy purposes may be to predict the financing and possible subsidy of child care, to investigate the well-being of children, or to understand parent choices in ways that might be helpful. Of particular importance is whether and where a sufficiently diverse supply of child care options is geographically available and accessible. Does it offer the kind of care parents want their children to have? If not, how does a community encourage the quality, availability, accessibility, and affordability of child care? Close study of child care arrangements will be part of the discussion. Issues of parent choice will be revisited in our last section.

Below is a list of constructs related to child care arrangements, followed by a more complete description of each construct. Before

discussing the constructs and variables, it is important to consider what arrangements will be studied. Early in the survey design stage, the research partners will have to decide whether they will collect child care arrangement data on a specific child or on all children in the survey's age range (e.g., birth through age 5, 12, or 14). Selecting a random child may simplify the analyses, but the sample of households will need to be large enough to support analyses of subgroups such as children of a specific age group by types of care, if you have only one child per household. Some researchers ask parents to report only on the youngest child, since child care use is greatest in the first 5 years of life. More work is needed to know what effects selection of the youngest versus a random child has on study findings. Asking parents to report on either the youngest child or a randomly selected focal child makes it possible to describe child care at the family rather than child level. There are instances in which doing the analysis at the family level makes it worth it to lose the information gained by collecting data on the arrangements of all children in the family.

A related decision is how much of the child's care to capture. Commonly used options include primary arrangement only, regular (as defined by research team), paid primary arrangement only, all paid arrangements, or all arrangements. It is common for parents to have a paid primary arrangement and supplemental or back-up arrangements. If you collect data on only primary or paid arrangements, the child care picture that emerges will be missing a vast array of paid and non-paid arrangements parents make for their children. Collecting reliable data on all arrangements is complicated for parent and researcher. The researcher may have to trade off detailed data for one child with some data on every child. The decision will be determined by both purpose of survey and cost/time/space limitations of the research project.

Time considerations are important. Researchers ask parents to report on child care arrangements within a time frame. Examples include current care, care in the most recent completed week, or care in a typical week in the last month. The goal is to collect a comprehensive picture of arrangements and avoid inaccuracies due to faulty parent memories. Child care varies substantially between school year and summer. Some researchers sample in both time frames while others sample only school year arrangements and report the findings for the school year only.

Discussion of Child Care Arrangements

Type of care. Type of care is the most critical and possibly the most complex construct in child care surveys. The purpose and cost/time/space limits of the survey will determine the level of detail about type of care and the number of children in the household for whom type-of-care data will be collected. Surveys range from a few type-of-care questions to detailed diaries of child activity over a week.

Language matters. Parents may not report an arrangement because they do not think what the child does fits a label used by the researcher. If parents use their own language to describe everything a child does, a much richer picture of types of arrangements will emerge, but coding and classifying will add time. Other than taking less time in both data collection and analysis, lists of types of care may support comparability with other geographical units and may facilitate links between findings and policy. Differences in child care licensing across states means that caution must be used in cross-state comparisons. What is defined as family child care in one state will be defined as care given by family, friends, and neighbors in another state.

The type of care used varies by age of child. For instance, lessons, recreation, and self-care are used as care arrangements predominantly for older children. A researcher could set up the survey to suggest different types of care for different age groups or could follow up with questions about different types of older-age child arrangements for a child above 4. Parents

Table 5. Constructs, Variables, and Sources of Sample Questions Related to Child Care Arrangements *(table continues on pages 26 and 27)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Type of care	Commonly-used categories: Parent Relative—break out other parent, grandparent, other relative, sibling Non-relative—18 or older, under 18 Center—break out child care center, nursery school or preschool, Head Start, before/after school School—break out kindergarten, elementary, middle school Recreation/sports Supervised self-care Self-care	x	x	x	x	x	x	x	x	x	x	x
Location of care	Child's home Other parent's home Other private home Center School Church, synagogue, or other religious institution Parent's workplace Community center Other (specify) Zip code/county	x	x		x	x			x		x	x
Hours in care	Number of hours per day or per week in arrangement	x	x	x		x			x		x	x

*Note: See page 4 for full titles and see references for links to the instruments.

may not think of sibling care, or self-care, as care arrangements, but if these categories are left out, the survey will not account for all arrangements, nor all the children in care. You may need prompts or separate questions in order to capture all types of care. Most researchers include before- and after-school care as arrangements but do not treat K–12 school as child care. The research team will need to determine how they want to treat K–12 school.

At the analysis stage, the differences in types of care used by children at different ages may lead to different analyses for different age groups. For instance, consider breaking by grade for school-age children rather than by age and analyzing more specific information on activities in which the children are engaged. If children above age 12 are included in the study, even more categories may be needed to capture youth-serving organizations and middle schools.

Location of care. Where the child receives care is a less complex construct. It is easy to list the most common locations. At the analysis stage, type of care and location of arrangement may be merged. For instance, care by a non-relative may be family child care or in-home care, depending on where the care is given. Some researchers combine location and type of care in the same construct and list options including type and location. The researcher has

Table 5 *(continued from page 25 and continues on page 27)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Time frame for care	Commonly-used categories: Day Evening Night Weekend Care schedule/diary			x								x
Difficulty managing care	Distance home to care Distance care to work Time home to care Time care to work Difficulty finding care		x	x	x		x		x			x
Stability of care	How many times did you change types of care in last x months Collect information about up to x arrangements over the last year List all arrangements over the last x months or since a specific date Ask parents their perceptions of continuity and stability of relationships		x		x	x				x		x
Amount spent on child care arrangement	Amount paid for last week or month for specified child for each arrangement (Distinct from the household child care expense variable)	x	x	x	x	x per child	x per child				x	x per child
Provider characteristics for this arrangement	How many children in group Number of teachers in group Adult: child ratio is derived variable			x	x	x						x
Provider language	What language does the caregiver speak when caring for child					x						x

*Note: See page 4 for full titles and see references for links to the instruments.

the most flexibility if type and location are asked separately.

Hours in care. Researchers typically ask parents to report hours in each arrangement. This may be hours per day if doing a diary, or it may be hours per week. Asking parents the number of hours children are in care by specific care types will facilitate analysis.

Time frame for care. Child care use varies by time of day. For instance, parents are more likely to use in-home care if they work evenings. Research partners may want to ask parents the time frame for care. This may be correlated with parent work schedules.

It may be necessary to define what is meant by "day," "evening," or "overnight." Some states have such definitions for regulated care, so it may be helpful to use those definitions. In other instances, it may be useful to use local labor market characteristics to define the time frame (e.g., if there are many factories that operate 3 pm to 11 pm as the evening shift, you could define evening work schedule with those times).

Table 5 *(continued from page 26)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Parent perceptions of arrangement quality	Number of adults in group Number of children in group Caregiver warmth Rich environment Caregiver skill Parent/caregiver relationship How child feels Risks to health, safety, and well-being Stability of care		x	x	x	x	x			x		x
Caregiver support	Family supportive—the caregiver is supportive of the way my family wants to raise our child		x									
Flexibility-caregiver	My caregiver understands my job and what goes on for me at work My caregiver is willing to work with me about my schedule I rely on my caregiver to be flexible about my hours I can count on my caregiver when I can't be there		x							x		x
Special arrangements	Days on which special arrangements had to be made—total in last 3 months Reason: child sick, caregiver not available		x		x							x
Amount of family child care	If someone in-house (over 18 years of age) provides care in home for non-resident children: • Is it for pay? • Is it on a regular basis (e.g., 3 months in a row) • Number of unrelated children • Number of children (typical day, maximum number present, enrolled)			x	x		x					

*Note: See page 4 for full titles and see references for links to the instruments.

Difficulty managing care. The research team may also be interested in time involved in getting child from home to care arrangement and in getting parent from care arrangement to employment. If so, questions could be asked to determine minutes from home to care facility and to work. Parents could also be asked if transportation is a problem. Measuring the level of difficulty finding child care may add to an understanding of the difficulty managing care. The number of arrangements, which is included below as a measure of stability, can also be seen as an aspect of child care management.

Stability of care. Researchers have found a relationship between child care stability and measures of child outcomes. Although in a given instance change may be in the best

interest of the child, changing caregivers frequently can interfere with the establishment of a trusting relationship between child and caregiver. Researchers have devised a number of ways to assess stability of the child's care (Weber, 2005). They ask how often caregivers change in x months or how often types of child care changed in x months (Wilder). Another strategy is to get information on up to four arrangements over the last year (NCCS) or all arrangements over the past 12 months (Abt Parent) or all arrangements, since a certain date (NHES). Yet another is to ask parents their perceptions of continuity and stability of relationships (RRI Quality).

Amount spent on child care arrangement. As noted in the household characteristics section, total amount of money spent on child care is a critical variable. It is necessary if you want to calculate percentage of household income spent on care. It may also be important to estimate amount spent by type of care, in which case data must be collected per arrangement for a given child. When asking the amount spent, a researcher may ask a follow-up question to be sure that the parent is reporting only for a specific arrangement or specific child. The researcher will need to prompt parents to report only amount of household income spent on child care. Questions on receipt of financial assistance were asked in a household characteristics section of the survey.

Another issue related to accuracy in reports of the amount spent on care concerns time, that is, amount per hour, per day, per week, or per month. Conversions may introduce error. If the researcher knows the time unit used for analysis, there are advantages to asking parents to report the amount spent in that time unit. This supports comparability and retains accuracy. If the researcher needs to collect information in a different time unit than will be needed for analysis, it helps to do the conversion while on the phone or in the interview and to get agreement with the parent; that is, when converting from hourly to weekly, do the conversion and then ask the parent whether that is the amount spent in the past week. Yet another issue is the difference between provider charges and amount paid. The amount the household spent is the data needed, not what the provider charged.

Provider characteristics for this arrangement. Adult:child ratio is one of the structural indicators of quality. Some researchers ask parents to report group size and number of adults in the group. Adult:child ratio variable is derived from these two.

Provider language. The primary language spoken by the caregiver is relevant to the child's development, but the meaning of this construct varies. Some researchers see a non-English caregiver as not preparing the child for success in school, while others see a caregiver who primarily speaks the same language as the child as supportive of development.

Parent perceptions of arrangement quality. Emlen created scales that measure parent perceptions of quality of child care arrangements (Emlen et al., 2000). The scales are used in a number of child care surveys. Parent perceptions of stability could be conceptualized as a component of parent perceptions of quality or as a measure of stability.

Caregiver support and flexibility of caregiver. Parents find flexibility primarily from work, family, or caregiver. Emlen created a measure of the amount of flexibility the parent gains from the caregiver. Caregiver support is a closely related construct. Researchers ask parents about the amount of support the caregiver provides.

Special arrangements. Related to a work absence construct in the parent section of a survey is a construct that focuses on parent needs to make special child care arrangements due to a wide range of causes, including illness of child, illness or absence of provider, or school closure. Parents express high levels of stress about the need to make other arrangements, and these stressors are greatest for single parents. Variables may include the number of hours or days missed, the reasons for making the special arrangement, and the type of back-up care arranged.

Amount of family child care. Population surveys provide the opportunity to gather

information about the range of child care arrangements being used in a community, state, or other geographic area. In this case, the survey respondent reports whether or not paid care is provided in the household by a person age 18 or older. Household surveys are the primary means of estimating the amount of home-based care given to related and non-related children. They may be the only way to estimate the size of the "informal" child care supply; those persons who care only for children known to the caregiver. When child care supply data gathered from licensing and R&R databases (formal or market child care) are combined with data collected from a household survey, the research team can produce a rich picture of child care arrangements in a geographic area.

Parent Choice

Introduction to Parent Choice

Finally, we consider the gamut of parent decision-making, from their values related to child rearing to the reasons for choice of current arrangements. Decision-making involves available resources, values, and preferences with respect to caregivers as well as to the options considered. Also relevant are the parents' satisfaction with the selection they made and their assessments of specific characteristics of the care, the caregiver, and the arrangement.

The study of parent choices and decision-making is useful. Policy analysts try to predict choices because it may be possible to improve the conditions that contribute to the choices made, resulting in a better choice of child care arrangements. As mentioned in the overall introduction, the study of parent decision-making contains a subjective component. It needs to be placed in the context of a hard-variable picture of household circumstances, the options that are actually available to parents, and the child care arrangements that parents actually made.

What sounds like a simple question involves a host of issues. What choices are parents making? Do they have much choice? What are their options? What alternatives do they perceive? What options do they consider? Would they or do they prefer something other than what they have? What is preference anyway? It's a rather abstract idea. For example, a stated preference for an on-site center at the workplace doesn't mean that a family would use it. A stated preference is not a judgment about feasibility but about the attractiveness of an alternative in the abstract. So there's really no reason why a stated preference should be predictive of future use. Still, preferences are worthy of investigation because they may reflect aspirations and important values that parents hold and try to realize when they make choices. In questions about preferences, the alternatives probably should be presented with equal attractiveness, realism, and prospects for being understood.

Preferences and behavior will differ because behavior reflects the balance parents find in managing family life. It is essential to distinguish preference data from that of usage. Each describes an important aspect of child care.

Discussion of Parent Choice Constructs and Variables

Parent choice includes a set of constructs that flow logically from knowledge of the child care market, through learning about and securing an arrangement, to termination of the arrangement. Knowledge, values, opinions, perceptions, and options are involved. It is challenging to accurately capture this complex set of intertwined factors in a survey. Roundtable participants identified the following constructs.

Knowledge of child care market. It is not uncommon for parents to have little or no knowledge that there even is a child care market the first time they need to identify non-parental care. Some families will make an arrangement with family, friends, or neighbors and still know little about the child care market. Assessing a parent's knowledge of the market is fundamental because it will directly influence responses to other questions.

How parents learned about arrangement. Parents who do not have a ready-made arrangement at hand must find ways to identify one. Apparently, the vast majority of parents turn first to people they trust: relatives, friends, neighbors, and churches (Hofferth, Shauman, Henke, 1998). Researchers survey parents on how they learned about their current arrangement.

Reasons for choice of current arrangement. In order to better understand the decision-making process, researchers collect information about possible reasons why parents chose their current arrangement. Parent behavior, values, and perceptions may include practical considerations, such as proximity of care or availability of child-care resources, or selections may be made on the basis of preferences and values. Stated preferences and observed choices do not always match, and questions that elicit the context in which the parent made the decision may help clarify apparent discrepancies. For instance, cost, location, and parent work schedule constraints may result in limited choice. It may be useful to ask parents whether they considered more than one option or how many options they considered before selecting their current arrangement.

Values related to child care arrangements. Within this construct the researcher is attempting to identify factors that are important in the abstract, not tied to any given arrangement. Rather, they are statements of value or preference. One goal is to understand the decision-making process and to predict parent behavior in a changed policy environment in which constraints such as cost were reduced.

Values related to child rearing. Parental values related to child rearing may also affect parent child-care choices. Schaefer and Edgerton (1985) created a survey of parental values and beliefs called the *Parental Modernity Scale*, which may provide information on parent choices. This survey has been used in the Early Head Start study, the National Longitudinal Survey of Youth (NLSY), and the Human Development Study in Chicago Neighborhoods.

Table 6. Constructs, Variables, and Sources of Sample Questions Related to Parent Choice ***(table continues on pages 32 and 33)***

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Knowledge of child care market	Neighborhood options by age of child	x	x	x	x							
	Choices of neighbors by age of child											
	Affordability by type of care											
	How parents learn about available care											
How/where learned about arrangement	Friends/neighbors/relatives /co-workers			x		x						x
	Place of employment											
	School											
	Church, synagogue, or other place of worship											
	Welfare or social service caseworker											
	Newspaper/ad/yellow pages											
	R&R											
	Provider											
	Parent already knew provider											
	Provider cared for another child of parent											
	Reference materials											
	Public bulletin board/flyers/drove or walked by child care facility											
	Internet											
	Other (specify)											

*Note: See page 4 for full titles and see references for links to the instruments.

Table 6 *(continued from page 31 and continues on page 33)*

		Sources of Survey Questions*										
Construct	**Possible Variables**	**Abt Com**	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Reason for choosing child care arrangement	Factors that led to decision or attributions reported regarding decision: Observed facility Presence/absence of choices Special needs of child Preference for type of care Preference for specific arrangement Level of difficulty in finding satisfactory arrangement	x	x	x	x							x
Values related to arrangements	Parents respond with a ranking of importance to lists of child care characteristics		x	x	x	x						x
Beliefs about self-care	Age child could be left alone Length of time child could be left alone											x
Termination of arrangement	Reasons for ending					x						x

*Note: See page 4 for full titles and see references for links to the instruments.

Elizabeth Prescott and colleagues (1972) provide some evidence of an association between parenting values and child-care choices. They studied parenting values regarding discipline and control and associated those with guidance policies in centers. Some parents seek a caregiver "who shares my values," while others value differences that complement what a child receives at home. Participants recommend that more research be done on the impact of child-rearing values on choice of child care.

Parent assessment of current arrangement—satisfaction and perceived quality of care. The focus of this construct is the child's current arrangement. The parent is asked to report perceptions based on her or his experience of the arrangement. Satisfaction and perceived quality are not the same; satisfaction is broader, taking other characteristics into account in addition to quality of care. Questions that ask parents their level of satisfaction with an arrangement, or an overall rating of its quality, do not discriminate as well as a series of more specific questions about the arrangement. Nevertheless, even overall "global" judgments about child care arrangements may be related to various difficulties parents experience finding child care or combining work and family. Questions that discriminate include those that ask 1) whether the parent would change the arrangement if she could, 2) if the parent had it to do over again, would she make the same arrangement, or 3) is the care just what the child needs?

Although attitudes about current arrangements might be considered in the section on child care arrangement, we have included it here because it deals with the general issue of parent perceptions.

Termination of arrangement. Parents may be asked to give reasons for terminating the last arrangement. It may be attributable to dissatisfaction or to disruptions such as in job, residence, or family relationships. It is important to distinguish dissatisfaction with a particular arrangement and dissatisfaction with a type of care. Some changes of caregiver are related to age and development, as when a happy toddler graduates to preschool. The rationale for ending the relationship gives further context to the environment in which the parent is making decisions.

Table 6 *(continued from page 32)*

Construct	Possible Variables	Sources of Survey Questions*										
		Abt Com	**Abt Par**	**HSPC**	**NCCS**	**NHES**	**OPS**	**PCCS**	**RRI Emp**	**RRI Qual**	**SIPP**	**Wilder**
Attitudes toward current arrangement—satisfaction with arrangement	Perceptions based on experience with arrangement—observed behavior of caregiver ▯ Advantages ▯ Disadvantages ▯ Relationship of child and caregiver, of parent and caregiver ▯ Disagreement/ dispute between parent and caregiver ▯ Focus on child ▯ Parent/provider communication and relationship ▯ Caregiver ability ▯ Richness of environment ▯ Child/caregiver relationship ▯ Fit for child Perception of alternatives: Would you change arrangements if you could? If you had to do it over would you do it again?	x	x	x	x	x	x		x	x		x

*Note: See page 4 for full titles and see references for links to the instruments.

Beliefs about self-care. The Wilder Research Center asks parents a set of questions about their beliefs related to self-care. Self-care grows in use as children age, and its use may be affected by parents' assessment of the child's maturity, neighborhood, and emergency backup arrangements. Parent beliefs about this type of care are important. Since safety is a major parent concern, one would expect variation by location.

Conclusion

The purpose of this Guide is to assist those constructing surveys that are designed to provide information about the factors driving parental use of child care. It is a product of a group of eight researchers and state child care administrators, all of whom had either conducted parent surveys as principal investigators or had a major administrative role and policy interest in such surveys. The Guide serves as a tool for those working to design a parent survey, large or small. The constructs, variables, and actual survey questions are offered as a menu from which you select those items that serve your research purpose. A rich discussion of constructs and variables enables you to build on what other researchers have learned from their work. We hope that you will share what you learn with Child Care and Early Education *Research Connections* so that we can continuously improve our understanding of parental use of child care.

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