

Herr Research Center for Children and Social Policy at Erikson Institute

Report to the Local Initiatives Support Corporation-Chicago

Staffed Support Networks and Quality in Family Child Care: Findings from The Family Child Care Network Impact Study Executive Summary

Funded by the John D. and Catherine T. MacArthur Foundation



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Funded by the John D. and Catherine T. MacArthur Foundation December 2008

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Kelly Daley, Ph.D., is a senior analyst at Abt SRBI. She holds a master's degree in policy studies from Johns Hopkins University. She earned her doctorate in sociology from the University of Chicago. She has had extensive experience working in and researching nonprofit organizations. Her research interests include the practical application of social science research methods for policy and social change, political participation, and qualitative research methodology. Kathy Modigliani, Ed.D., directs the Family Child Care Project in Arlington, MA. She holds an M.Ed. in child study from Tufts University and an Ed.D. in higher and adult continuing education from the University of Michigan. She has studied family child care for 20 years; consulted with numerous national organizations, foundations, and governmental agencies; and evaluated more than 50 community family child care initiatives. At Wheelock College, Modigliani developed a provider accreditation system for the National Association for Family Child Care (NAFCC). Before that she held appointments in the research division and graduate faculty at Bank Street College of Education.

## Local Initiatives Support Corporation / Chicago

LISC/Chicago's purpose is to stimulate the redevelopment of neighborhoods throughout Chicago and to reconnect them to the socioeconomic mainstream in the region. Through their wide array of financial products, investments, and strategic technical assistance, LISC helps community-based development organizations get what they need to build vibrant communities—affordable housing, employment opportunities, commercial enterprises, community facilities, and civic engagement.



# Acknowledgements

We gratefully thank the 150 family child care providers who permitted us to interview them and observe at length in their homes. Thanks to the network directors and coordinators and the leaders of provider associations who agreed to be interviewed and allowed us to review their records. These generous individuals are not named to protect their confidentiality.

We are indebted to the John D. and Catherine T. MacArthur Foundation for funding this ground-breaking study and to the Local Initiatives Support Corporation (LISC) for sponsoring the study.

Ricki Lowitz, senior program officer of LISC/Chicago, offered wise and patient guidance throughout this study.

Alisú Shoua-Glousberg, consultant, provided helpful oversight at several critical stages of this research including the project design, final data analysis, and report-writing phases of the project.

The late Susan Kontos, from Purdue University, served as principal investigator for the design and data collection phases of the project, and we wish that she could have lived to witness the publication of this report. This report is dedicated to her memory.

The study was transferred to Erikson Institute in 2007 under the direction of Juliet Bromer.

University of Chicago Survey Lab staff who conducted interviews and in-home observations include

Virginia Bartot Martha Van Haitsma Kelly Daley Marcia DaCosta Libby Kaufman Anne-Maria Makhulu Carmen Ochoa Daniel Steinhelper Elizabeth Tussey Other graduate research assistants helped with data analysis. Special thanks goes to Jin Xu who carried out the bulk of the data runs, conducted diagnostics for seemingly endless permutations of various models, and supplied valuable statistical advice. Others who worked on the data include Julie Berger, Hsi-Yuan Chen, Moira Harden, Leslie Kandaras, Ying Li, Basheer Mohammed, Alicia Vandervusse, and Robert Wyrod.

We are also grateful for the insightful comments and suggestions on earlier drafts from Lee Kreader, National Center for Children on Poverty, Columbia University; Toni Porter, Institute for a Child Care Continuum, Bank Street College of Education; Donna Bryant, FPG Child Development Institute, University of North Carolina at Chapel Hill; Linda Gilkerson, Erikson Institute; Jerome Stermer, Voices for Illinois Children; Tom Layman, Illinois Action for Children; Laura Pastorelli, North Avenue Day Nursery; Bruce Hershfield, New York City Administration for Children's Services; and Marsha Hawley, Kendall College.

Amy Timm provided editorial review and assistance in producing this report. Eboni Howard provided overall guidance to the principal investigator in producing this report.

For more information about this study and to receive a copy of the full technical report, please contact

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# Abstract

The Family Child Care Network Impact Study is the first study to examine staffed networks—programs that provide services and support to family child care (FCC) providers affiliated with the network through at least one paid staff person. The data were collected between the years 2002 and 2004. The study examines the relationship between affiliation with a staffed network and quality of family child care among affiliated providers in the city of Chicago. The study includes 150 licensed FCC providers including network-affiliated providers, a matched control group of unaffiliated providers, and a third comparison group of providers affiliated with a provider-led association. (See the glossary at the end of this report for definitions of terms.)

The study finds that FCC providers affiliated with staffed networks have significantly higher quality scores than unaffiliated providers, confirming the earlier finding from Kontos, Howes, Shinn & Galinsky (1995) that affiliation with a provider support group is associated with higher quality care in FCC homes. The study further finds that providers in networks with speciallytrained coordinators (defined as a coordinator who participated in a post-baccalaureate certificate program in infant studies customized for family child care coordinators) have significantly higher quality scores than providers affiliated with associations. This study also yields new information about staffed networks as a particular type of support organization, and the effectiveness of services offered by networks to affiliated FCC homes.

This study finds that multiple factors must come together at once for strong network effects on quality. The study identifies specific network characteristics and services that are correlated with significantly higherquality care among affiliated providers, once individual provider characteristics such as relevant education are controlled. The following paragraph describes the largest effects found on quality of care in this study.

First, the study finds that networks with staff that have regular and supportive communication with providers through meetings, telephone help, and formal feedback channels have a greater effect on the quality of care offered by affiliated providers than networks that lack these multiple avenues for interaction. Second, the study finds a large effect on the quality of care offered by providers affiliated with networks that are staffed by a specially-trained coordinator (defined as a coordinator who participated in a post-baccalaureate certificate program in infant studies customized for family child care coordinators), *and* that offer one or more of the following direct services to providers:

- direct training for providers at the network site;
- visits to FCC homes that focus on helping providers work with children and parents;
- supportive interactions with network staff through regular meetings, telephone help, and opportunities to give feedback; and
- all of these services combined (training for providers, visits to FCC homes, and supportive interactions).

Providers in these networks have significantly higher quality scores than providers in networks that do not have this combination of a specially-trained coordinator and direct service offerings.

The study identifies several other network services that, on their own, have a positive effect on quality. These effects on quality are not as large as those described above, but may point to secondary pathways for improving quality among network-affiliated providers. Providers in networks that offer any of the following services—use of a formal quality assessment tool, frequent visits to FCC homes to help providers work with children and parents (10 times within 6 months or possibly fewer if coordinator has specialized training), initial training for newlylicensed providers, or on-going training for providers at the network site—have higher quality scores than providers in networks that do not offer any of these services.

In addition, the study finds that services such as referrals to external trainings, peer mentoring, free materials, and business help do not have a significant relationship to higher quality care. These are all services that *do not* focus on network staff-provider interactions around care of children and quality improvement. The study does find, however, that materials and business services may help providers maintain financial stability and retain network affiliation.

Finally, the study compares staffed networks to voluntary, provider-led associations and identifies significant differences between these organizations in the types of services and supports offered to affiliated providers. The study concludes with policy and program recommendations regarding staffed networks as a quality improvement strategy for family child care.

# **Overview**

## Family Child Care (FCC) Quality and Staffed Networks

The quality of care young children receive in early care and education settings is crucial to their later development and school success (Shonkoff & Phillips, 2000). Estimates vary on how many children are in family child care arrangements. National surveys find that from 1 in 10 children to nearly a quarter of children spend some time in family child care homes, and a majority of young children from low-income families are cared for in home-based settings while their parents work (Morrissey, 2007). Aside from offering a developmental support to young children, FCC providers have the potential to support low-income working parents and communities (Bromer & Henly, 2004; Gilman, 2001).

Yet, a growing body of evidence also suggests a crisis in the quality of child care young children receive, with family child care settings rated as adequate to poor (see Morrissey, 2007 for a review; Kontos, Howes, Shinn & Galinsky, 1995). Moreover, FCC providers serving mostly subsidized, low-income children have been found to offer lower quality care than their middle-income counterparts (Kontos et al., 1995; Raikes, Raikes & Wilcox, 2005). Studies find that the negative effects of low-quality child care may be worse for low-income children than for children from higher-income families (Shonkoff & Phillips, 2000; Votruba-Drzal, Coley & Chase-Lansdale, 2004). Such studies point to the need for more research on how to improve quality in family child care settings, especially those serving predominantly low-income families and communities.

Networks, also referred to in some states as systems, hubs, or satellites, that offer on-going support to FCC providers are one strategy for quality improvement in family child care (Hershfield, Moeller, Cohen & the Mills Consulting Group, 2005). Such networks exist in many states, although there are currently few mandated standards for these services. Staffed networks in the city of Chicago, the site of this study, provide services to FCC providers including visits to FCC homes, training, and business assistance. Yet few standards or regulations exist in Chicago concerning the quality or nature of support/oversight that staffed networks supply to affiliated providers, thus resulting in great variation among these networks in the frequency, type, and quality of services delivered to providers.

Several changes in the local policy environment immediately preceding the study period prompted concerns about if and how staffed networks in Chicago could live up to their promise of improving the quality of family child care among their member providers. When the Chicago Department of Human Services (CDHS) received a contract for Early Head Start (EHS) in 1998, they called upon all of their regular center-based Head Start grantees to launch family child care networks to oversee administration of these EHS slots in FCC homes. This resulted in a sudden expansion of the number of staffed networks, many run by groups with limited knowledge of family child care or how to run a staffed network.

This set of local conditions, along with the wider absence of research about the effect of staffed networks on quality of care in FCC homes, prompted the Local Initiatives Support Corporation (LISC) to sponsor and the John D. and Catherine T. MacArthur Foundation to fund the research reported here. In the environment described above, an assumption that network membership would automatically yield higher quality care seemed unwarranted. Providers could choose a network that offered just a few services, or they could drop network membership altogether to avoid monitoring. In this environment, networks were allowed to offer minimal services simply because it was economically beneficial.

In their landmark study of quality in family child care, Kontos et al. (1995) found that support group affiliation, in general, was an important correlate of quality. Yet no studies to date have looked systematically at the particular characteristics of staffed networks that are related to quality child care. Clearly, more information was needed about what networks offer that increases quality of care in member provider homes. This study is the first to take a detailed look at staffed networks in a large urban community and to examine the particular characteristics and services of networks that are associated with quality child care.

## Study Design and Methods

The Family Child Care Network Impact Study took place during the years 2002 to 2004 and includes 150 licensed FCC providers in the city of Chicago. The study used a matched control design wherein 80 staffed network-affiliated providers were matched on key provider characteristics (age, gender, race/ethnicity, experience, education, and neighborhood type) to a control group of 40 unaffiliated providers. The matched control group was designed to isolate the effect of network affiliation on quality of care among affiliated providers. The study also includes a third comparison group of 30 providers affiliated exclusively with a provider-led association. The comparison group of association-affiliated providers in this study is not representative of association providers in Chicago, but rather a sub-set of providers who are affiliated exclusively with an association.

Interviews were conducted with network staff, association leaders, and affiliated providers in the study sample. In-person interviews with network staff and association leaders focused on organizational history and goals as well as services offered to member providers. Telephone interviews with providers gathered provider reports about network and association services. Two observational measures of child care quality were used in provider homes: The Family Day Care Rating Scale (FDCRS), which assesses global quality of the family child care home including the environment, routines, learning activities, and provider-child interactions (Harms & Clifford, 1989), and the Arnett Caregiver Interaction Scale (Arnett CIS), which measures provider sensitivity to children in care (Arnett, 1989).

## Description of Staffed Networks, Provider-led Associations, and Providers

## **Staffed Networks**

A total of 35 staffed networks were included in this study although only 26 networks had providers who were eligible to participate. In order to participate in the study, network-affiliated providers had to be licensed by the state of Illinois, had to be affiliated with these networks for at least six months, had to be affiliated with only one network, and had to hold no affiliation within the past year with other support groups such as provider-led associations.

#### Network coordinators

Each of the networks in this study had a coordinator on staff to work directly with FCC providers at the network. Of these coordinators, 70% held a college degree or higher and most had some kind of relevant education or training in early care and education. Although the study did not specifically ask coordinators about the source of their relevant education, 10 coordinators from 10 networks (38%) with providers in this sample reported that they participated in a post-baccalaureate certificate program in infant studies customized for network coordinators. The program took place at a local institution of higher education<sup>1</sup> and was designed at the request of the local department of youth services as

<sup>&</sup>lt;sup>1</sup> This certificate program in infant studies for network coordinators was offered by Erikson Institute in Chicago. Some coordinators reported this specialized training during the interviews, but it was coded only as "relevant education," along with other relevant education coordinators might have received. Once this study was transferred to Erikson Institute in 2007, we were able to obtain a list of network coordinators in the study who attended the infant studies certificate program to break out those who had received this training from those who had general education in the area of child development. We then matched these names to coordinators we had interviewed at networks with providers in the study.

# Table 1. Characteristics of Post-Baccalaureate CertificateProgram for Network Coordinators

| Program Component                     | Description   |
|---------------------------------------|---|
| Course work and supervised internship | Graduate-level, academic sequence<br>of four semester-long courses<br>followed by a supervised internship.  |
| Focus on infant-toddler care          | Course work focuses on working<br>with providers who care for infants<br>and toddlers and their families.<br>Course work also covers knowledge<br>base specific to infant/toddler<br>development and care.  |
| Adapted for network coordinators      | Curriculum focuses on how to<br>support FCC providers in their work<br>with children and families.*   |
| Relationship-based<br>curriculum      | Program emphasizes supportive<br>relationships between coordinators<br>and between instructors and coor-<br>dinators. Modeling of relationship-<br>building helps coordinators develop<br>supportive and effective relationships<br>with providers in their networks and<br>ultimately helps providers develop<br>supportive relationships with children<br>and families in care (Gilkerson &<br>Kopel, 2004; Stott & Gilkerson, 1998). |
| Funding and endorsement               | Coordinators were fully funded to<br>participate in the certificate program<br>by local and federal government<br>entities, and sponsored by their<br>network agencies.   |

# Table 2. Five Dimensions of Staffed NetworkServices to Providers

| Type of Service                           | Description  |
|---|--|
| Visits to FCC homes                       | <ul> <li>Monitor quality</li> <li>Check for licensing violations</li> <li>Observe and work with children</li> <li>Talk to providers about their<br/>work with children and parents</li> <li>Meet with parents</li> </ul> |
| Education/ training                       | <ul> <li>Knowledge of child development</li> <li>Training for providers at the<br/>network site</li> <li>Referrals to off-site training<br/>and education</li> <li>Tuition reimbursement programs</li> </ul>             |
| Professional and supportive relationships | <ul> <li>Regular provider meetings</li> <li>Telephone help</li> <li>Opportunities for feedback<br/>to the network</li> <li>Peer mentoring programs</li> </ul>  |
| Material resources                        | <ul><li>Lending libraries</li><li>Free toys, books, equipment</li></ul>  |
| Business services                         | <ul> <li>Recruitment and enrollment<br/>of families</li> <li>Payment of fees</li> <li>Administration of subsidies</li> <li>Help with taxes</li> </ul>  |

\*The 18-credit certificate program offered by Erikson Institute was also modified to a 15-credit program, with three internship credits waived for coordinators' prior experience in the field. part of their work to implement a new Early Head Start grant. Participation in this program by network coordinators (specially-trained coordinators) turns out to be a key predictor of higher quality among affiliated providers in this study.

Although the study did not involve an evaluation of the certificate program, conversations with the certificate program director and instructor (which took place after the data collection period) helped illuminate five unique aspects of the program (see Table 1). They include: Graduate-level course work and a supervised internship; a focus on infant-toddler development and care; a curriculum intentionally adapted for FCC network coordinators; a relationship-based curriculum; and full funding and endorsement by local and federal government entities.

### $Network\ services$

Staffed networks in Chicago vary in the type and frequency of services offered to affiliated providers. Based on reports from network staff and affiliated providers, the study conceptualizes five dimensions of services that are offered by networks (although not uniformly or consistently) to affiliated providers (see Table 2): Visits to FCC homes; education and/or training for providers; supportive professional relationships; material resources; and business services.

Analyses of network services and quality in this study rely on provider reports of services received or available. Provider reports are a more reliable measure of network services because network leaders are motivated to put their best foot forward, while providers have no incentive either to over or under report the services their networks provided.

#### **Provider-led Associations**

The 12 provider-led associations in this study are qualitatively distinct from staffed networks. Providerled associations are groups of providers who volunteer their time to participate in association activities, are independent of any sponsoring agency, and do not have paid staff. Associations offer peer support, mentoring, and professional encouragement to provider members and depend on the leadership of individual providers. All but two association leaders in the sample had an associate's degree or higher and most had professional training in child development or early childhood education. By and large, associations are not deeply involved in the day-to-day operations of member providers, although many offer training or referrals to external training, regular association meetings, and telephone help-lines. A few even offer occasional home visits to member providers.

## Table 3. Demographic Characteristics of FCC Providers by Affiliation Status

| Matched Characteristics                                      | Staffed Network<br>N=80 | Control<br>N=40 | Provider-led<br>Association N=30 |
|--|-------------------------|-----------------|----------------------------------|
| Race and Ethnicity   |                         |                 |                                  |
| Black or African American                                    | 65%                     | 65%             | 90%                              |
| Latina or Hispanic   | 31%                     | 27%             | 0                                |
| White  | 1%                      | 8%              | 10%                              |
| Asian  | 2%                      | 0               | 0                                |
| Age  |                         |                 |                                  |
| Mean age   | 46                      | 47              | 45                               |
| Years of Experience  |                         |                 |                                  |
| Mean numbers of years in child care                          | 5.6                     | 5.9             | 7.2                              |
| Highest Education Level                                      |                         |                 |                                  |
| Less than high school  | 16%                     | 15%             | 3%                               |
| High School or GED   | 13%                     | 15%             | 20%                              |
| Some college but no degree                                   | 43%                     | 38%             | 47%                              |
| A.A. degree  | 19%                     | 18%             | 17%                              |
| B.A. degree or higher  | 10%                     | 15%             | 13%                              |
| Neighborhood Poverty   |                         |                 |                                  |
| Average proportion of persons below poverty from Census 2000 | 23%                     | 20%             | 19%                              |
| Unmatched Characteristics                                    |                         |                 |                                  |
| Highest Relevant Education*                                  |                         |                 |                                  |
| None   | 25%                     | 36%             | 43%                              |
| Some college   | 33%                     | 26%             | 43%                              |
| CDA credential   | 30%                     | 25%             | 7%                               |
| A.A. degree  | 14%                     | 8%              | 7%                               |
| B.A. degree or higher  | 1%                      | 3%              | 0%                               |
| Average Household<br>Monthly Income*                         | \$3,447                 | \$3,041         | \$3,194                          |

\*Staffed network providers had higher levels of post-secondary relevant education in child development or early childhood education and higher incomes than the control group providers most likely due to higher rates of CDA completion and higher paying Early Head Start slots.

| Characteristics  | Staffed Network<br>N=80 | Control<br>N=40 | Provider-led Association<br>N=30 |
|--|-------------------------|-----------------|----------------------------------|
| Mean number of children enrolled<br>(includes part-time) | 6.8                     | 7.2             | 7.1                              |
| Infants (under age 1) enrolled                           | 55%                     | 58%             | 60%                              |
| Homes with 1 or more assistants                          | 75%                     | 77%             | 80%                              |
| Percent with any Head Start<br>or Early Head Start slots | 53%                     | 0%              | 0%                               |
| Percent with any private fee-paying families             | 39%                     | 60%             | 70%                              |

#### Table 4. Characteristics of FCC Programs by Affiliation Status

### **Providers**

Table 3 shows the demographic characteristics of the 3 groups of providers in this study. The similarity of the distribution of most characteristics for the first two groups—network-affiliated providers and unaffiliated (control group) providers—is due to the matched control group design of the study. Providers were matched on race, age, experience, education, and neighborhood type. Providers were not matched on relevant education and household income. The 30 association-affiliated providers in this study were selected as an additional comparison group to network-affiliated providers but were not matched to either the network or unaffiliated group. Association providers in this sample were almost all African-American, almost exclusively established providers, and had higher levels of college education than network providers but lower levels of relevant education in child development or early childhood education.

Although providers were not matched on program characteristics, Table 4 shows that FCC programs are similar across the 3 groups except for source of payment.

# **Findings**

## Network Affiliation and Quality

The study finds that affiliation with a staffed network is a strong predictor of global quality in FCC homes in a lowincome urban context. Network affiliation has a significant and positive association with higher global quality scores when comparing network-affiliated providers with unaffiliated providers, even after controlling for other provider and program characteristics associated with quality, such as provider's relevant education, household income of the provider, and ages of children in the family child care program.

The average global quality (FDCRS) score for the 150 providers observed for this study is 3.80,<sup>2</sup> which is considered "adequate" but not "good." Despite low overall scores, the average global quality score for networkaffiliated providers is 3.99, or "adequate" as compared to the average score for unaffiliated providers, which is 3.38 or "minimally adequate." Moreover, 10% of networkaffiliated providers score a 5 or above indicating "good" quality, whereas none of the unaffiliated providers score in the "good" range. Similarly, 11% of network-affiliated providers score a 2, indicating "inadequate" or "poor" quality, compared to 40% of unaffiliated providers scoring a 2. In other words, although most network-affiliated providers have quality scores that indicate "adequate" but not "good" quality care, very few offer poor, inadequate care. By contrast, none of the unaffiliated providers offer "good" care, and nearly half offer care that may be considered harmful to children.

The study goes on to find that providers affiliated with a network that has a specially-trained coordinator (participated in a post-baccalaureate certificate program in infant studies customized for coordinators) have significantly higher global quality and provider sensitivity scores than unaffiliated providers. Moreover, providers affiliated with a network that has a specially-trained coordinator also have significantly higher global quality scores than providers affiliated with providerled associations. This finding underscores the central finding in this study that networks with qualified staff have a unique opportunity to improve quality in family child care homes. Indeed, the study finds no significant quality difference between providers affiliated with associations and providers affiliated with any network, regardless of coordinator qualifications. The following section details specific features of networks that have a positive effect on quality among affiliated providers as well as those aspects of networks that do not impact quality in this study.

## Network Services, Coordinator Qualifications, and Quality

#### Large Effects on Quality

The study finds networks that emphasize supportive interactions between staff and providers, and networks that have a specially-trained coordinator who delivers services to providers, have the largest positive effects on quality among affiliated providers. These findings suggest that coordinators are central to the effectiveness of network services for providers. Table 5 summarizes the effects of particular network services and network coordinator qualifications on global quality (as measured by the FDCRS) among the 80 network-affiliated providers.

Two pathways towards large network effects on quality are found, controlling for individual provider characteristics such as relevant education, Early Head Start participation, and ages of children in care.<sup>3</sup> First, the study finds a large and positive effect on global quality among providers affiliated with networks that offer regular opportunities for supportive interactions between network staff and providers. As Table 5 shows, providers in networks that offer the combination of regular meetings, telephone help, and opportunities for providers to give feedback to network staff, have significantly higher global quality scores than providers in networks that do not offer this group of opportunities.

<sup>&</sup>lt;sup>2</sup> The FDCRS rates providers on 32 standards with scores ranging from a low of 1—a score that designates "inadequate" care, to a high of 7—a score that designates "excellent" care.

<sup>&</sup>lt;sup>3</sup> Although the study does not control for self-selection into certain staffed networks by providers, interviews with providers suggest that providers did not join networks based on the particular services offered or qualifications of network staff. Providers often joined networks in order to receive the higher Early Head Start subsidy rate, free materials and/or business help—services that are not associated with quality in this study.

# Table 5. Effects of Network Coordinator Qualifications and Network Services on Global Quality (FDCRS) Among Network-affiliated Providers (n=80 providers)

| Qualifications  | Large Effects on Quality <sup>a</sup>  | Modest Effects on Quality <sup>b</sup>   | No Effects on Quality <sup>c</sup>   |
|---|--|--|--|
| Experience  |  | Prior experience working     with children   |  |
| Education   |  | <ul> <li>Participation in specialized<br/>certificate program</li> </ul>   | <ul> <li>Coordinator level of general<br/>education</li> <li>Coordinator has non-certificate<br/>relevant education/training</li> </ul>  |
| Network services  |  |  |  |
| Visits to FCC homes   |  | <ul> <li>Use of formal quality assessment</li> <li>High frequency visits (10 times<br/>in 6 months) focused on working<br/>with a child</li> </ul> | <ul> <li>Check for licensing violations</li> <li>Discuss health/safety information</li> <li>Monthly visits</li> </ul>  |
| Education/ training   |  | <ul> <li>Training for providers at<br/>network site</li> <li>Training for newly licensed<br/>providers</li> </ul>                                  | <ul><li>Referrals to external training</li><li>Tuition reimbursement</li></ul>   |
| Professional and supportive relationships                     | Combination of supportive<br>interactions:<br>• regular meetings<br>• telephone help, and<br>• opportunity to give feedback<br>to network  |  | Peer mentoring   |
| Material resources<br>and business services                   |  |  | <ul> <li>Lending libraries</li> <li>Free toys, books, equipment</li> <li>Recruitment of families</li> <li>Administration of fees/subsidies</li> <li>Help with taxes</li> </ul>                             |
| Network Coordinator<br>Qualifications<br>AND Network Services |  |  |  |
|   | <ul> <li>Specially-trained coordinator<sup>d</sup></li> <li>AND any of the following<br/>(in order of increasing effect size):</li> <li>Training for providers at<br/>network site or</li> <li>Visits to FCC homes focus<br/>on child / parent; or</li> <li>Combination of supportive<br/>interactions (regular meetings,<br/>telephone help and opportunity<br/>to give feedback to network); or</li> <li>Combination of all 3 services<br/>(training, visits, interactions)</li> </ul> |  | Specially-trained coordinator<br>AND any of the following:<br>• Lending libraries<br>• Free toys, books, equipment<br>• Recruitment of families<br>• Administration of fees/subsidies<br>• Help with taxes |

<sup>a</sup> Large effects are defined as more than half a point higher score on the FDCRS (as determined by ordinary least-squares regression analyses). <sup>b</sup> Modest effects are defined as less than half a point higher score on the FDCRS (as determined by ordinary least-squares regression analyses).

<sup>c</sup> No effects on quality are defined as no statistically significant positive effect on FDCRS scores.

<sup>d</sup>Participated in a post-baccalaureate certificate program in infant studies customized for coordinators working with FCC providers

Second, the study finds a large and positive effect on global quality among providers affiliated with networks that have a specially-trained coordinator and that offer one or more of the following direct services to providers:

- direct training for affiliated providers at the network site;
- visits to FCC homes focused on helping providers work with children or parents, and;
- opportunities for supportive interactions with network staff through the combination of regular meetings, telephone help, and opportunities to give the network regular feedback.

Providers in networks with a specially-trained coordinator and that offer all of the above services combined (training for providers, visits to FCC homes, and supportive staff-provider interactions) have FDCRS quality scores of 5.07, on average, which is considered "good" care for children. Although there are few providers from our sample in these networks, this particular combination has the greatest effect on global quality in the study (close to a point higher FDCRS score).

In addition, two combinations of a specially-trained coordinator and a package of direct services have a significant and positive effect on *provider sensitivity* to children in care:

- Networks that have a specially-trained coordinator and supportive staff-provider interactions through meetings, telephone help, and feedback opportunities; and
- Networks that have a specially-trained coordinator and the combined package of all three services—training for providers at the network, visits to FCC homes, and supportive staff-provider interactions.

Several factors may help explain the large effect of specially-trained network coordinators on quality of care offered by affiliated FCC providers. The 10 coordinators who participated in the specialized certificate program were the only coordinators at their network, and thus it is likely that providers in these networks were receiving services directly from these coordinators.<sup>4</sup> Moreover, 80% of networks with specially-trained coordinators also had coordinator-to-provider ratios of less than 1 to 12, which supports the idea that in order for specially-trained coordinators to be effective, they must have reasonable caseloads of providers. Furthermore, the certificate program's particular focus on infant-toddler care (most FCC providers care for very young children) and the customization of the curriculum for FCC coordinators may partially explain the impact of this program. Other relevant education/training in child development or early childhood education among coordinators does not have a significant association with higher quality care among affiliated providers.

### **Modest Effects on Quality**

The study also finds that the use of a formal quality assessment tool by networks, frequent visits to FCC homes, training for providers at the network, and coordinator prior experience in child care and specialized coordinator training *each on their own* have a significant yet more modest effect on quality, and point to additional ways in which networks may impact the quality of care among affiliated providers.

These modest but significant effects of network services and coordinator qualifications on quality are detailed below.

- Providers in networks that use a formal quality assessment tool during visits to FCC homes have significantly higher global quality scores, on average, than providers in networks that do not offer formal assessments of quality.
- Providers in networks that conduct visits to FCC homes to help providers work with children or parents at least 10 times within a 6 month period (or possibly fewer if coordinator has specialized training<sup>5</sup>) have

<sup>&</sup>lt;sup>4</sup> Five networks with providers in the study had multiple coordinators who worked with providers. Only one coordinator was interviewed at each network and the coordinators that were interviewed in each of these five networks did not participate in the certificate program. However, it is possible that other coordinators in those five networks, who were not interviewed and thus could not be identified, did attend the program.

<sup>&</sup>lt;sup>5</sup> Although high-frequency visits have a significant relationship to higher quality care, the study also shows that speciallytrained coordinators who work with children during visits to FCC homes have a greater effect on quality than frequency of visits alone. Although some frequency of visits is obviously necessary for coordinators to have an impact on provider practices, the study cannot identify an ideal number of visits.

significantly higher global quality scores and more sensitive interactions with children, on average, than providers in networks that do not conduct this intensity of visits to FCC homes. A majority of providers (78%) who report high frequency visits to their homes also belong to networks that have what could be considered an optimal coordinator to provider ratio of no more than 12 providers per coordinator.

- Providers in networks that offer education or training for providers at the network site have higher global quality scores and more sensitive interactions with children, on average, than providers in networks that do not offer education or training for providers at the network site.
- Providers in networks that offer introductory training for both licensed providers just joining the network or for those just becoming licensed also have higher global quality scores than providers in networks that do not offer introductory training.
- Providers in networks with a coordinator who has professional experience working with children, either as an FCC provider or as a center-based teacher, have higher global quality scores than providers in networks that do not have coordinators with child care experience.
- Providers in networks with a specially-trained coordinator have higher global quality scores than providers in networks that do not have a specially-trained coordinator.

Two network services, on their own, have a differential effect for newly-licensed versus experienced providers. For more experienced providers, visits to FCC homes that focus on working with a child, or talking to a provider about a child, have a greater effect on global quality than they do for newly licensed providers. For newly licensed providers, use of a quality assessment tool during visits has a greater effect on global quality than it does for experienced providers.

#### No Effects on Quality

The study goes on to find that some network services, including monitoring FCC homes, external training for providers, peer mentoring, and material and business resources, are NOT significantly associated with higher quality care among affiliated providers. None of these four network service areas involve direct interaction between network staff and providers around care of children, as described below:

- visits to FCC homes focused on monitoring for licensing, health, and safety violations (versus visits focused on helping providers work with children and parents);
- referrals to external training or tuition reimbursements for providers (versus on-site training for providers at the network);
- peer mentoring programs, which offer supportive peer relationships, (versus opportunities for professional support between network staff and providers);
- material resources and business services (versus services that involve interactions and support between network coordinators and providers).

Although material resources and business services do not impact the quality of care in this sample of networkaffiliated providers, these services may help providers run better businesses. Providers report that the following material resources and business services helped them improve their businesses (percentages of networkaffiliated providers reporting this are shown):

- help with recruitment of families (60%)
- free supplies (55%)
- help with payments (38%)
- business skills (37%)

Most of these services are delivered at the agency level rather than by network coordinators and, in addition to improving providers' business practices, may be important factors in attracting providers to join and remain affiliated with networks.

### Table 6. Characteristics of Staffed Networks and Provider-led Associations

|                                | Staffed Networks   | Provider-led Associations  |
|--------------------------------|--|--|
| Organizational Characteristics | <ul> <li>Part of an established social service<br/>umbrella organization</li> <li>Funded by external agencies<br/>(e.g. Early Head Start)</li> </ul>   | <ul> <li>Independent group of providers</li> <li>Funded by member dues, occasional one-time grants</li> </ul>  |
| Staff and Leaders              | <ul> <li>Paid staff to work directly with providers</li> <li>Staff are not providers</li> <li>Some network coordinators have<br/>specialized training to work with<br/>FCC providers</li> </ul>  | <ul> <li>No formal, paid staff to work with providers</li> <li>Voluntary and fluctuating leadership</li> <li>Leaders are also FCC providers</li> </ul>   |
| Services for Providers         | <ul> <li>Services focus on initial training for<br/>beginning providers and raising quality<br/>of care for children</li> <li>Benefits often include access to other<br/>umbrella group services or facilities for<br/>children or their families</li> </ul> | <ul> <li>Services focus on professional<br/>development of experienced providers</li> <li>Benefits often include social activities<br/>for providers outside hours of caring for<br/>children</li> </ul> |

## Differences Between Staffed Networks and Provider-led Associations

This study finds that staffed networks offer a different menu of services than provider-led associations. Many networks focus their services on new providers, child care quality, and child and family well-being. Provider-led associations focus their efforts on seasoned providers, professional advocacy, and peer support for providers. Although some associations offer occasional home visits and direct training for providers, these services are dependent on unpredictable funding and on the time constraints and circumstances of individual association leaders. Moreover, networks have paid staff who may be specially trained to work directly with providers. Networks also function under the funding and organizational capacity of an umbrella agency. Provider-led associations do not have paid staff or stable funding sources, and their existence depends on an individual association leader's commitment and availability (see Table 6).

Providers in networks are more likely than association providers to report that network affiliation helps their business and financial stability through reduced-cost or free supplies, marketing of programs to parents, and reliable and regular administration of subsidy payments.

# **Policy Implications**

Findings from this study regarding specific characteristics and services of staffed networks have concrete implications for policy-makers and administrators seeking to improve the quality of family child care.

Government and other stakeholders should consider investing in staffed networks as a potentially effective quality improvement strategy for family child care in low-income, urban communities. This study finds that affiliation with a staffed network is significantly associated with higher quality care. Prior research suggests that children from low-income families are more likely to be cared for in family child care homes and may benefit from highquality child care settings. Thus, improving quality in family child care may be one way to improve outcomes for low-income children and families.

Government and other stakeholders should consider investing in specialized graduate-level training for network coordinators who work directly with FCC providers. This study finds that the combination of a specially-trained coordinator and direct services to providers focused on working with children is a key component of staffed networks that have higher quality providers. An approach to quality improvement that includes specially-trained staff, who deliver training and technical assistance to providers, is a more effective strategy than support services without a specially-trained coordinator. Although the study did not observe the network coordinator certificate program in this study, key aspects of this program may contribute to its effectiveness in helping coordinators work with and support providers: graduate-level academic course work and supervised internship; a focus on infant-toddler care; a curriculum adapted for FCC network coordinators; a relationship-based curriculum; and funding and endorsement by local and federal government.

**Government and other stakeholders should consider creating a set of quality standards for staffed networks.** With the exception of Early Head Start standards, networks at the time of this study (2002–2004) had few standards to follow, which resulted in a range of network services. Borrowing terms from child care quality measurement, findings regarding network services associated with higher quality care in this study may be categorized as *structural* and *process* features of networks (Philips & Howes, 1987; Kontos et al., 1995). Conceptualizing network services in terms of structural and process features of quality may facilitate the development of standards for networks.

As shown in Table 7, in this study structural features of networks refer to components that can be easily regulated, such as specialized training for coordinators, frequency of visits to FCC homes, low coordinator to provider ratios, use of a formal quality assessment tool during visits, and training and educational workshops for providers at the network site. Process features of networks in this study refer to components that are not easily regulated but are observable, such as visits to FCC homes that help providers work effectively with children and parents, strong coordinator-provider relationships that are responsive and respectful of provider needs, and opportunities for providers to give feedback to and have a voice within the network. Prior research has found that structural and process aspects of quality in child care facilities and programs are linked to child outcomes (Vandell & Wolfe, 2000). Yet despite the findings from this study regarding quality outcomes, the research reported here points to the need for future research to examine the relationship between network quality and child outcomes.

Government and other stakeholders should consider creating mandatory standards based on structural aspects of staffed networks that are associated with higher quality FCC. Additional investments in the process aspects of staffed network quality should also be considered such as assuring the content of visits to FCC homes is focused on helping providers work with children and parents, and implementing programs and practices that lead to strong network-provider relationships. Early Head Start may be a promising sponsor of networks, as some of the services associated with quality in this study are mandated by Head Start standards, including coordinator to provider ratios and frequency of visits to FCC homes. However, Early Head

# Table 7. Structural and Process Features of Staffed Network Services Associated with Higher Quality Care

#### **Structural Features of Networks**

| Network Coordinator<br>Qualifications | <ul> <li>Participated in a post-baccalaureate certificate program focused on providing support to FCC providers who care for very young children and their families.</li> <li>Prior experience working with children either in FCC or center-based setting.</li> </ul>  |
|---------------------------------------|---|
| Visits to FCC Homes                   | <ul> <li>High-frequency visits to FCC homes<br/>(at least 10 times within 6 months<br/>or possibly fewer if coordinator has<br/>specialized training)</li> <li>Low coordinator to provider ratio<br/>(no more than 12 providers per<br/>coordinator)</li> <li>Use of a formal quality assessment<br/>tool in visits to FCC homes</li> </ul> |
| Education/ Training                   | <ul> <li>Training and education at the<br/>network site for affiliated providers.</li> <li>Introductory training for new<br/>providers</li> </ul>   |

#### **Process Features of Networks**

| Visits to FCC Homes                          | • Content of visits to FCC homes is focused on helping the provider work with children and parents.  |
|--|--|
| Professional and<br>Supportive Relationships | • Opportunities for professional<br>and supportive relationships<br>between coordinators and<br>providers: Combination of regular<br>meetings, telephone help-lines, and<br>opportunities to give feedback |

Start standards alone may not be enough to ensure quality outcomes. Indeed, the study finds no differences in quality between providers who have Early Head Start slots and those who do not.<sup>6</sup>

Government and other stakeholders should encourage collaborations between staffed networks and other organizations that serve FCC providers, including provider-led associations, unions that represent providers, and resource and referral agencies. Increased collaboration and partnerships between support organizations could reduce redundancies in support systems and maximize the potential of different support groups to help providers. Services such as lending libraries and business help, for example, are not directly related to quality of care for children, but may be important for improving business and other provider-focused outcomes. Such services may be better delivered by organizations that focus on provider advocacy, peer support, and business stability. Packaging different types of services through collaborations between networks and associations, for example, may make it easier for providers to access the types of services they need for both quality improvement and business support.

Government and other stakeholders should consider financial incentives for FCC providers to join staffed networks and improve their quality of care. In the current study, higherpaying Early Head Start slots for children attracted providers to join networks. Further collaboration between Early Head Start and family child care may be one way to bring providers into networks and consequently raise the quality of care offered in these FCC homes. Other state-level incentives might include tiered reimbursement rates with network providers receiving higher reimbursements than non-network providers.

<sup>&</sup>lt;sup>6</sup> It is important to note that all networks in the study had some Early Head Start or Head Start slots. However, not all providers affiliated with the networks were allocated one or more of these slots.

# **Program Recommendations**

Findings from this study have several implications for agencies that sponsor staffed networks in large, urban communities.

Staffed networks should invest resources into hiring coordinators with a bachelor's degree and encourage coordinators to enroll in graduate-level training focused on working with providers, very young children, and families. This study finds that specially-trained coordinators, who attended a post-baccalaureate certificate program in infant studies, enhance the effectiveness of direct services to providers including training for providers, visits to FCC homes, and staff-provider interactions. This coordinator certificate program is not a professional-development training, but rather a coordinated academic, credit-granting program in infant studies offered at an institution of higher education.

Staffed networks should hire coordinators who have prior experience working with children either in family child care or center-based settings. Direct experience working with children helps coordinators understand the work of FCC providers and may enable them to develop trusting and supportive relationships with providers in their networks.

Staffed networks should find ways to develop supportive interactions between network staff and providers through regular meetings for providers, telephone help, and opportunities for providers to give network staff feedback. This study finds that networks that offer this combination of opportunities for staff-provider interactions have some of the greatest effects on quality. Regular meetings for providers should focus on topics identified by providers or focus on training topics related to working with young children and families. Networks should also provide some mode of regular communication between coordinators and providers in addition to scheduled visits to FCC homes. Providers should have regular telephone access to someone at the network for technical assistance. Finally, networks should have in place some procedure for providers to give the network formal feedback about the program services. Such feedback may help providers feel they have a professional voice in the network and foster positive and trusting relationships between staff and providers. Provider feedback also offers a source of program and service development for network directors and coordinators that is directly responsive to the needs of providers.

Staffed networks should focus their resources on developing training programs for providers at the network rather than making referrals to off-site programs or offering tuition reimbursement programs for providers. On-site training for providers at the network may enable coordinators to customize trainings for providers in the network and offer opportunities for providers to develop professional relationships with other providers as well as with network staff.

Staffed networks should invest their resources in visits to FCC homes. In order to carry out quality-focused visits, staffed networks should commit to limiting provider caseloads for coordinators to no more than 12 providers per coordinator, in order to assure adequate frequency and intensity of visits. This study finds that the following characteristics of visits to FCC homes have a significant relationship to higher quality care among affiliated providers:

- network uses a formal quality assessment tool in FCC homes;
- specially-trained coordinator works with children during visits to FCC homes;
- specially-trained coordinator talks to providers about children during visits to FCC homes;
- specially-trained coordinator talks to providers about parents during visits to FCC homes;
- network staff make regular and frequent visits to FCC homes (at least 10 times in 6 months or possibly fewer if coordinator has specialized training) to help provider work with children and parents.

Staffed networks should differentiate their services depending on providers' experience levels. Individualized services, such as visits to FCC homes focused on working with children, may be more effective for experienced providers. Services that help providers understand quality, such as use of a formal quality assessment tool during a visit, may be most effective for newly-licensed providers.

Staffed networks may consider offering business services and/or material goods to providers as an incentive for providers to join the network. Such services, however, should not replace quality-focused services such as visits to FCC homes, direct training for providers, or opportunities for staff-provider interaction. Finally, staffed networks may encourage more experienced providers to join or form their own associations. Providerled associations may be an additional support for providers in networks and dual affiliation may be beneficial to many providers. This study finds that associations offer different kinds of supports to providers than networks do—mostly in the areas of advocacy and peer networking. Association involvement may be a particularly effective quality improvement step for more experienced providers in a network.

# **Future Research**

Findings from this study point to the potential for developing standards and best practice models for staffed networks. Future studies may include piloting these models and examining the impact of network services on quality of care over time. In particular, the study finds that specialized coordinator training is a key predictor of higher quality networks and providers. However, limited information is known about how this coordinator certificate program helps coordinators work effectively with providers. Future research may involve examining the processes by which training of network coordinators impacts providers, children, and families. The child care field is in need of detailed information about professional development processes in order to replicate effective quality improvement programs.

The current study was designed to understand the relationship between network affiliation and quality of care, as measured by standard assessments of the family child care environment and provider-child interactions. Yet other outcomes in addition to program quality may yield further information about the impact of networks. The child care field is currently in the midst of reassessing and conceptualizing current approaches to measuring and defining quality child care that include better alignment between assessments of child care quality and child outcomes (Child Trends, 2006). Future studies could examine the impact of network affiliation on child outcomes in addition to program quality outcomes.

Parent perspectives and parent outcomes may be another area to examine in future studies of networks. Parents are central players in young children's development and experiences in child care. Many FCC providers often develop close relationships with parents of children in care (Bromer, 2006). Networks have the potential to support and enhance these relationships. Future studies might look at how networks interact with and support parents and how networks help providers work effectively with parents.

Future studies may also examine the effectiveness of networks for different groups of providers including family, friend, and neighbor providers and licenseexempt providers serving low-income families. The current study finds that some network services are more effective for newly licensed providers, while other services are more effective for more experienced providers. Future research could examine the different ways networks support quality across provider types and levels of experience and licensing status. Given the large numbers of low-income children who are cared for in license-exempt homes, understanding how to support quality in these settings seems an important goal for future studies.

Another area for future investigation is the community and neighborhood role of networks. Networks have the potential to support neighborhood-based FCC providers and to help providers develop a positive presence in their local communities. Some research has examined the community-building roles of FCC providers, documenting the neighborhood-watch function that many providers in low-income neighborhoods perform (Bromer, 2006; 2002). Networks that support providers have the potential to increase recognition and visibility of providers in neighborhoods, and to enhance the impact providers have on children, families, and communities.

# Glossary

Family Child Care (FCC) is paid, non-parental child care offered in a provider's home. This study included only FCC providers licensed by the state of Illinois (through the Illinois Department of Children and Family Services). Some people use the term to include unregulated, non-parental home-based care by relatives or neighbors, and in some states the provider is not required to live within the FCC home. In Illinois, a provider without an assistant is licensed to care for up to eight children under the age of 12, no more than five under the age of five and no more than three under the age of two. With an assistant the rules allow for more young children or up to 12 children if some of them are school-age and are cared for before and after school only.

**Support organization** refers to any organization that offers formal or informal supports to family child care providers.

Staffed network or network refers to a family child care support network with paid staff attached to a pre-existing social service organization. The staffed network provides oversight, direct education/services and/or links to education and services for family child care providers. The providers who belong to staffed networks in this study are independent contractors and are not employed by the network. Typically, staffed networks screen and register children and their families for federal or state child care programs such as Head Start/Early Head Start or vouchers for Transition Assistance for Needy Families (TANF). Agencies that sponsor staffed networks generally target lowincome families. Most staffed networks

place children with the providers in their network and administer the payments to the providers under purchase-of-service contracts. In Chicago, the staffed network agencies employ a coordinator to oversee and deliver services to member providers. Larger networks may have additional staff.

Network directors are the program or agency directors who oversee a staffed network. Some of the organizations that run staffed networks are very small so that the overall organization director also directs the network. Other organizations are large and complex so that the network director is not the head of the entire agency but directs the network and some other set of programs.

Network coordinators are the staff persons who deliver the network program services for providers. The network coordinator works for (or with) the network director defined above. The coordinator is the person responsible for visits to FCC homes; setting up and running meetings and trainings for the providers; interacting directly with providers by phone, mail, email and/or in-person; getting providers referrals or direct services, etc.

Specially-trained network coordinators are coordinators who participated in a post-baccalaureate certificate program in infant studies, customized for coordinators working with family child care providers.

**Provider-led association** refers to a group of providers who come together voluntarily to form a mutual support or professional group. Some associations are organized as 501(3)c non-profit

groups in order to be able to apply for grants. Associations have no paid staff and no regular income aside from member dues.

Affiliated indicates membership in a staffed network or provider-led association.

**Unaffiliated** designates providers who are not affiliated with any support organization. That is, they do not belong to either a staffed network or provider-led association. Because the unaffiliated providers in this study were matched to the network providers on several dimensions and serve as a primary comparison group, they are also referred to as **matched control providers**. These providers were selected based on demographic characteristics that matched the network providers in the study. These providers serve as a comparison group for the network providers.

**Quality** in this study refers to quality of family child care care as measured by either the Family Day Care Rating Scale (FDCRS) or the Arnett Caregiver Interaction Scale (CIS).

**Global quality** in this study refers to quality of family child care as measured by the **Family Day Care Rating Scale** (FDCRS).

Provider sensitivity to children or sensitive interactions with children in this study refers to quality of family child care as measured by the Arnett Caregiver Interaction Scale (CIS).

# References

Arnett, J. (1989). Caregivers in day-care centers: Does training matter? *Journal of Applied Developmental Psychology*, 10(4), 541–552.

Bromer, J. (2002). Extended care: Family child care, family support, and community development in low-income neighborhoods. *Zero to Three, 23*(2), 33–37.

Bromer, J. (2006). Beyond child care: The informal family support and community roles of African-American child care providers. Dissertation. University of Chicago, Chicago, IL.

Bromer, J., & Henly, J. R. (2004). Child care as family support? Caregiving practices across child care providers. *Children and Youth Services Review*, *26*, 941–964.

Child Trends (2006). *Measuring quality in early childhood and school-age settings: At the junction of research, policy, and practice.* Executive Summary. Washington, DC: Department of Health and Human Services.

Gilkerson, L., & Kopel, C. C. (2004). *Relationship-based systems change: Illinois' model for promoting social-emotional development in Part C early intervention* (Occasional Paper No. 5). Chicago: Erikson Institute, Herr Research Center for Children and Social Policy.

Gilman, A. R. (2001). Strengthening family child care in lowincome communities. New York: Surdna Foundation.

Harms, T., & Clifford, R.M. (1989). *Family Day Care Rating Scale*. New York: Teachers College Press, Columbia University.

Hershfield, B., Moeller, A., Cohen, A.J., & the Mills Consulting Group (2005). *Family child care networks/systems: A model for expanding community resources*. New York: Child Welfare League of America.

Kontos, S., Howes, C., Shinn, M., & Galinsky, E. (1995). *Quality in family child care and relative care*. New York: Teachers College Press. Morrissey, T. W. (2007). *Family child care in the United States*. (Reviews of research literature review). New York: Child Care & Early Education Research Connections.

Philips, D., & Howes, C. (1987). Indicators of quality in child care: Review of the research. In D. Phillips (Ed.), *Quality in child care: What does research tell us?* Research Monograph of the National Association for the Education of Young Children (NAEYC), Vol. 1, 1–19. Washington, DC: NAEYC.

Raikes, H. A., Raikes, H. H., & Wilcox, B. (2005) Regulation, subsidy receipt, and provider characteristics: What predicts quality in child care homes? *Early Childhood Research Quarterly*, 20(2), 164–184.

Shonkoff, J. P., & Phillips, D.A. (Eds.) (2000). From neurons to neighborhoods: The science of early childhood development. Washington, DC: National Academy Press.

Stott, F., & Gilkerson, L. (1998). Taking the long view: Supporting higher education on behalf of young children. *Zero to Three*, *18*(5), 27–35.

Vandell, D. L., & Wolfe, B. (2000). *Child care quality: Does it matter and does it need to be improved?* (Special report No. 78). University of Wisconsin-Madison Institute for Research on Poverty.

Votruba-Drzal, E., Coley, R. L., & Chase-Lansdale, P. L. (2004). Child care quality and low-income children's development: Direct and moderated effects. *Child Development*, *75*, 296–312.

### About the Center

The Herr Research Center for Children and Social Policy informs, guides, and supports effective early childhood policy in the Great Lakes region. Unique in its regional approach, the center brings together perspectives from policy and research to promote the well-being of young children from birth to age 8 and their families.

This center builds on the work of an applied research center established at Erikson in 1997 with a generous gift from the Jeffrey Herr family. The center expanded its mission in 2005 with additional funding from the Herr family and from the McCormick, Joyce, and Spencer Foundations and the Children's Initiative, a project of the Pritzker Family Foundation.

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