

**ASSESSING QUALITY IN FAMILY, FRIEND AND  
NEIGHBOR CARE:**

**THE CHILD CARE ASSESSMENT TOOL FOR  
RELATIVES**

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## Abstract

This paper describes the Child Care Assessment Tool for Relatives (CCAT-R), an observation instrument specifically designed for measuring quality in child care provided by relatives. It discusses the development process, the CCAT-R's psychometric properties, and the results of a field test with 92 low-income relative caregivers. A fine-grained instrument, the CCAT-R uses time sampling in two components to assess the frequency of caregiver-child interactions. It includes checklists for health, safety and materials as well as a caregiver interview. The CCAT-R's psychometric properties compare favorably with those of other instruments. Its content validity is based on participation of researchers and practitioners during the development of the measures and the individual items. The criterion for inter-rater reliability is .80 exact agreement on individual items. Confirmatory factor analysis produced four factors--caregiver nurturing; caregiver engagement in activity with focus child, caregiver/child bidirectional communication, and caregiver unidirectional use of language—that are related to the caregiver's support for child development domains. The floor for quality is based on individual factor scores, below which quality is rated as poor.

The field test suggests that the CCAT-R is a simple and efficient instrument to use for programs that seek to assess the needs of relative caregivers as well as to evaluate the effects of their interventions. Findings from the analysis of the sample of relatives indicate that quality was associated with several structural aspects of care, including caregivers' educational background and experience, and the number of children in care. It was also positively associated with the variety of materials as well as the number of health and safety features in the home. In addition, quality was higher when parents expressed an interest in caregivers' lives, and when caregivers were paid for providing child care.

The paper points to some issues for consideration by policy makers, practitioners and researchers who have an interest in family, friend and neighbor care that is exempt from regulation. Among them are the role of the subsidy system in promoting quality in care provided by relatives, potential strategies for improving the care that they offer to children, and the need for additional research on these settings.

# **ASSESSING QUALITY IN FAMILY, FRIEND AND NEIGHBOR CARE: THE CHILD CARE ASSESSMENT TOOL FOR RELATIVES**

## **Introduction**

### **Background**

The effect of child care on children's development emerged as a significant issue for parents, researchers and practitioners in the early 1980s, when women with young children began to enter the workforce in large numbers. Initially, attention focused on the impact of care outside the home on children's attachment to their mothers (Phillips, 1987). The discussion quickly shifted to broader questions related to the effects that child care has on children's long-term development. In recent years, the frame has changed again. Now questions are raised about school readiness—whether and how child care prepares children for school (Bruner, Copeman, & Floyd, 2005; Knitzer, 2002; Ramey & Ramey, 2004).

Much of the research on child care looks at how aspects of quality are associated with child outcomes—that is, children's social/emotional, cognitive, language and physical development. These aspects are typically divided into two categories: structural features such as group size, adult-child ratios, the environment and caregiver qualifications, and process features that relate to the caregiver's interactions with children.

Most of the studies on quality in the 1980s and 1990s focused on regulated child care centers and family child care homes (Berruta-Clement, Schweinhart, Barnett, Epstein, & Weikart, 1984; Clarke-Stewart & Gruber, 1984; Helburn, Culkin, Howes, Bryant, Clifford, Cryer, Peisner-Feinberg, & Kagan, 1995; McCartney, Scarr, Phillips, & Grajek, 1985; Ramey & Campbell, 1991; Whitebook, Howes, & Phillips, 1990). Care provided by family, friends and neighbors (kith and kin child care) that is legally exempt from regulation was largely overlooked, because it was not considered part of the formal child care system (Gilbert, Duerr, & Meyers, 1991; Kisker, Maynard, Gordon, & Strain, 1989; Porter, 1998; Siegal & Loman, 1991; Sonenstein & Wolfe, 1991). This situation changed in the mid-1990s with the passage of welfare reform when states began to report data about the number of families who used their child care subsidies for these child care arrangements. Family, friend and neighbor child care moved onto the public policy agenda.

The attention to kith and kin child care was well-deserved. It is the most common arrangement for children under five whose parents are working (Smith, 2002). It is also commonly used by families whose children are regarded as the most vulnerable in terms of school success (Capizzano, Adams, & Sonenstein, 2000; Snyder & Adelman, 2004). In many states, family, friend and neighbor care accounts for the largest proportion of child care arrangements that are subsidized with public child care funding. Because so many children spend their days—and sometimes their nights—with these providers, the quality of care they offer is a major concern (Anderson, Ramsburg, & Scott, 2005; Brandon, Maher, Joesch, Battelle, & Doyle, 2002; Drake, Unti, Greenspoon, & Fawcett, 2004; Layzer & Goodson, 2003).

Family, friend and neighbor child care is different from registered or licensed family child care and center-based care. Because it is legally exempt from regulation, the child care settings do not have to comply with requirements—other than limits on the number of children or the hours they spend in care—that are imposed on family child care homes or centers. In most states, there are few requirements that apply to these caregivers even when they provide care for children who are subsidized with public funding. Standards for the health and safety of the environment are often minimal, and many states do not require caregivers to complete any child care training (Porter & Kearns, 2005a).

Kith and kin care also differs from regulated family child care or center care because these child care arrangements, for the most part, are informal, embedded in a relationship between the caregiver and the parent that begins—especially for relatives—long before the child care starts and continues long after the child care ends (Porter, Rice, & Mabon, 2003). Many of these caregivers intend only to care for their grandchildren, nieces or nephews, or their close friend's child (Anderson et al., 2005; Brandon et al., 2002; Drake et al., 2004; Layzer & Goodson, 2003; Porter, 1998; Zinsser, 1991). They view their care as surrogate parenting; they do not see themselves as professional child care providers nor do they intend to have a career in child care (Porter, 1998; Zinsser, 1991). One of the challenges for the child care field is how to evaluate care in these kinds of settings.

This paper describes the Child Care Assessment Tool for Relatives (CCAT-R) (Porter, Rice, & Kearns, 2006) an observation instrument specifically designed to assess quality in care provided by

relatives, the largest proportion of family, friend and neighbor caregivers (Brandon et al. 2002; Layzer & Goodson, 2003). The first section reviews the results of several studies of kith and kin child care quality. The second introduces the CCAT-R, with a description of its development and components. The next section presents the results of a field test with 92 relative caregivers, followed by a discussion of the implications of the findings.

## **Research on Quality in Family, Friend and Neighbor Care**

Until federal welfare reform in 1996, only one major study, the *Study of Quality in Family and Relative Child Care* (Kontos, Howes, Shinn, & Galinsky, 1995) included observations of child care provided family, friends and neighbors. Since then, four major observational studies have examined this kind of care:<sup>1</sup> the Growing Up in Poverty (GUP) Project (Fuller & Kagan, 2002; 1997); the Embedded Developmental Study, part of the Three-City Study (Coley, Chase-Lansdale & Li-Grining, 2001); the Study of Legal Non-regulated Child Care in North Carolina (Maxwell, 2005); and *Care in The Home*, the sub-study of the National Study of Child Care for Low-Income Families (Layzer & Goodson, 2003). The National Institute of Child Health and Human Development (NICHD) Study of Early Child Care, which has been following approximately 600 children nationally since 1993, also included family, friend and neighbor caregivers (NICHD, 2000).

These studies vary widely: the sample, sub-samples, sizes and methodologies differ (Table 1: Comparison of Selected Studies of Quality in Family, Friend and Neighbor Care). The range of sample sizes is broad, extending from 190 in North Carolina to 612 in the NICHD study. Only one study, Maxwell's, focused exclusively on family, friend and neighbor care; the others included regulated providers as well. Layzer and Goodson looked at both regulated and license-exempt family child care. Kontos, Fuller and Coley compared quality in regulated family child care, regulated center care and family, friend and neighbor care. The NICHD study included grandparents along with fathers, nannies, regulated family child care providers, and regulated child care centers. Half of the studies included relative providers as a sub-sample; the others did not.

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<sup>1</sup> Whitebook's study of child care in Alameda County, California, included only 12 family, friend and neighbor caregivers (Whitebook, Phillips, Bellm, & Almaraz, (2004). There are 20 caregivers in Jaeger and Funk's (2001) study of child care quality in Philadelphia.

**Table 1: Comparison of Selected Studies of Quality in  
Family, Friend and Neighbor Care**

	Sample Size	Provider	Number of Sites	Subsidy Status	Instruments
<b>NC</b>	190	FFN	NC	Subsidized Only	FDCRS CIS Learning Activities Scale, Summary Provider Rating, Child Care- HOME (modified), EQUAL (modified)
<b>Three-City</b>	181	FFN FCC Centers	3 cities	Subsidized	FDCRS AIS
<b>Family and Relative Child Care</b>	226	FFN FCC	3 communities	Subsidized Nonsubsidized	FDCRS AIS Howes Involvement Scale
<b>GUP</b>	352	FFN FCC Centers	3 states	Subsidized	FDCRS AIS C-COS
<b>National Study of Child Care for Low Income Families</b>	533	FFN FCC	5 counties	Subsidized	Environmental Snapshot, Provider Rating
<b>NICHD</b>	612	FFN FCC Fathers Grandparents	9 states	NA	ORCE

**Key:**

AIS –Adult Involvement Scale  
 CIS-Caregiver Interaction Scale  
 C-COS – Child-Caregiver Observation System  
 FCC-Family Child Care  
 FDCRS – Family Day Care Rating Scale  
 FFN – Family Friend and Neighbor  
 HOME-Home Observation for Measurement of the Environment  
 ORCE – Observational Record of the Caregiving Environment

The samples were also drawn from different states, in which exemptions from regulations vary. In California, one of the GUP sites, family, friend and neighbor caregivers can provide care for an unlimited number of children if they are all from one family (Porter & Kearns, 2005a). In North

Carolina, these same caregivers would have to be regulated as family child care providers; the state limits the number of nonrelated children in license-exempt homes to two. It is important to take these contextual findings into account, because research shows a relationship between group size, adult-child ratios and quality (Kontos & Herzog, 1997; NICHD Early Child Care Research Network, 1996; Peisner-Feinberg, Burchinal, Clifford, Culkin, Howes, & Kagan, 1999; Shonkoff & Phillips, 2000; Vandell & Wolfe, 2000).

In addition, three of the studies included only caregivers who provided care for subsidized children. Like exemptions from regulation, requirements for caregivers who provide subsidized care vary from state to state. Subsidized caregivers in some states may have to equip their homes with specific health and safety features or obtain a minimum amount of training, while caregivers in others may not. Because these structural features, like adult-child ratios and materials, can have an effect on quality, it is important to interpret the findings in light of these state differences.

The studies also used different instruments to assess quality. Four relied on the Family Day Care Rating Scale (FDCRS) (Harms & Clifford, 1984) and the Adult Involvement Scale (Arnett, 1989); two used new measures.<sup>2</sup> NICHD developed the Observational Record of the Caregiving Environment (ORCE) for its research (NICHD Early Child Care Research Network, 1996), and Layzer and Goodson (2003) created the Environmental Snapshot and Provider Rating based on several existing instruments.

Despite these differences, the results were similar in four of the six studies. Among those that used the FDCRS and the Arnett, the quality of family, friend and neighbor care was generally rated as poor. The vast majority of caregivers received FDCRS ratings of minimal or inadequate (3 or less on a 7-point scale). Average scores on the Arnett scale of 1 to 4 ranged between 2.6 and 3.2.

The two studies that used other instruments, by contrast, found mixed results. In the Low-Income Child Care sub-study, most of the homes were rated as safe and healthy (Layzer & Goodson, 2003). Providers were involved with the children in the majority of the observations, and they were largely

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<sup>2</sup> Maxwell used a modified version of the Child Care-HOME in an interview format and a modified version of the EQUAL. The GUP study used a relatively new instrument, the C-COS, in addition to the other instruments.

affectionate and responsive. Approximately a third of the children’s activities involved “play,” including creative activities such as pretend play.

On the other hand, a significant proportion of the homes in the study lacked some materials such as art supplies and sufficient quantities of age-appropriate books. There was little evidence of formal math and reading activities. While caregivers spent a significant amount of time talking to children, the language was primarily directive—that is, commanding and requesting—and did not involve a high level of verbal stimulation. Television use was common: in most homes, one or more children watched TV during the entire four-hour observation.<sup>3</sup>

In the NICHD study, grandparents (as well as in-home caregivers and fathers) had mean scores of 3 out of 4 on qualitative ratings of positive provider behaviors (sensitivity to a child’s distress, stimulation of development, positive regard) and negative behaviors (detachment, flatness of affect) that were reverse-coded. The mean score for grandparents of the frequency of positive caregiving that related to the “caregiver’s affect,” “physical contact,” “talk to and with the child,” and “stimulation of cognitive and social development” was 2.4 on a scale of 1 to 4.<sup>4</sup>

The five studies that examined quality in multiple settings also reported unfavorable ratings for regulated care.<sup>5</sup> With the exception of Kontos et al. (1995), the studies that used the FDCRS found low scores among similar proportions of regulated providers and kith and kin caregivers.<sup>6</sup> The Low-Income sub-study showed few differences between the providers who were regulated and those who were not, and few differences between those who were related to children in their care and those who cared for children who were not related to them. In the NICHD study, grandparents had higher ratings than regulated center teachers or family child care providers: the proportion of

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<sup>3</sup> The GUP study also showed that children spent a significant percentage of the time watching television as well as a relatively high frequency of time spent unoccupied and wandering.

<sup>4</sup> The number of categories in the positive caregiving frequency varied by age of the child.

<sup>5</sup> In the Three-City study, 92% of the regulated providers and 93% of the centers had FDCRS scores of minimal to inadequate (3 or below) compared to 88% of the family, friend and neighbor caregivers (Coley et al., 2001.) In the GUP study, the proportion of regulated family child care providers with low scores was the same as that for non-regulated providers ( Fuller & Kagan, 2000).

<sup>6</sup> The Family and Relative Care study found significant differences among centers and home-based providers (Galinsky et al., 1996).

regulated family child care providers with low scores was higher than that of grandparents at 15, 24, and 36 months.<sup>7</sup>

During the same period that these researchers were conducting observational studies to evaluate quality in family, friend and neighbor care, others were using focus group discussions and surveys to understand different aspects of these child care arrangements. These studies examined a wide range of issues, including parents' use of kith and kin child care; caregivers' motivations, demographic characteristics, and interests; and the nature of the child care arrangements (Porter & Kearns, 2005b). The findings indicated that parents often choose kith and kin child care because they want someone they know and trust to care for their children, and they need the flexibility that family, friend and neighbor caregivers offer for nontraditional work hours. The results also showed that most kith and kin caregivers provide care to help out family and friends. They only care for two or three children, on average, and many are not paid for this work (Porter & Kearns, 2005b).

This research contributed to a growing understanding that family, friend and neighbor care is fundamentally different from regulated center-based or family child care. As a result, a consensus began to emerge in the child care field that existing instruments, like the FDCRS, might not be appropriate for evaluating these kinds of child care arrangements, especially when care is provided by relatives (Porter et al., 2003). There was general agreement that a new instrument was needed to assess care in these settings. This was the impetus for the CCAT-R.

### **Development of the CCAT-R**

The CCAT-R measures quality for children under age six in care provided by relatives, the largest proportion of family, friend and neighbor caregivers (Smith, 2002). It consists of a three-hour assessment that includes an observation and an interview. The observation can be completed in 2 to 2½-hours; the interview in half an hour.

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<sup>7</sup> For toddlers at 15 months, the proportion of family child care providers with low scores was higher than that for grandparents: 50% compared to 30%. The difference between the two settings widened at 24 months, but they narrowed again at 36 months—55 % of grandparents with scores of 3 or less compared to 66% of family child care providers.

We developed the instrument in three phases over a four-year period from 2001 to 2005. The first phase consisted of focus groups with caregivers to understand their perceptions of quality, meetings with child care experts, and discussions with practitioners who worked with kith and kin caregivers. The next phase involved the creation of the instrument, and the final phase consisted of a field test to establish the CCAT-R's psychometric properties.

### **Constructs**

The CCAT-R measures a set of constructs that are based on themes from 10 focus groups that we conducted with 67 family, friend and neighbor caregivers in 2001 (Porter et al., 2003).<sup>8</sup> We asked them questions about the most important aspect of the care that they offered to children, the differences between their care and that provided by parents or in other settings, and the kind of relationships that they had with the children's parents. In addition, the discussion included questions about how caregivers spent their time with children and how they kept children safe and healthy.

The results indicated that many caregivers, especially family and friends, believed that they played a special role in the children's lives and that they provided a kind of love and affection that children did not receive from anyone else. Some caregivers demonstrated an awareness of child development. They reported that they talked to children, were sensitive and responsive to their needs, and engaged them in informal activities like playing patty-cake and going for walks. The caregivers also talked about having books and puzzles, but they did not mention materials like blocks that are often available in professional child care settings. The way they described putting babies to sleep on their backs and using safety gates to protect children on stairs reflected common knowledge of health and safety practices.

Initially, we derived 10 constructs from these themes: support for physical development; understanding of child development; nurturing; sensitivity and responsiveness; support for cognitive development; support for language development; discipline; supervision; relationship with parents; and health and safety. Consultations with child care researchers, practitioners, and policy makers in a

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<sup>8</sup> Four of the focus groups were conducted in Connecticut and six in California. The ethnic distribution of the caregivers reflected the proportion of Latino, African American and European Americans who use family, friend and neighbor care.

series of meetings convinced us to combine some of the constructs. We reduced nurturing, sensitivity, and responsiveness to a single construct—social/emotional—because these areas overlapped considerably. We added understanding of child development to it, because we posited that caregivers’ understanding of the developmental level of the child was manifested through her responsiveness to the child’s emotional, social, and cognitive cues. We also collapsed supervision and discipline into a single construct of behavior management.

The final set of five constructs related to the caregiver’s support for different developmental domains. They are: support for physical development, which includes health and safety; support for cognitive development; support for language development; support for social/emotional development; and behavior management. We also included the caregiver’s relationship with parents, because the nature of the relationship may affect child care quality. (Please see Appendix A: Definitions of Constructs.)

### **Components**

The CCAT-R consists of five components: the Action/Communication Snapshot; the Summary Behavior Checklist; the Health and Safety Checklist; the Materials Checklist and the Caregiver Interview. We looked at several existing instruments to create individual measures.<sup>9</sup> Among them are the FDCRS (Harms & Clifford, 1984), the Child Care Home Observation for Measurement of the Environment (CC-HOME) (Bradley, Caldwell, & Corwyn, 2003), and the Child-Caregiver Observation System (C-COS) (Boller & Sprachman, 1998). In many ways, the CCAT-R is similar to these instruments; in others, it is not.

*Assessing caregiver interactions.* Like the C-COS, which assesses the frequency of caregiver communication and interactions with the child, the CCAT-R uses a fine-grained approach to assess interactions between a single caregiver and a single focus child. It focuses on interactions that support specific child development domains, and uses time sampling to determine the frequency of these caregiver and child behaviors and activities.

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<sup>9</sup> Five items on the Health and Safety Checklist are taken from the FDCRS with permission of the authors. They are: infants held while bottle fed; toddlers seated or head propped when holding own bottle; quiet area for sick children available; caregiver washes hands with soap and water or sanitizing lotion after each diapering or when helping children with toileting; and extra clothes available to change children. The two Toileting items on the Summary Behavior Checklist are also taken from the FDCRS with the authors’ permission.

Time sampling is used in two components: the Action/Communication Snapshot and the Summary Behavior Checklist. Each is completed 6 times during a 2 ½- to 3-hour observation. (Please see Appendix B: Action/Communication Snapshot and Summary Behavior Checklist.). The Action/Communication Snapshot consists of 20 items that are coded in ten 20-second intervals in the 6-minute 40-second observation cycle (Exhibit 1). They are divided into four sections, two that apply to the caregiver and two that apply to the focus child. Individual items relate to verbal communication by the caregiver and the child as well as caregiver-child engagement in activities. Examples of caregiver talk include requesting language as well as repeating and extending it; examples of focus child talk items include self-talk (including talk to materials) and talk to the caregiver.

**Exhibit 1**

<i>CHECK ALL THAT APPLY</i>	1		2		3		4		5		6	
<b>A. CAREGIVER VERBAL COMMUNICATION WITH FOCUS CHILD</b>												
2. Requests language or vocalization	20 second observe	20 second record	20 second observe	20 second record	20 second observe	20 second record	20 second observe	20 second record	20 second observe	20 second record	20 second observe	20 second record

The Summary Behavior Checklist provides a context for understanding the interactions that occurred during the observation cycle. Completed once at the end of each 6-minute 40-second observation cycle, it consists of nine sections with a total of 35 items. The sections provide information on caregiver and child affect; the child's activities, such as eating or sleeping; the caregiver's activities, such as reading or playing music with the child; and the caregiver's interactions with the child, such as kissing or holding and criticizing or restraining. In addition, there are sections on toileting, behavior management, and child safety.

*Assessing the environment.* Unlike the FDCRS or the CC-HOME, the CCAT-R does not include health, safety or materials in a global quality score, because we did not want to misrepresent the quality of care in homes where there might be few resources. It assesses these aspects of the environment in two checklists, one for health and safety and the other for materials. There is a version of each checklist for children under the age of three and for children ages three and older.

The Health and Safety Checklist consists of four sections: Food Preparation; Environment; Routines; and Outdoor Play with a total of 42 items in the version for children under three, and 32

in the version for children three and older. Among them are “red flag” items that present an imminent danger to the child.<sup>10</sup> Examples include “safety caps on electrical sockets,” “dangerous substances are locked away or out of reach,” and “provider can see or hear children age 5 and under at all times.” Because we did not want to penalize the caregiver if an item was not observed—if there was no outdoor play during the observation, for example—the checklist includes a category of “not applicable.”

Unlike the FDCRS or the CC-HOME, which assesses the quantity of each type of material in the home, the CCAT-R Materials Checklist assesses the variety and availability of materials. It consists of two sections, Furnishings and Materials, with 17 items on both versions. Examples of furnishings include soft furniture and booster seats; examples of materials range from crayons and paints to books and riding toys. The items that are present are noted on the form with checks.

*Caregiver interview.* Another difference between the CCAT-R and existing instruments is that the CCAT-R includes an interview with the caregiver as a formal component. The responses provide insights into the caregiver’s attitudes towards child care as well as her relationship with the parent and the child that are helpful for interpreting the scores. The interview also gathers data about the nature of the child care arrangement and caregiver characteristics that are useful for analysis and needs assessment.

*Scoring.* Unlike most other instruments, the CCAT-R does not provide a single total score for quality. Caregivers are rated on four factors: caregiver nurturing; caregiver engagement in activity with child; caregiver/child bidirectional communication; and caregiver unidirectional use of language. Each is related to different constructs.

The caregiver nurturing factor measures the caregiver’s support for social/emotional development, while the caregiver engagement factor measures interactions that promote physical and cognitive development. Two factors relate to language. One, caregiver/child bidirectional communication, reflects interactions around language *between* the caregiver and the child. The other, caregiver unidirectional use of language, measures the caregiver’s talk *to* the child.

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<sup>10</sup> There are 14 red flag items on the under three checklist and 9 on the three and older checklist.

Individual factor scores are based on the average of the total frequencies for specific Snapshot and Behavior Checklist items from the six observation cycles. One Snapshot item—“Directs focus child activity without regard for child’s interest” (B.3) and two Behavior Checklist items—“Caregiver not engaged” (B.2.3) and “Caregiver does her own activity without including focus child” (D.10) are scored as negative. Floors for each factor are based on the median scores from the field test. Scores below the floor indicate poor quality care. The scoring system does not specify ranges for good and excellent care.

### **The CCAT-R Field Test**

The field test for the CCAT-R began in early 2004. Its purpose was twofold. First, we aimed to establish the CCAT-R’s psychometric properties; and second, we sought to use the CCAT-R to assess quality in child care provided by relatives. In addition to the CCAT-R, we also used selected items from the FDCRS for comparative purposes.

#### **Training**

Training for the field test observers was conducted during a four-day period in December, 2003. It consisted of two days of classroom training with practice on three videotaped observations of grandmothers, and two days of live observations.<sup>11</sup> Observers were trained on the CCAT-R as well as the FDCRS items.

#### **Recruitment**

We aimed to recruit 100 poor or low-income relatives for the study, because family, friend and neighbor care is more commonly used by families with low incomes (Capizzano et al., 2000), and programs that serve kith and kin caregivers frequently draw from this socioeconomic group. To obtain geographic and ethnic distribution, we worked with organizations that provided services to kith and kin caregivers in low-income communities in four sites: Community Connections for Child Care in Bakersfield, California; the Association for Supportive Child Care in Tempe, Arizona; Action

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<sup>11</sup> The first day’s session, conducted by Susan Sprachman of Mathematica Policy Research, Inc. and the staff of the Institute for a Child Care Continuum, included an introduction to the CCAT-R components; a detailed review of the Action/Communication Snapshot and Behavior Checklist; practice using the CCAT-R on video segments; a discussion of the health and safety and materials checklist; and interview role play. The Institute conducted the remainder of the training.

for Children in Chicago, Illinois; and Aquinas Housing Corporation in New York City. The Institute for a Child Care Continuum also recruited caregivers in New York. Two sites, New York and Chicago, were urban; the Tempe recruitment area included suburban neighborhoods. Bakersfield was rural. Each site was expected to recruit 25 caregivers with specific ethnic characteristics. Half were supposed to be caring for children under three years of age.

Recruitment began in January, 2004. There were four screening requirements for participants: caregivers had to be exempt from state family child care licensing requirements; caring for at least one related child under six; providing care for a minimum of 15 hours a week; and English-speaking, Spanish-speaking, or bilingual in English and Spanish.<sup>12</sup> The caregivers received a \$50 stipend for participating in the study.

The relative caregivers were recruited in a variety of ways. Field observers at all four sites contacted current or former program participants to invite them to enroll in the study.<sup>13</sup> They also publicized the study through fliers posted at community agencies as well as through word of mouth. Among the caregivers who were contacted personally through phone calls or letters, refusal rates ranged from 4% in Arizona and 50% in New York and California, to 72% in Illinois.

### **The CCAT-R Sample**

A total of 92 observations were completed. Fifty-two percent of the caregivers were Latino, 26%, European American, and 21% African American (Table 2: Sample Characteristics). The remainder self-identified as other ethnic groups.

The vast majority of the caregivers—96% (88)—were women, but there were four men. More than half (55%) were grandparents of the children in care, and slightly more than a third (36%) were aunts or uncles. Approximately 9% were related to the children in some other way, such as cousins. The majority of the caregivers (61%) were married or living with a significant other. Among those who were single heads of households, half were never married; the remainder were separated, divorced or widowed.

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<sup>12</sup> Caregivers and parents had to agree to participate in the study by signing a “Protection of Human Subjects” form.

<sup>13</sup> The Institute recruited participants through flyers at community organizations that were located in low-income communities.

Although we did not ask questions about income levels, it is likely that most of the caregivers had low incomes, because they were recruited in low-income neighborhoods.<sup>14</sup> Slightly more than half (58%) were paid for providing child care. Of the 53 caregivers who were paid, 31 received payment from the parent, 19 received payment from the government, and 3 received payment from both the government and the parents. Approximately 70% of the caregivers who responded to the interview question about payment indicated that they could afford to provide care without it. Half of them said that parents gave them gifts or performed some service in exchange for the care.

The range of educational levels among the participants was wide. Of those caregivers who reported this information, 40% had high school degrees or equivalent. Another 45% had some college, a two-year degree or a four-year degree.<sup>15</sup> By contrast, approximately 15% of the caregivers had not completed high school.

There was also a wide range of child care experience. Approximately 44% of the caregivers had five or fewer years of experience providing child care for other people's children; 13% had been caring for children for a year or less. On the other hand, nearly 20% had been taking care of children for 20 years or more.

Caregivers' training in early childhood education varied, too. Slightly more than half (53%) of the caregivers had some sort of specialized training such as Child Development Associate classes, teacher training, nurse's training, child care workshops, parent education workshops, or some other type of training such as training for foster care. Nearly a quarter had taken classes in child development or early education at a college or university.

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<sup>14</sup> In addition, research indicates that parents tend to choose caregivers with backgrounds similar to their own. This suggests that at least a quarter of the caregivers may have been poor or working class because the parents for whom they provided care were eligible for child care subsidies (Layzer & Goodson, 2003).

<sup>15</sup> N=72.

**Table 2: Sample Characteristics**

	N	%
Race/Ethnicity (N=92)		
Latino	48	52.2
European-American	24	26.1
African-American	19	20.6
Other	1	1.1
Gender (N=92)		
Female	88	95.7
Male	4	4.3
Relationship to Child (N=92)		
Grandparents	51	55.4
Aunts/Uncles	33	35.9
Other	8	9.7
Marital Status (N=92)		
Single	15	16.3
Married	56	60.9
Never Married	6	6.5
Divorced/Separated	12	13.0
Widowed	3	3.3
Payment (N=92)		
Not Paid	39	42.4
Paid	53	57.6
Government Only	19	20.7
Parent Only	31	33.7
Government & Parent	3	3.3
Education (N=72)		
Some High School	11	15.3
High School Graduate	29	40.3
Some College	13	18.1
Two-Year College Degree	14	19.4
Four-Year College Degree	5	6.9
Child Care Experience (N=82)		
1 year or less	11	13.4
2 to 5 years	25	30.5
6 to 10 years	18	22.0
11 to 19 years	12	14.6
20 years or more	16	19.5
Child Age in Years (N=90)		
0 years old	9	10.0
1 year old	15	16.7
2 years old	24	26.7
3 years old	9	10.0
4 years old	22	24.4
5 years old	11	12.2
Number of children in care		
1 child	37	40.2
2 children	19	20.7
3 children	22	23.9
4 children – 7 children	14	15.2
Care for children with special needs (N=91)	15	16.5
Training (N=91)	48	52.7
Took classes (N=92)	22	23.9

On average, caregivers provided care for two children; the range of children in care varied from one to seven. Approximately 40% of the arrangements consisted of one child; another 21% provided care for two children. Slightly more than a third of the children (38) were under three.

Approximately 16% of the caregivers indicated that they were caring for children with special needs such as attention deficit hyperactivity disorder, learning delays, or asthma.

### **Data Collection**

Data collection consisted of a single three-hour observation of a relative caregiver by a pair of observers. Six consistent pairs of observers conducted the observations—one pair each in Arizona, California and Illinois, and three pairs in New York.<sup>16</sup> Spanish bilingual observers conducted the observations in the homes of Spanish-speaking caregivers. One field test observer used the CCAT-R and the other, the selected FDCRS items. Both observers completed a post-visit rating scale to record their reactions to the visit. Selection of the focus child was based on the related child under six who spent the most hours in care.

### **Psychometric Properties**

*Reliability.* Observers were trained to a criterion of .80 exact agreement on individual items in the CCAT-R Action/Communication Snapshot and the Summary Behavior Checklist in a minimum of 4 of the 6 observation cycles.<sup>17</sup> Inter-rater reliability was obtained through comparison of observers' coding with the master-coded videotaped practice observations and two live observations with a reliable observer before observers used the CCAT-R in the field.

*Validity.* Because the CCAT-R is a new instrument, we believed that it was important to establish its validity. We used two approaches: content validity and factor analysis. The content validity is based on participation of child care researchers throughout the CCAT-R's development. A group of researchers reviewed the constructs that informed the individual items in the CCAT-R, and several reviewed the full CCAT-R before the pilot test. In addition, we discussed the constructs and the CCAT-R items with practitioners at national conferences to identify whether the measure reflected caregiver behaviors with which they had experience. It is possible that the CCAT-R has criterion

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<sup>16</sup> One pair was from Aquinas Housing Corporation and the other two pairs were from the Institute.

<sup>17</sup> They were trained to a criterion of .90 on the FDCRS items.

validity as well because the items are grounded in child development theory and research and, as a result, may be predictive of positive child outcomes.

*Factor analysis.* Initial confirmatory factor analysis indicated that there were too few cases of several items— toileting, for example—for statistically useful variation, and these items were eliminated. Subsequent analyses indicated that there were not enough unique items in behavior management to support it as a construct. We eliminated it from the scoring, but we retained the related Behavior Checklist items in the coding for future research.

Additional confirmatory factor analysis using a maximum likelihood fit test with both promax and oblimin rotations produced five factors that seemed feasible. To check for consistency, we ran the generalized least squares fit function with promax rotation. Although the two solutions differed in several ways, there was satisfactory substantive correspondence in the first four factors to justify their use. As the following table indicates, the selection minimizes the number of items with loadings at .35 or greater on multiple factors as well as the number of items that did not load appreciably on any factor (Table 3: CCAT-R Factors).

Some items, particularly those related to nurturing such as kissing, holding and patting, loaded on more than one factor, specifically the language factors. This may reflect the caregiver's interactions with infants and toddlers, because caregivers may hold babies as they talk to them. In addition, some of the caregiver talk items load on both language factors. The primary difference between these factors is that the child responds to the caregiver's talk in bidirectional communication, and the child talks to herself or the materials in which she is engaged, instead of the caregiver, in the unidirectional use of language. In other words, the former measures caregiver talk with the child, while the latter measures caregiver talk to the child.

Table 3: CCAT-R Factors

	Caregiver Nurturing	Caregiver Engagement in Activity with Focus Child	Caregiver/Child Bidirectional Verbal Communication	Caregiver Unidirectional Use of Language
<b>Snapshot Items</b>				
A.1 Responds to FC language or vocalization			.846	.421
A.2 Requests language or vocalization			.673	.388
A.3 Verbally directs FC action			.308	.685
A.4 Repeats or builds on what child says			.481	.701
A.5 Names or labels		.203	.430	.826
A.6 Other talk		.078	.123	
B.1 Does activity with FC alone or with other children		.759	.585	
B.3 Directs FC's activity without regard for child's interests		.092		.220
C.1 Caregiver		.548	.933	
C.2 Self-talk				.446
D.1 Caregiver			.204	.661
D.2 Safe materials or objects		.518		
<b>Behavior Checklist</b>				
B.2 Caregiver Tone		.269	.375	
D.10 Caregiver does own activity excluding focus child	-.333			
F.1 Kisses and/or hugs child	.489			.210
F.2 Holds, pats or touches child	.748		.042	.251
F.3 Comforts child	.657		-.152	

### CCAT-R Quality Results

As we indicated earlier, the CCAT-R identifies a floor for each factor, below which the care is poor. The floor is based on the median score for the caregivers in the field test: half scored above this level, half below. We chose to use the median score rather than the average, or mean score, because we believed it represented a more accurate measure of quality.

The floors vary depending on the number of items from the Snapshot and the Behavior Checklist as well as the age of the child. On all of the factors, median scores for caregivers in the field test who were caring for children under three were higher than those who cared for children three and older.

For the caregiver nurturing factor, which includes three positive behavior checklist items and one negative behavior checklist item, the overall median score from the field test was 5 of a possible 18. This means that the caregivers kissed, held, or comforted the focus child during only 2 of the 6 observation cycles, or approximately one third of the observation. For caregivers who provided care for children under three, the median score was 7, more than double that for children three and over, which was 3.

The overall median score on the caregiver engagement factor for caregivers in the field test was 45, with a Snapshot total of 89 of a possible 240. This means that the caregivers did an activity and used simple language like naming or labeling, and the child was engaged with materials, in slightly more than a third of the time during the observation. The score for caregivers with a focus child under three was 47, only slightly higher than that of children three years and older (44).

For the Caregiver/Child Bidirectional Communication factor overall the caregivers in the field test had a median score of 79 (with a Snapshot total of 147 out of a possible 540). This means that they talked with the focus child, engaged in an activity with her, and held or comforted her in slightly fewer than 2 of the 6 cycles, or less than a third of the time during the observation. Like the median score for caregiver engagement, scores for children under three were only a few points higher than those for children three and older: 79 compared to 77.

For Caregiver Unidirectional Use of Language, the median score was 45 (with a Snapshot total of 85 of a possible 320). This means that these caregiver interactions with the child occurred 20% of the time. For caregivers with children under three, the score was 48.5, nearly 10 points higher than the score for children three and older, which was 39.5.

*Health and safety.* Overall, the scores indicated that most homes had healthy and safe environments for children. Four in ten (37) of the 92 homes did not have a single “red flag” item. In homes where there were “red flag” items, the number was small: 22 had one “red flag” item, 15 had 2, and 12, 3.

The most common were unsecured electrical cords (36) and open electrical outlets (30), followed by dangerous substances within reach. Only four homes lacked a safety gate for the stairs, and there was only one instance of an infant who was not sleeping on her back.

The number of observed items varied widely. For children under 3, the largest number was 28 of 42, and the lowest was 4; for the older children, the range was 0 to 23 of a total of 32. The most common items that were not observed were related to routines like bathing, sleeping and eating or outdoor play equipment.

*Materials.* The number of items that were observed in caregivers' homes ranged from 1 to 15 of a possible 17 for children under three and 3 to 14 for children over three. Most homes for children in both age groups had books as well as crayons, markers and paper. Cuddly toys, pull toys for infants and toddlers, and pretend play materials were available in most cases. In homes for older children, there were puzzles and construction toys like alphabet and bristle blocks.

Among the most common items that were not observed for children under three were materials for gross motor activity such as play slides or rocking horses and those that support fine motor development such as shape sorters. For children over three, there was not much evidence of toys such as sorting cubes that teach color. Booster seats to raise children on adult chairs to table level for eating or art activities were not commonly observed for children in both age groups.

### **FDCRS Scores**

We used four FDCRS items for our comparison with the CCAT-R factor scores.<sup>18</sup> They were informal use of language, helping children use language, helping children reason and tone, which relates to the “warmth and pleasantness” (p. 30) in the interactions between the caregiver and the children and among the children (Harms & Clifford, 1984). (Please see Appendix C for definitions of each item.) We selected these items because they correspond with items in the CCAT-R factors Caregiver/Child Bidirectional Communication, Caregiver Unidirectional Communication, Caregiver Engagement in Activity with Child, and Nurturing, respectively.

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<sup>18</sup> Although we had planned to use a Discipline item, we eliminated it when we dropped discipline from the CCAT-R constructs.

Three items apply to infants and toddlers as well as preschool children. On helping children use language and helping children reason, the median FDCRS score was 4.<sup>19</sup> On tone, it was higher—6.<sup>20</sup> The fourth item, informal use of language is divided into two parts, one for infants and toddlers and one for preschoolers. The median for infants and toddlers was 6, and the median for preschoolers was 4.<sup>21</sup>

## Analysis

Initial analysis of the CCAT-R scores for the 92 relative caregivers in our sample shows some interesting relationships. Some of them reflect results from other studies of child care quality; others seem to be a function of the distinctive nature of child care provided by relatives. We found three structural features that are related to quality (Table 3: Pearson's *r* Correlations between Aspects of Relative Child Care and Quality). One is the education of the caregiver. For the caregivers in our study, higher education—some college, an associate's degree, or a bachelor's degree—was associated with higher scores on three factors: caregiver engagement in activity--her support for the child's cognitive development--and both language factors. Caregivers with some college or an associate's degree had higher quality on the caregiver's engagement with the child in an activity factor (Pearson's *r* .292 and .209 respectively), while those with some college or a bachelor's degree had higher scores on the caregiver/child bidirectional communication factor. There was also an association between the caregiver's experience caring for children and caregiver engagement in activity: those with more experience had higher scores on this factor.

Another structural feature was group size. Overall, quality was higher when there were a smaller number of children in care. Scores on both language factors (talk with the child and talk to the child) were higher for those caregivers with two children in care than those with three or more. The quality of nurturing was also associated with two children in care rather than three, and the age of the child played a role as well.

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<sup>19</sup> The mean for the former was 3.9 and the standard deviation was 1.8; the mean for the latter was 3.7 with a standard deviation of 1.7.

<sup>20</sup> The mean was 5.3 with a standard deviation of 1.6.

<sup>21</sup> The mean for 14a. was 4.6, with a standard deviation of 1.4; the mean for 14b. was 5.4, with a standard deviation of 1.4.

Aspects of the environment such as materials and health and safety features were also associated with quality. A larger variety of materials was related to higher scores on caregiver engagement in activity and caregiver/child bidirectional communication. These trends were stronger for children three and older, and were associated with unidirectional use of language as well.

**Table 4: Pearson's r Correlations between Aspects of Relative Child Care and Quality**

	Caregiver Nurturing	Caregiver Engagement in Activity with Child	Caregiver/Child Bidirectional Communication	Caregiver/Child Unidirectional Communication
<i>Caregiver Characteristics</i>				
Child Age	-.439****	.008	-.047	-.102
Under 3	-.256*	.185	.286**	.356***
3 and over	.097	.017	-.238	-.401**
Years of Experience	-.027	.078	.133	.226**
Under 3	-.169	.048	.149	.242*
3 and over	-.275	.082	.026	-.029
Education	-.023	.311***	.321***	.324***
Under 3	-.054	.521****	.575****	.496***
3 and over	.155	.159	.096	.099
Number of kids in care	-.184*	-.160	-.267***	-.266***
Under 3	-.273**	-.188	-.226	-.188
3 and over	-.155	-.124	-.314*	-.444***
Paid by Family	-.061	-.212**	-.054	.172*
Under 3	-.201	-.314***	-.054	.202
3 and over	-.066	-.092	-.066	.042
Paid by Government	.221**	.238**	.010	-.183*
Under 3	.267*	.129	-.181	-.361***
3 and over	-.012	.368**	.224	.073
Relationship with Parent	.089	-.057	.028	.192*
Under 3	.091	.074	.182	.235*
3 and over	.099	-.175	-.121	.137
<i>Materials and Health &amp; Safety Checklists</i>				
Materials Present	-.025	.266***	.185**	.149
Under 3	-.025	.319**	.347**	.277**
3 and over	-.039	.170	-.048	-.058
Red flags	-.063	-.313***	-.227**	-.177*
Under 3	.045	-.207	-.126	-.226
3 and over	-.411***	-.485***	-.404**	-.153
Unsecured Electrical Cords	-.140	-.238**	-.224**	-.184*
Under 3	.030	-.066	-.122	-.224
3 and over	-.271*	-.438***	-.336**	-.053
Exposed	.056	-.337***	-.206**	-.193*

Dangerous Substances				
Under 3	.093	-.260*	-.097	-.184
3 and over	-.262	-.518***	-.450***	-.348**
Pot handles	-.202*	-.246**	-.182*	-.106
Under 3	-.176	-.135	-.067	-.098
3 and over	-.382**	-.403**	-.352**	-.151

\* $p < .10$ . \*\* $p < .05$ . \*\*\* $p < .01$ . \*\*\*\* $p < .001$ .

There was also a relationship between red flag items and quality: the higher the number of red flag items, the poorer the care in terms of the caregiver's engagement with the child in activities and her communication with the child. This association was stronger for children three and over. It was also linked to nurturing. Some red flags were related more closely to these factors than others. For example, unsecured electrical cords were associated with lower scores on caregiver engagement.

Our analysis also pointed to some relationships between quality and particular aspects of care that may be unique to relative care. One is the relationship between parents and caregivers. Caregivers who reported that parents were interested in their lives—who talked to them often about what was going on at home—had higher scores on nurturing than those who had no such involvement.

Another aspect was payment. There were two different trends—one related to whether the caregiver was paid, and the other to the source of the payment. Caregivers who were paid by the government had higher scores on caregiver engagement in activity and nurturing than those who were paid by the family or did not receive any payment. By contrast, caregivers who were paid by families had higher scores on caregiver/child bidirectional communication than those who were paid with subsidies or not at all.

## Discussion

One of the objectives of the field test was to determine the CCAT-R's psychometric properties. This aspect of developing a new instrument is important, because the results of its use have consequences for caregivers and the parents who depend on them. Instruments must be reliable from a scientific perspective; otherwise, their results are not credible. The CCAT-R psychometric properties include:

- Content validity based on review by child care researchers,
- Inter-rater reliability to a criterion of .80 exact agreement on individual items,

- Factors with minimal item loading on multiple factors and minimal items without appreciable loading on any factor.

These properties compare favorably with a number of existing instruments, which means that the CCAT-R can be used with confidence.

In addition, comparison of the CCAT-R scores and the FDCRS ratings on individual items seems to indicate that using the CCAT-R medians as floors may be an accurate measure of quality. On the language and cognitive items for preschoolers, the FDCRS median score, at slightly better than minimal, was equivalent to the floors on the CCAT-R factors. There were differences between the scores for language for infants and toddlers and nurturing on the two instruments, but this may be a function of the differences in the definition of the items. It is also possible that the CCAT-R floors may have to be re-normed with additional cases.

Another aspect of the field test was to establish whether the CCAT-R would be simple and efficient to use for needs assessments and evaluations. In biweekly debriefings, the field test observers reported that looking for individual interactions between the caregiver and the child during specific time intervals was easy to do after they made the initial shift from the approach used in global instruments. The observers also indicated that coding for specific items in the three-hour observation sharpened their awareness of the nature of the caregiver's interactions with the child, which allowed them to identify the caregiver's strengths and weaknesses. Reactions to the Checklists were positive for similar reasons: the observers could see what was present and what was missing in the home.

Our findings about quality in child care provided by relatives point to some issues that may warrant consideration by policy makers. One is related to participation in the subsidy system by parents who use relative child care. Our analysis shows that caregivers who were reimbursed by the government had higher scores on support for cognitive development than those who were not. This suggests that payment may play a role in child care quality, and, more important, that caregivers may provide better care when they are confident that they will be paid regular amounts on a regular basis.

Other findings relate to possible directions for initiatives to improve quality. Our research indicates that there is an association between health and safety and quality. This suggests that it might make sense to provide caregivers with some basic equipment and materials through stand-alone initiatives or as incentives for participation in training or home visiting. In addition, the rather low floors on the two language factors seem to indicate that caregivers may benefit from information about child development in general, and language development in particular, in training or support groups. The association we found between quality and parents' involvement in the caregivers' lives suggests that programs might want to include discussions about caregiver-parent communication in their efforts as well. While a number of programs already use several of these strategies, these approaches might be adopted by others that have concerns about family, friend and neighbor care (Porter & Kearns, 2005b).

The results of our study contribute to the knowledge base about quality in family, friend and neighbor child care, but they also raise many questions. We looked at a small sample of convenience: all of the caregivers were relatives and all of them, low-income. Clearly, there is a need for research on a broader scale--not only studies with larger caregiver samples but also studies of care provided by friends and neighbors. We need to explore the role that payment plays in these settings—whether participation in the subsidy system makes a difference on a wide scale, the factors that contribute to these differences, and the policies that contribute to caregivers' willingness to participate. We also need evaluations of efforts to support these caregivers as well as studies of the outcomes of the children in their care.

In addition, although the CCAT-R seems to be an appropriate instrument for assessing quality, it will be important to test it with other cultural groups beyond the Latinos, African Americans, and European Americans in our sample. We need to know whether the CCAT-R's constructs and measures correspond to the views of quality held by parents in these groups. Related to this question are parents' expectations for the role that relative care plays in supporting their children's readiness for school.

Such research can help us better understand the nature of quality in family, friend and neighbor care which can, in turn, inform policy for improving it. Although we do not yet have data about how

children fare in these settings, our findings suggest that family, friend and neighbor care—particularly relative care—has the potential to support children’s development. This means parents can choose this care with confidence that their children may have a positive experience and that states can be confident that family, friend and neighbor care represents a legitimate option for families.

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## **Appendix A: Definitions of Constructs**

### **Physical Development**

The construct for physical development consists of support for both fine motor and gross motor development. Items for this construct, which are based on caregivers' reports of coloring and drawing, are included in the Action/Communication Snapshot ("Focus child interacts with materials") and the Summary Behavior Checklist ("Child Activity Type: Gross and Fine motor"). Materials and practices that promote healthy physical development are also assessed in the Health and Safety Checklist and the Materials Checklist.

### **Cognitive Development**

Caregivers reported that they played patty-cake, used shape or sorting toys, danced with children, and cooked with them. Some talked explicitly about teaching children numbers, colors, or letters. The related items for this construct are included in the Action/Communication Snapshot ("Caregiver Action: Does an activity with FC alone or with other children," and "Focus Child Interacts with or attends to caregiver, safe materials or objects; other adults or other children"), and the Summary Behavior Checklist ("Child Activity Type: self-help activities;" "Caregiver Activity with Focus Child: encourages concept learning, encourages experimentation with object; explains demonstrates how to do something; uses routines as learning activities; music or rhythmic activities").

### **Language Development**

Language and literacy development is a subset of cognitive development. We decided to delineate it as a separate construct because it plays such an important role in child development. The Summary Behavior Checklist includes a number of items based on caregiver reports of singing, story telling and reading that relate to this construct, while the Action/Communication Snapshot includes items related to different kinds of caregiver talk such as questioning, naming or labeling objects, and repeating and building on child language.

### **Social/Emotional Development**

Strong social/emotional development is essential for children, not only because it is vital to mental health in adulthood, but also because it contributes to cognitive and language development. The Summary Behavior Checklist includes items related to nurturing, sensitivity and responsiveness, all

of which are related to social/emotional development. They are holding, patting, kissing and hugging and responding to children's distress and comforting them. One Snapshot item—directing the child's activity without regard for her/his interests—is also related to this construct.

### **Behavior Management (Discipline/Supervision)**

Discipline, often conceptualized as child socialization, is an important part of an assessment of quality, as both permissive and punitive approaches have a detrimental effect on development, while reasonable and appropriate discipline helps children internalize controls and become self-actualizing citizens and responsible members of society. The instrument includes several items about the type and frequency of disciplinary practices that are consistent with the focus group data. Minimizing frustration through redirection and explaining consequences of behavior are designed to assess positive practices, while using physical punishment and inappropriate use of time-outs is a measure of negative practices.

### **Relationships With Parents**

The relationship between caregiver and parent cannot easily be observed, because this type of interaction often occurs outside of the child care setting. The Caregiver Interview measures these aspects of quality. Questions focus on aspects of the relationship such as the congruence of views on child-rearing practices, shared understanding of the role that child care plays in each other's lives, and mutual interest in each other's well-being. In addition, it measures the extent of the caregiver's involvement in the life of the child and the parent outside of child care.

### **Health and Safety**

Health and safety is a primary concern in child care. Items in the Health and Safety Checklist are based on two standards: the K-Mart or Sam's Club standard for the types of equipment that could be expected in the home; and the "Today" show or "USA Today" standard for information about practices.



**Appendix B: CCAT-R SUMMARY BEHAVIOR CHECKLIST**  
CHECK FOR EACH BEHAVIOR THAT OCCURRED DURING THE 6-MINUTE 40-SECOND  
OBSERVATION PERIOD

**A. PREDOMINANT LOCATION OF FOCUS CHILD (CHECK ONE)**

1.  Inside
2.  Outside

**B1. PREDOMINANT FOCUS CHILD TONE (CHECK ONE)**

1.  Smiling/laughing
2.  Engaged
3.  Upset/crying
4.  Listless/detached/withdrawn

**B2. PREDOMINANT CAREGIVER TONE WITH FOCUS CHILD (CHECK ONE)**

1.  Smiling/laughing
2.  Engaged
3.  Not engaged
4.  Irritated/hostile
5.  Listless/detached/withdrawn

**C. CHILD ACTIVITY TYPE – CHECK ALL THAT APPLY**

1.  Gross motor
2.  Fine motor
3.  Initiates help-seeking actions
4.  Self-help activities
5.  Sleeping
6.  Eating/drinking
7.  Unoccupied/wandering\*

**D. CAREGIVER ACTIVITY WITH FOCUS CHILD – CHECK ALL THAT APPLY**

1.  Encourages concept learning
2.  Encourages experimentation with object
3.  Encourages independence or autonomy
4.  Explains/demonstrates how to do or use something
5.  Uses routines as learning opportunities
6.  Imitates infant's gestures
7.  Tells stories, rhymes, sings
8.  Interacts with books or other print materials
9.  Musical or rhythmic activity
10.  Caregiver does own activities excluding focus child

**E. TOILETING/DIAPERING – Code YES, NO or NA (did not occur)**

- |    | <u>YES</u>               | <u>NO</u>                | <u>NA</u>                |                          |
|----|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Handled in calm manner   |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Accidents handled calmly |

**F. CAREGIVER INTERACTION WITH FOCUS CHILD – Code YES or NA (did not occur)**

- |    | <u>YES</u>               | <u>NA</u>                |   |
|----|--------------------------|--------------------------|---|
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | Kisses or hugs child                          |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | Holds, pats, or touches child                 |
| 3. | <input type="checkbox"/> | <input type="checkbox"/> | Comforts child                                |
| 4. | <input type="checkbox"/> | <input type="checkbox"/> | Responds to child's distress*                 |
| 5. | <input type="checkbox"/> | <input type="checkbox"/> | Restrains child (not for safety reasons)*     |
| 6. | <input type="checkbox"/> | <input type="checkbox"/> | Handles child roughly                         |
| 7. | <input type="checkbox"/> | <input type="checkbox"/> | Criticizes, shames, teases or threatens child |
| 8. | <input type="checkbox"/> | <input type="checkbox"/> | Ignores child*                                |

**G. BEHAVIOR MANAGEMENT – Code YES or NA (did not occur)**

- |    | <u>YES</u>               | <u>NA</u>                |   |
|----|--------------------------|--------------------------|---|
| 1. | <input type="checkbox"/> | <input type="checkbox"/> | Minimizes frustration through redirection |
| 2. | <input type="checkbox"/> | <input type="checkbox"/> | Explains consequences of behavior         |
| 3. | <input type="checkbox"/> | <input type="checkbox"/> | Inappropriate use of time-outs            |
| 4. | <input type="checkbox"/> | <input type="checkbox"/> | Uses physical punishment                  |

**H. CHILD SAFETY – Code YES, NO or NA (did not occur)**

- |  | <u>YES</u>               | <u>NO</u>                | <u>NA</u>                |                                       |
|--|--------------------------|--------------------------|--------------------------|---------------------------------------|
|  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Intervenes to protect child from harm |

\*Code "Yes" only if occurs for *more than half* of the observation cycle.

## Appendix C: Selected FDCRS Items

We used four indicators from two FDCRS areas, language and reasoning and social development. They are described below.

*Informal use of language.* Indicator 14a and 14b relates to the CCAT-R language development construct. It is used to capture caregiver talk with the children in care; “a” focuses on infants and toddlers, and “b” relates to children 2 and older. The items range from no talk or talk only to control children’s behavior (1) and high level language such as adding to what the child says (3) to asking questions that encourage complex answers (7). The items under each rating for “a” and “b” are based what is appropriate for that age group.

*Helping children use language.* Indicator 16 compares to the CCAT-R language development construct as well. This indicator focuses on caregiver efforts to encourage children to use language with materials and/or activities. A “1” rating indicates that there are no activities of materials to help children practice using language. For higher scores, the caregiver must engage children in activities such as singing, naming and labeling objects as well as encouraging older children to share experiences.

*Helping children reason.* Indicator 17 measures the extent to which the caregiver provides an environment in which children can learn concepts. This relates to the CCAT-R item of concept learning in the construct of cognitive development. Items range from no activities or materials to help children reason (1) to working on concept development with every individual child through game playing at least on a week (7).

*Tone.* Tone (27), which is related to the CCAT-R construct of nurturing, is used to measure the quality of interaction between the caregiver and the children as well as among the children themselves, specifically looking for “warmth and pleasantness” in the interactions. If the caregiver is always angry and the physical contact (for example, “hurrying children along” p. 31) is only used for control, the rating is “1.” The rating increases to “3” when physical contact is used for routines and the caregiver “does not smile at, talk to, or listen to children” (p.31). If the caregiver “uses physical contact to show affection to all children (for example, “gentle holding hugging, pat on the head”

p.31), and the children are relaxed, the rating increases to “5”. Respect shown among children and the caregiver and caregiver praise for children’s helpfulness are required for a rating of “7.”