

Chapter 4

WHAT IS THE QUALITY OF CHILD CARE USED BY LOW INCOME WORKING FAMILIES IN THE FOUR COMMUNITIES?

In this chapter, we present results of the child care quality assessments conducted in the Community Child Care Research Project. The sample consisted of the 307 child care settings attended by the children in the study. Data collection took place during 2002 and 2003. Sixty-three percent (n=193) of children were placed in child care centers (licensed child care center, child care ministry, and Head Start program) while 27% (n=114) were in home-based settings (licensed and unlicensed family child care and relative care). This chapter describes the quality of child care utilized by these 307 children, and examines differences in quality among the communities and among types of care in the sample. Descriptive statistics are presented in Appendix E.

WHAT IS CHILD CARE QUALITY AND HOW DID WE ASSESS IT?

A number of measures of quality were used in this study because several elements of quality have been found to be important in previous research (Phillips, Mekos, Scarr, McCartney, & Abbott-Shim, 2000). The measures used in this study assessed the global, structural, and process quality of child care settings.

Global quality includes an overall view of quality that takes into account the space and furnishings of the program, safety and health precautions, program structure, as well as activities and learning opportunities presented to children.

Structural quality includes group size, staff-child ratio, and the training and experiences of caregivers. Past research has shown that child care settings staffed with a fewer numbers of children per teacher, a relatively small group sizes, and a teacher with a strong education background are more likely to have teachers who interact with children in sensitive, nurturing, and intellectually stimulating ways (Howes, Phillips, & Whitebook, 1992).

Process quality refers to the “process” aspects of the child care environment, including children’s daily classroom activities, caregiver-child interactions, child-child interactions, caregiver sensitivity and warmth, and relationships between caregivers and children, as well as between caregivers and parents. Table 4.1 presents a list of measures that we used to assess these three types of quality. More specific information about individual measures is presented in Appendix A.

TABLE 4.1 QUALITY MEASURES USED IN COMMUNITY CHILD CARE RESEARCH PROJECT

	Measure
1. Global Quality	1. Early Childhood Environment Rating Scale-Revised (for center-based care) or Family Day Care Rating Scale (for home-based care)
2. Structural Quality	1. Group Size 2. Child-Adult Ratio 3. Caregiver General Education Level 4. Caregiver Specialized Education in Child Development and/or Early Childhood Education 5. Caregiver Years in Experience in child care
3. Process Quality	1. Student Teacher Relationship Scale (STRS) 2. Parent Caregiver Relationship Scale (PCRS, parent and caregiver report) 3. Caregiver Interaction Scale (CIS) 4. Caregiver Responsive Interaction with Child 5. Caregiver Talk with Child 6. Child’s Activity Level

WHAT IS THE QUALITY OF CHILD CARE IN THE FOUR COMMUNITIES?

Global Child Care Quality: Environmental Ratings

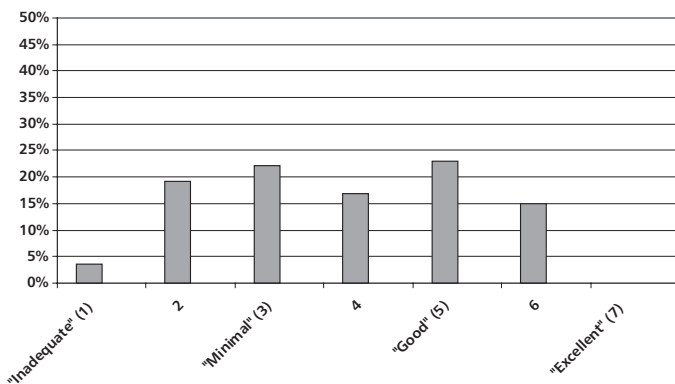
Researchers assessed the global quality of each child care setting via direct observation utilizing the Early Childhood Environment Rating Scale—Revised (ECERS-R, Harms, Clifford, & Cryer, 1998) in center-based child care settings and the Family Day Care Rating Scale (FDCRS, Harms & Clifford, 1989) in home-based child care settings, both widely used, well-validated measures. Scores on these quality scales range from 1 (inadequate) to 7 (excellent). The average quality levels of all types of care in the four communities were low. The median level of global child care quality in each community was near 4 on the ECERS-R and FDCRS scales, which is between “good,” and “minimal.” Ap-

nearly 1/2 of the children in this sample attended child care that may not provide the kinds of experiences and environment thought to be important for development.

proximately 25% of the observed classrooms and homes fell below “minimal” quality, while another 20% were rated at “minimal.” Thus, nearly 1/2 of the children in this sample attended child care that may not provide the kinds of experiences and

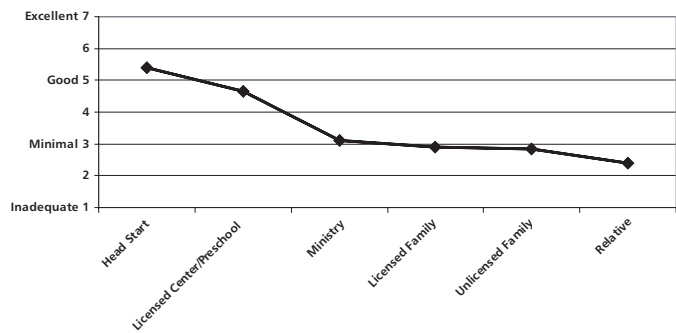
environment thought to be important for development. Figure 4.1 displays the quality rating scores. Overall child care quality level did not differ across community sites.

FIGURE 4.1 DISTRIBUTION OF GLOBAL QUALITY OF CHILD CARE CLASSROOMS AND HOMES



The highest quality care was found in Head Start settings and licensed child care/preschool centers. The lowest quality levels were observed in relative care and unlicensed family child care. On average, children in Head Start ($M = 5.39$) received higher global quality than children in all other care arrangements, while children in licensed child care/preschool centers received higher global quality care ($M = 4.66$) than children in child care ministries ($M = 3.10$), licensed family child care home ($M = 2.91$), unlicensed family child care home ($M = 2.85$), and relative care ($M = 2.40$). Global quality did not statistically differ for child care ministries, licensed family care, unlicensed family care, and relative care. Figure 4.2 provides a comparison of mean global quality ratings for the six types of child care arrangements.

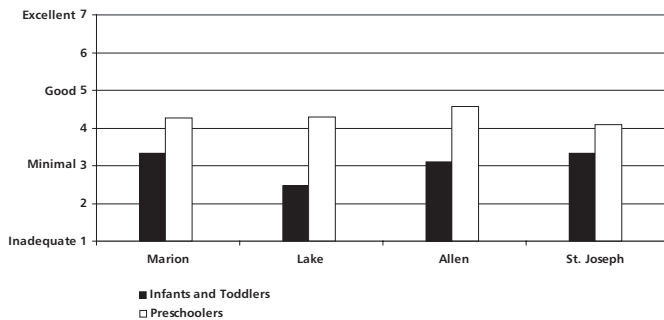
FIGURE 4.2. GLOBAL CHILD CARE QUALITY AND TYPE OF CHILD CARE



- Home-Based and Center-Based Care:** In general, children in center-based settings received higher quality care ($M = 4.38$) than children in home-based settings ($M = 2.84$). This difference was consistent across all communities.
- Licensed and Unlicensed Care:** Children in licensed child care settings received higher quality care ($M = 4.17$) than children in unlicensed settings ($M = 2.90$). This pattern of results was similar across communities.
- Child Care for Infants and Toddlers and Preschool-age Children:** Preschool-age children received higher quality care ($M = 4.30$) than infants and toddlers ($M = 3.06$). Global quality for infants and toddlers averaged at a minimal level or below in all types of settings in all four communities, regardless of whether the care was center- or home-based. Seventy percent of infants/toddlers in this sample were cared for in classrooms or homes that were of minimal or lower quality. There were differences in the global quality of infants and toddlers among communities.

Even though all quality levels were low, infants and toddlers observed in St. Joseph, Marion, and Allen counties ($M = 3.33$, $M = 3.33$, and $M = 3.09$, respectively) received significantly higher quality care than infants and toddlers in Lake County ($M = 2.46$). Figure 4.3 illustrates these differences.

FIGURE 4.3 GLOBAL QUALITY (ECERS-R AND FDCRS) FOR INFANTS/TODDLERS AND PRESCHOOL-AGE CHILDREN ACROSS THE FOUR COMMUNITIES



Structural Quality

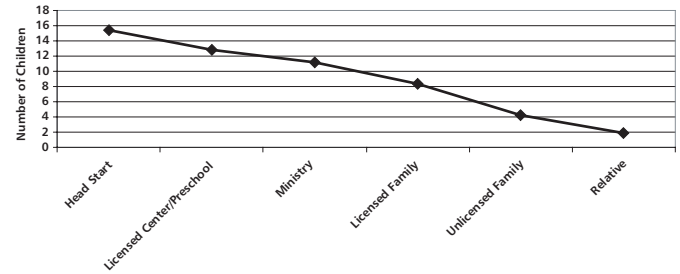
The structural quality variables assessed in this study included group size, child-caregiver ratio, caregiver general education level, caregiver specialized education, and caregiver years of experience in child care. Structural quality indicators are important because they have been shown to be related to developmentally appropriate practices (Howes, Phillips, & Whitebook, 1992). Lower group sizes and child-adult ratios provide children with more opportunities for interaction with caregivers and more access to space and materials, as well as promote the health and safety of children. There is a lower risk of infection, reduced disease transmission, and fewer situations involving potential danger (such as children climbing on furniture; Hayer, Palmer, & Zaslow, 1990) when the group sizes and child-adult ratios are smaller, because caregivers are able to better monitor and promote health practices and behaviors.

Structural Quality: Group Size

The number of children in each classroom or home setting was counted by a researcher during the ECERS-R or FDCRS observation. On average, there were 10 ($M = 10.42$) children in a classroom or child care home, but the range was 1 to 27 children. The largest group sizes were observed in Head Start settings and licensed child care/preschool centers ($M = 15.4$ and $M = 12.9$, respectively). The smallest group sizes were observed in unlicensed family child and relative care ($M = 4.3$ and $M = 1.9$, respectively). Child care ministries and licensed family child

care fell in the middle ($M = 11.2$ and $M = 8.4$, respectively). This pattern was similar for all communities. Figure 4.4 presents these group size patterns.

FIGURE 4.4. GROUP SIZE IN THE SIX TYPES OF CHILD CARE SETTINGS



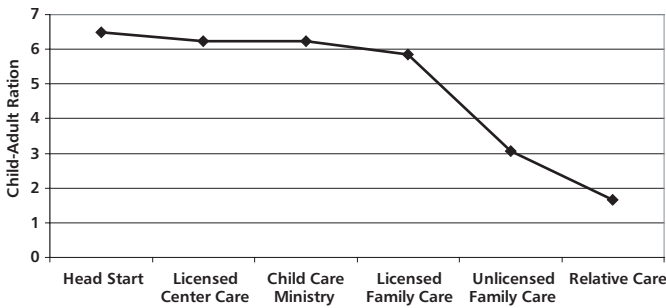
- Home-based and Center-based:** Overall, child care group sizes were larger in center-based ($M = 12.8$) than in home-based child care settings ($M = 6.6$). This pattern was similar across communities.
- Licensed and Unlicensed:** Child care group sizes were larger in licensed child care settings ($M = 11.6$) than unlicensed child care settings ($M = 7.4$). This pattern did not differ across communities.
- Child Care for Infants and Toddlers and Preschool-age Children:** Group sizes were larger for preschool-age children ($M = 12.5$) than for infants and toddlers ($M = 7.4$). These group sizes are consistent with the National Association for the Education of Young Children (NAEYC) recommendations of group sizes of six to eight children for infants, 10 to 14 children for toddlers, and 16 to 20 children for preschool-age children. There was no difference among the communities.

Structural Quality: Child-Adult Ratio

Child-adult ratio was calculated by a researcher during the ECERS-R or FDCRS observation. The average child-adult ratio was 5.6 children per adult, ranging from one to 16 children per adult. Overall, child-adult ratios were significantly different across types of child care settings (Figure 4.5). Specifically, child-adult ratios in unlicensed family care ($M = 3.1$ children per adult) and relative care ($M = 1.7$ children per adult) were lower than the other forms of care [Head Start, licensed center care/preschool, child care ministries, and licensed family care ($M = 6.5$, $M = 6.2$, $M = 6.2$, $M = 5.8$, respectively)]. This pattern was similar for all communities. Figure 4.5 illustrates these differences.



FIGURE 4.5. CHILD-ADULT RATIOS IN THE SIX TYPES OF CHILD CARE SETTINGS

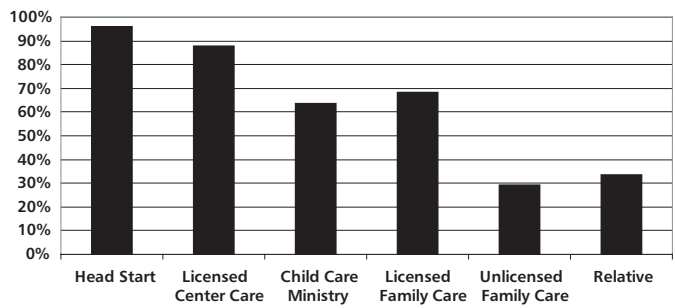


- **Home-based and Center-based Care:** Lower child-adult ratios were observed in home-based settings ($M = 4.6$ children per adult) compared to center-based child care settings ($M = 6.2$ children per adult). This pattern was similar for all communities.
- **Licensed and Unlicensed Care:** Child-adult ratios were significantly higher for licensed ($M = 6.1$ children per adult) than for unlicensed child care settings ($M = 4.4$ children per adult). There were no differences among the communities.
- **Child Care for Infants and Toddlers and Preschool-age Children:** Child-adult ratio was higher for preschool-age children than for infants and toddlers ($M = 6.3$ vs. 4.7). This difference was similar for all four communities.

Structural Quality: Caregiver General Education Level

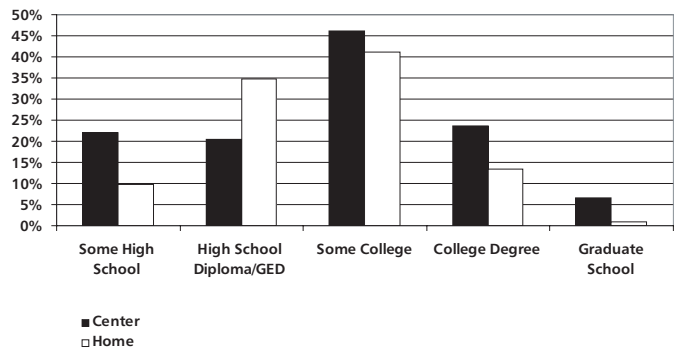
Caregivers were asked to report their highest level of general education. A majority of the caregivers had at least a high school diploma or GED (92%). Almost 70% (67%) had some college and 25% had at least a four year college degree. Caregiver education levels were highest for caregivers in Head Start settings and licensed child care/preschool centers; a majority of caregivers in these two settings had some college education (75% to 95%). The lowest levels of caregiver general education were found in relative and unlicensed family care; only a third of caregivers in these two settings reported more than a high school diploma or GED. Caregiver general education in child care ministries and licensed family child care fell in the middle. Caregiver general education did not differ by community. Figure 4.6 presents these patterns of general education.

FIGURE 4.6. CAREGIVER GENERAL EDUCATION LEVELS IN THE SIX CHILD CARE SETTING (% WITH SOME COLLEGE)



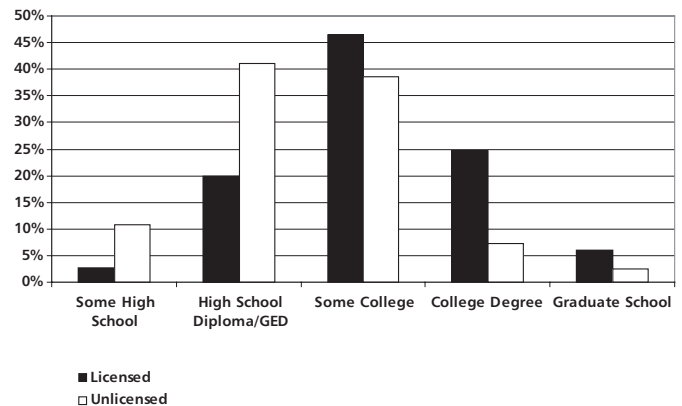
- **Home-based and Center-based Care:** Caregivers in center-based settings reported higher education levels than those in home-based settings. This pattern was similar for all communities (See Figure 4.7).

FIGURE 4.7. CAREGIVER GENERAL EDUCATION LEVELS IN HOME-BASED AND CENTER-BASED CARE



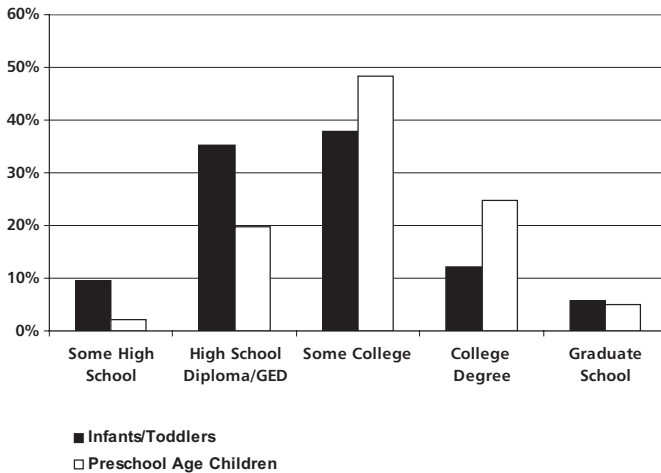
- **Licensed and Unlicensed Care:** Caregivers in licensed settings reported higher education levels than those in unlicensed settings. This did not differ for communities. (See Figure 4.8).

FIGURE 4.8. CAREGIVER GENERAL EDUCATION LEVELS IN LICENSED AND UNLICENSED CHILD CARE SETTINGS



- Child Care for Infants and Toddlers and Preschool-age Children:** Caregivers of preschool-age children reported higher levels of education than caregivers of infants and toddlers. This did not differ for communities. (See Figure 4.9)

FIGURE 4.9. CAREGIVER GENERAL EDUCATION LEVELS IN CHILD CARE FOR INFANT AND TODDLERS AND PRESCHOOL-AGE CHILDREN

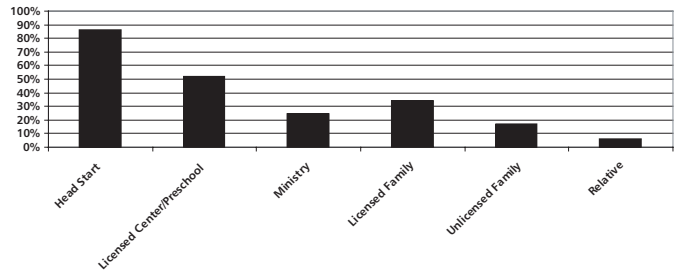


Structural Quality: Caregiver Specialized Education in Child Development

Caregivers were asked about the specialized education they had in child development and early childhood education. Specialized education was defined as possessing at least one specialized early childhood credential (e.g., early childhood teaching certificate, Child Development Associate credential, Montessori credential, early childhood special education endorsement, or kindergarten endorsement). Less than half of the caregivers (41%) indicated they possessed this level of specialized education.

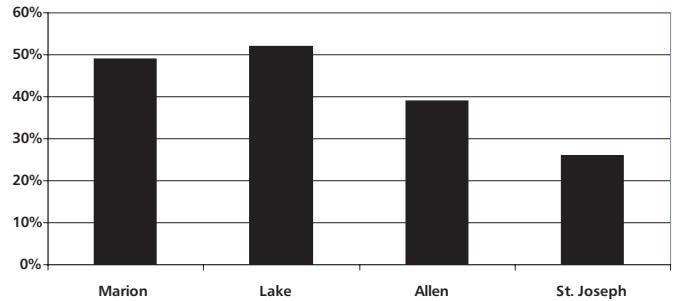
The rate of caregiver specialized education differed among the six child care settings. Almost 90% of Head Start caregivers and a little over half of licensed center care/preschool caregivers reported some specialized education, while only 6% of relative care and 17% of unlicensed family care caregivers reported specialized education. One-third of licensed family child care providers and one-fourth of child care ministry caregivers reported specialized education. Figure 4.10 displays these differences.

FIGURE 4.10. PERCENTAGE OF CAREGIVERS WITH SPECIALIZED EDUCATION IN CHILD CARE SETTINGS



Caregiver specialized education also differed by community. Lake, Marion, and Allen counties did not differ significantly in the percent of caregivers with specialized education (52%, 49%, and 39%, respectively). However only 26% of caregivers in St. Joseph County reported having specialized education, which differed significantly from Lake and Marion counties. Figure 4.11 illustrates these differences.

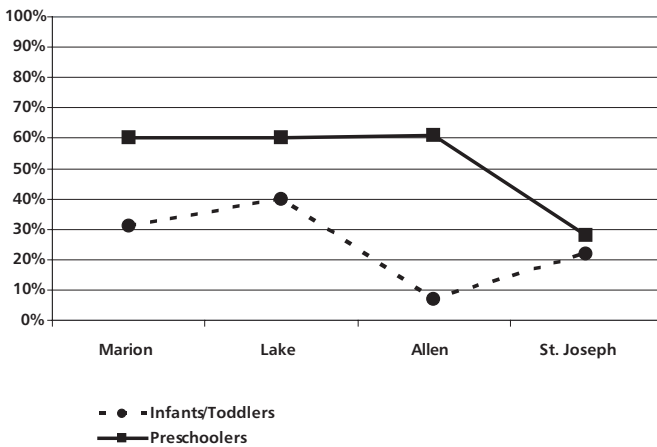
FIGURE 4.11. PERCENTAGE OF CAREGIVERS WITH SPECIALIZED EDUCATION IN THE FOUR COMMUNITIES



- Home-based and Center-based Care:** A greater percentage of caregivers in center-based settings (50%) reported specialized education than those in home-based settings (26%). This pattern was similar for all communities.
- Licensed and Unlicensed Care:** A greater percentage of caregivers in licensed settings (50%) reported specialized education than those in unlicensed settings (19%). This pattern was similar for all communities.
- Child Care for Infants and Toddlers and Preschool-age Children:** Caregivers of preschool-age children were twice as likely (52%) to have any specialized education in child development than were caregivers of infants and toddlers (25%). The greatest discrepancy in the proportion of caregivers with specialized education occurred in Allen

County. Sixty-one percent of caregivers of preschool-age children had specialized education while only 7% of caregivers of infants and toddlers did. In St. Joseph County, a small proportion of caregivers had specialized training, and the difference between caregivers of infants and toddlers and preschool-age children was minimal. (See Figure 4.12).

FIGURE 4.12. CAREGIVER SPECIALIZED EDUCATION IN CHILD CARE FOR INFANTS AND TODDLERS IN THE FOUR COMMUNITIES.

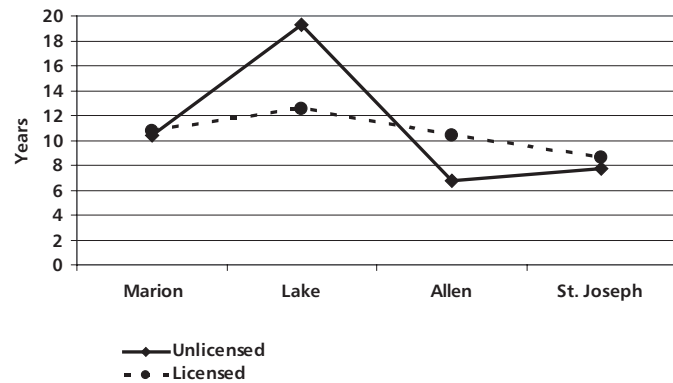


Structural Quality: Caregiver Years of Experience in Child Care

Caregivers were asked to answer a question, “Since you were 18, how long have you worked in child care?” On average, they had worked in child care for about 10 years, but there were significant differences in caregivers’ years of experience across communities. Caregivers in Lake County had worked longer in child care ($M = 13.38$) than those in St. Joseph County ($M = 8.43$). Although this difference coincides with the difference in caregiver specialized education in communities, the correlation between caregiver specialized education and years of experience was relatively small ($r = .16$). There was no difference in caregivers’ years of experience among the six child care settings, between home and center-based care, or between child care for infants and toddlers and child care for preschool-age children.

- Licensed and Unlicensed Care:** Caregivers in licensed and unlicensed child care settings reported similar years of experience in child care. Lake County did not follow this pattern. Caregivers in unlicensed child care reported more years of experience ($M = 19$) than those in licensed child care ($M = 12.3$). (See Figure 4.13).

FIGURE 4.13. CAREGIVER YEARS OF EXPERIENCE IN LICENSED AND UNLICENSED CARE IN FOUR COMMUNITIES.



Process Quality

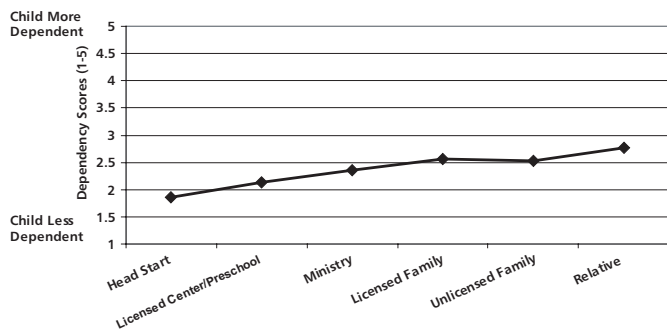
Process quality was assessed based on the caregiver-child relationship, caregiver-parent relationship, caregiver sensitivity, caregiver responsive interactions with the child, caregiver talk, and child’s activity level.

Process Quality: Caregiver-Child Relationship

Caregivers rated their perceptions of their relationship with the participating children using the Student Teacher Relationship Scale (STRS Pianta, 1992). The STRS asks the caregiver to rate the child’s interactive behavior, and how the caregiver thinks the child feels about him/her. Three subscales were used in this study to reflect different aspects of the caregiver-child relationship: Conflict/Anger, Closeness, and Dependency. Scores range from 1 to 5 with 5 indicating high conflict/anger, high closeness, and high dependency (or lack of independence). In general, caregivers rated their relationships with the child positively. Conflict and anger in their relationships was low ($M = 1.87$), while closeness was moderate to high ($M = 4.07$), and dependency was moderate to low ($M = 2.31$). There were no differences among the four communities.

There was a difference in the amount of dependency among the six child care settings. Head Start and licensed center care/preschool caregivers reported the least amount of dependency, while relative and unlicensed family care reported the most. Licensed family care and child care ministries fell in the middle. (See Figure 4.14).

FIGURE 4.14. CAREGIVER REPORT OF DEPENDENCY (STRS) IN THE SIX CHILD CARE SETTINGS



No differences in the other subscale scores (i.e., Conflict/Anger & Closeness) were found among the six types of child care settings, or between home and center-based care.

- Home-based and Center-based Care:** Caregivers in home-based settings ($M = 2.58$) reported greater dependency than in center-based settings ($M = 2.14$) in their relationships. This pattern was similar for all communities and was present even after controlling for age of the child.
- Licensed and Unlicensed Care:** Caregivers in unlicensed settings reported greater dependency ($M = 2.47$ compared to $M = 2.24$) and greater conflict ($M = 2.01$ compared to $M = 1.8$) in their relationships. This pattern was similar for all communities and was present even after controlling for age of the child.
- Child Care for Infants and Toddlers and Preschool-age Children:** Caregivers of preschool-age children reported greater closeness ($M = 4.17$ compared to $M = 3.92$) while caregivers of infants and toddlers reported greater dependency ($M = 2.53$ compared to $M = 2.17$) in their relationships. This difference was true for all communities.

Process Quality: Parent-Caregiver Relationship

Parents and caregivers used the Parent Caregiver Relationship Scale (PCRS; Elicker, Noppe, Noppe, & Fortner-Wood, 1997) to rate their perceptions of the quality of the dyadic parent-caregiver relationship. The scale assesses a parent's or a caregiver's perceptions, attitudes, and feelings about her/his relationship with the other partner in the caregiving dyad. Total and subscale scores were used for comparisons. For the parent version of

PCRS, the subscales are Trust/Confidence, Collaboration, and Affiliation. The caregiver PCRS has the same first two subscales and a Caring subscale instead of Affiliation. Scores range from 1 to 5 with 5 indicating a more positive perception of the relationship.

Parent Report

In general, relationships were rated positively ($M = 4.10$). The quality of relationships between parents and caregivers, as reported by parents, was highest in relative care ($M = 4.36$) and licensed and unlicensed family child care ($M = 4.22$); it was lowest in licensed center care/preschool ($M = 3.9$), child care ministries ($M = 4.02$) and Head Start settings ($M = 4.05$). This was true for the total and subscale scores (Trust/Confidence, Collaboration, and Affiliation). Figure 4.15 displays these differences for the total scores on the PCRS. There were no differences in the quality of parent-caregiver relationships between licensed and unlicensed care, or between child care for infants and toddlers and preschool-age children. There were community differences, however, on the total score and each subscale score. Lake County parents rated the relationship lower than Marion County parents. Parents in Allen and St. Joseph counties rated their relationships in-between parents in Lake and Marion counties.

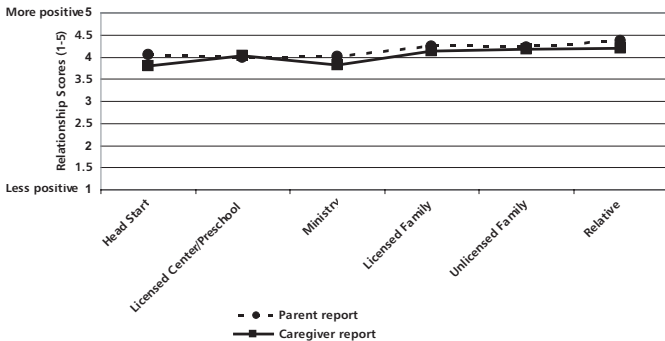
- Home-based and Center-based Care:** The quality of relationships between parents and caregivers was higher in home-based care ($M = 4.25$ compared to $M = 4.0$). This was true for the total and subscale scores (Trust/Confidence, Collaboration, and Affiliation). This pattern was similar for all communities.

Caregiver Report

Overall, caregivers rated the parent-caregiver relationship quality similar to parent reports ($M = 4.03$ compared to $M = 4.10$). The quality of relationships between parents and caregivers, as reported by caregivers, was highest in relative care ($M = 4.26$) and licensed and unlicensed family child care ($M = 4.15$); it was lowest in licensed center care/preschool settings ($M = 4.03$), child care ministries ($M = 3.83$), and Head Start ($M = 3.79$). Figure 4.15 illustrates these differences. This pattern is similar to that reported by the parents on the PCRS. Ratings by caregivers did not differ for communities, between licensed and unlicensed care, or between child care for infants and toddlers and preschool-age children.



FIGURE 4.15. TOTAL SCORES OF PARENT-CAREGIVER RELATIONSHIP IN SIX CHILD CARE SETTINGS



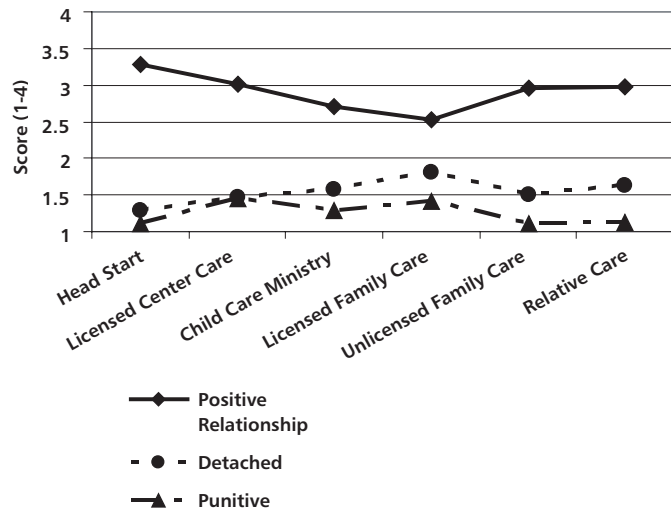
- Home-based and Center-based Care:** The quality of relationships between parents and caregivers was higher in home-based care ($M = 4.16$ compared to $M = 3.95$). This was true for the total and subscale scores (Trust/Confidence, Collaboration, and Affiliation). This pattern was similar for all communities.

Process Quality: Caregiver Sensitivity (CIS)

During the ECERS-R and FCDRS observations, researchers also rated caregiver sensitivity using the Caregiver Interaction Scale (CIS; Arnett, 1989). The subscales we used were Positive Relationship, Punitiveness, and Detachment. The Permissiveness subscale was omitted because the item scores in the subscale were not internally consistent. Scores range from 1 to 4, with 4 indicating more positive interactions, more punitiveness, and more detachment.

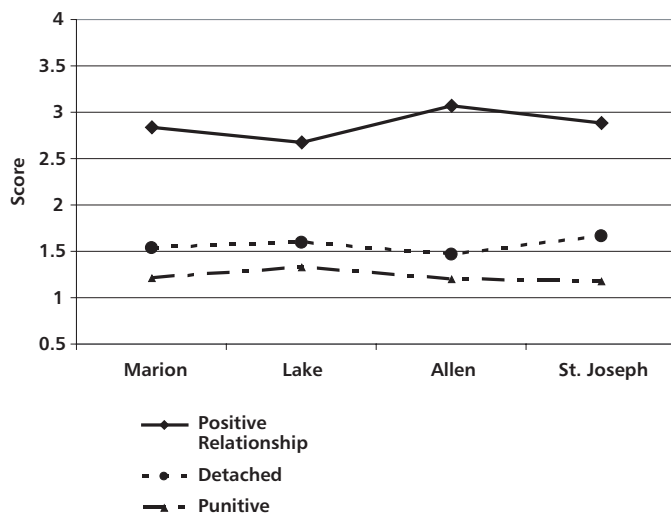
Overall, the mean scores for Positive Relationship, Punitiveness, and Detachment were 2.87, 1.23, and 1.56, respectively. There were differences in these scores among the six child care settings. Licensed family child care settings were rated higher on the Punitive subscale than all other settings ($M = 1.42$), and higher on the Detached subscale than Head Start and licensed center care/preschool settings. Licensed family child care along with child care ministries ($M = 2.5$, $M = 2.70$, respectively) were rated the lowest on the Positive Relationship subscale, while Head Start and licensed center care/preschool settings were rated the highest ($M = 3.75$, $M = 3.01$, respectively). Figure 4.16 presents the scores of each subscale for the six child care settings.

FIGURE 4.16. CAREGIVER SENSITIVITY SCORES FOR THE SIX CHILD CARE SETTINGS



The only community difference existed in the Positive Relationship subscale scores. Allen County caregivers were rated higher than Lake County caregivers on the Positive Relationship subscale ($M = 3.07$ compared to $M = 2.68$), while Marion and St. Joseph counties fell in the middle and did not differ significantly ($M = 2.84$ and $M = 2.88$, respectively). Figure 4.17 presents the scores of each subscale for the four communities.

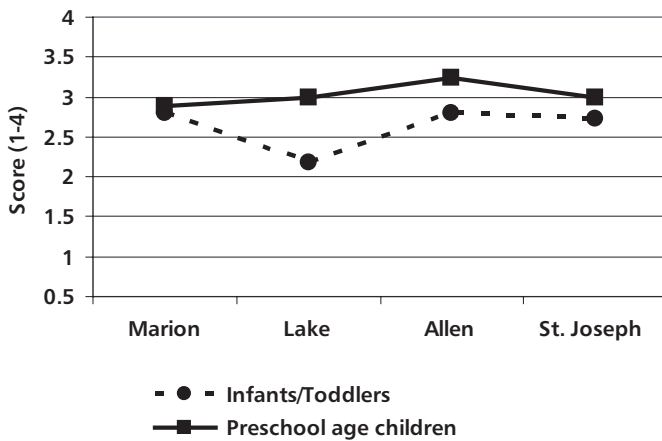
FIGURE 4.17 CAREGIVER SENSITIVITY SUBSCALE SCORES FOR THE FOUR COMMUNITIES



- Home-based and Center-based:** Home-based settings were rated lower on the Positive Relationship subscale ($M = 2.68$ compared to 2.97), higher on the Punitive subscale ($M = 1.32$ compared to 1.18), and higher on the Detached subscale ($M = 1.73$ compared to 1.47) than center-based settings. This was similar for all communities.

- Child Care for Infants and Toddlers and Preschool-age Children:** Caregiver interaction for infants and toddlers was rated as less positive ($M = 2.63$ compared to $M = 3.02$), less punitive ($M = 1.32$ compared to $M = 1.45$), and less detached ($M = 2.63$ compared to $M = 3.02$) than with preschool-age children. Within preschool-age children, there were no significant community differences. Within infants and toddlers, however, the Positive Relationship subscale score for Lake County ($M = 2.18$) was lower than the other three counties ($M = 2.74, 2.79, 2.8$, respectively). (See Figure 4.18)

FIGURE 4.18. POSITIVE RELATIONSHIP SUBSCALE SCORES FOR INFANTS AND TODDLERS AND PRESCHOOL-AGE CHILDREN IN THE FOUR COMMUNITIES

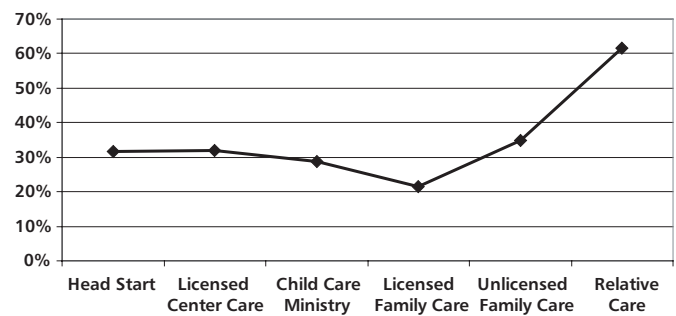


Process Quality: Caregiver Responsive Interaction with Child

Caregiver involvement with each participating child was also observed and categorized as ignore, routine/minimal, and simple/elaborated/intense using time-sampling techniques. Overall adult responsive interaction was calculated as the proportion of simple/elaborated/intense adult involvement out of the total time when an adult was within three feet of the child. In other words, the percent of time the adult was actively interacting with the child when the adult was within three feet of the child was calculated. On average, adults were observed to be interacting responsively with the child 30% of the observed times when they were within three feet of the focal child. Sixty-six sample children (21.5%) were either ignored by adult(s) or received routine or minimal involvement even when at least one adult was close to them.

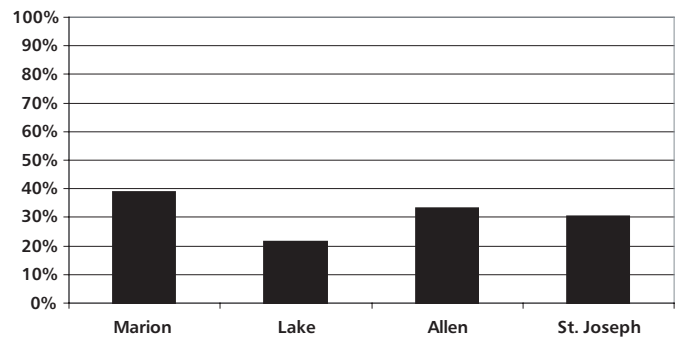
There was a significant difference in percentage of adult responsive interaction across types of child care settings. The mean percentages of adult responsive interaction in relative care (61.6%) were higher than all other forms of care. Licensed family care was observed to have the lowest percentage of adult responsive interaction (21.4%). Figure 4.19 illustrates these differences. There were no differences between home and center-based care or between licensed and unlicensed settings. (See Figure 4.19).

FIGURE 4.19. ADULT RESPONSIVE INTERACTION OF CAREGIVER WITH CHILD IN THE SIX CHILD CARE SETTINGS



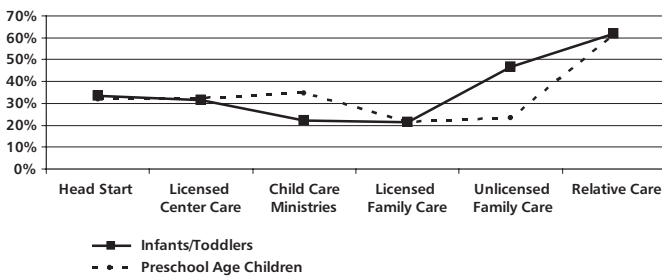
There were also differences in adult responsive interaction across communities. The mean percentages of adult responsive interaction in Marion and Allen counties were the highest (38.5% and 33.1%, respectively). Lake County was observed to have the lowest percentage of adult responsive interaction (21.4%), while St. Joseph County fell in the middle (30%). Figure 4.20 illustrates these differences.

FIGURE 4.20. ADULT RESPONSIVE INTERACTION OF CAREGIVER WITH CHILD IN THE FOUR COMMUNITIES



- Child Care for Infants and Toddlers and Preschool-age Children:** Overall, there was no difference in the level of adult responsive interaction between age groups. However, within the sample of infants and toddlers, the proportion of adult responsive interactions was significantly different across child care settings. More specifically, for infants and toddlers, caregivers were involved significantly more responsively in licensed center care/preschool centers ($M = 34.49\%$) and Head Start classrooms ($M = 50.24\%$) than they were in licensed family child care homes ($M = 20.87\%$). Adults were involved more responsively in Head Start classrooms than in child care ministries ($M = 27.37\%$). No significant difference was found for children older than 3 years. (See Figure 4.21).

FIGURE 4.21. ADULT RESPONSIVE INTERACTION IN THE SIX CHILD CARE SETTINGS



Process Quality: Caregiver Talk

Caregiver talk with child was observed by researchers using time-sampling techniques and categorized as Initiating or Responding to the child. Talk was then rated as Praise/acknowledgement, Social, Question, Expansion, Describes, Prompt/suggestion, or Directive. Proportions of time during which the caregivers were observed engaging in these types of talk were calculated. Caregivers initiated talk with the child 29% of the observed time; they responded 5% of the time. The greatest proportion was Description (14.6%), followed by Question (6.9%), Directive (5.8%), Praise (3.2%), and Prompt/suggestion (2.4%). Social talk and

Expansion were observed less than 1% of the time. There were no differences in caregiver talk among the six types of child care setting, between home and center-based care, or between licensed and unlicensed care. The only community difference was in the amount of directive talk. Allen County caregivers used directive talk significantly more than the other counties (3% compared to 6.5%).

- Child care for Infants and Toddler and Preschool-age Children:** Caregivers for preschool-age children were observed using descriptive talk more than caregivers of infants and toddlers ($M = 16\%$ compared to 12%). Although infant/toddler and preschool caregivers did not differ on other categories of talk, differences emerged in the percent of praise talk when the type of setting was considered. While relative and Head Start caregivers used more praise talk with infants and toddlers, unlicensed family child care caregivers used praise talk more with preschool-age children.

Process Quality: Child's Cognitive Activity Level

Using time-sampling techniques (20-second intervals), research assistants coded the behaviors of each child to reflect the type of activity in which he/she was engaged. Then, based on the type of activity in which the child was engaged, the cognitive activity level was categorized as none, low-yield, medium-yield, and high-yield activities, and the proportions of each category to the total intervals observed were calculated. (See Table 4.2 for a description of the categories). The percent of each activity level was weighted by 0, 1, 2, and 3, and the sum of the four was used as

Children in Head Start displayed higher levels of cognitive activity ($M = 1.22$) than children in relative care and child care ministries ($m = .74$ and $M = .98$, respectively).

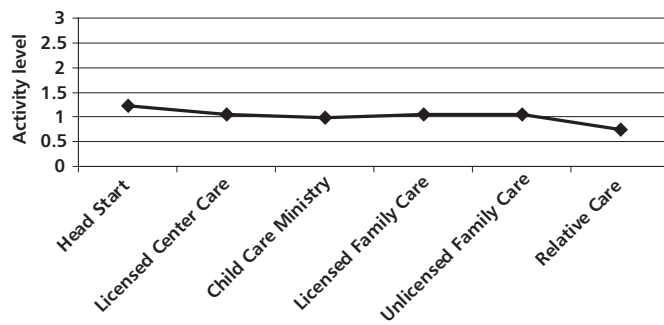
TABLE 4.2. DEFINITIONS OF CHILDREN'S COGNITIVE ACTIVITY LEVELS

Cognitive Activity Level	Activities Engaged	Weight Given
None	Routines, Other, and Unoccupied/wandering	0
Low-yield	Close-ended art, Didactic, TV (TV and TV-child), and Large motor.	1
Medium-yield activities	Manipulatives, Book/Writing, Sensory, Computer, and Music	2
High-yield activities	Open-ended art, Blocks, and Dramatic play	3

overall children's activity level. The possible range of the scores is 0 to 3. Overall, the average level of children's activity was 1.04 (min = .02 and max = 2.84). This means the overall children's activity level was a little higher than "low yield."

Differences were found in children's cognitive activity among the six types of child care settings. Children in relative care displayed lower levels of cognitive activity ($M = .74$) than other forms of care. Children in Head Start displayed higher levels of cognitive activity ($M = 1.22$) than children in relative care and child care ministries ($m = .74$ and $M = .98$, respectively). Figure 4.22 illustrates these differences. There were no differences between home and center-based settings or among the four communities.

FIGURE 4.22. CHILD COGNITIVE ACTIVITY LEVEL IN THE SIX CHILD CARE SETTINGS



- **Licensed and Unlicensed care:** The overall level of child's cognitive activity was higher in licensed settings ($M = 1.07$ vs. $.96$). This was similar for all communities.
- **Child Care for Infants and Toddlers and Pre-school-age Children:** The overall level of preschool-age children's cognitive activity was higher than that of infants and toddlers ($M = 1.13$ vs. $.91$). This was similar for all communities.

CONCLUSIONS


Despite the parents' high ratings of their child care quality, the global quality levels assessed by our trained observers of all types of care used by low-income working families in these four communities were relatively low. On a well-validated observation scale, the average level of child care quality observed was below "good," and just above "minimal." Almost $\frac{1}{2}$ of the children in this sample attended child care that may not have provided the kinds of experiences and environment thought to be important for development. The highest levels of global quality were found

in Head Start settings and licensed center care/preschool centers, while the lowest levels were observed in child care ministries, licensed family care, unlicensed family care, and relative care. Overall, licensed settings were of higher global quality than unlicensed settings.

In general, child-adult ratios in the settings complied with NAEYC guidelines. Caregivers in center-based care and licensed care reported more general and specialized education than caregivers in home-based or unlicensed care. On indicators of process quality, home-based settings had more positive parent-caregiver relationships, while center-based settings were higher on measures of caregiver sensitivity with children. Licensed family child care tended to be the lowest on process quality, especially for infant/toddler care. Overall, infants and toddlers received the lowest quality of care. Global quality for infants and toddlers was at a minimal level or below in all types of settings in all four communities, regardless of whether the care was center- or home-based. Caregivers of infants and toddlers also reported lower levels of general and specialized education than caregivers of preschool-age children.

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