Herr Research Center for Children and Social Policy
at Erikson Institute

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

Report to the Local Initiatives Support Corporation-Chicago

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

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This report as well as the executive summary, *Staffed Support Networks and Quality in Family Child Care: Findings from The Family Child Care Network Impact Study,* and policy brief, *The Family Child Care Network Impact Study: Promising Strategies for Improving Family Child Care Quality,* are available to download at herrcenter.erikson.edu.

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About the Authors

Juliet Bromer, Ph.D., is an assistant research scientist at the Herr Research Center for Children and Social Policy at Erikson Institute in Chicago. She earned her M.S. in education from Bank Street College of Education and her Ph.D. in human development from the University of Chicago. She has conducted research on the family and community support roles of child care providers in low-income neighborhoods. Her current interests include the role of families in child care quality measurement, quality improvement in home-based care, and the role of support in child care settings.

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Local Initiatives Support Corporation (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.

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Overview

Overview

As many research studies have suggested, 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). Child care research to date has primarily focused on quality in child care centers. Yet a majority of young children from low-income families spend some time in home-based child care settings while their parents work. Family child care providers have the potential to make a significant impact on the well-being of children, families, and communities. Aside from offering a developmental support to young children, family child care providers also have the potential to support low-income working parents and communities (Bromer & Henly, in press; 2004). Many parents choose family child care because of its convenience and flexibility regarding location, hours, and fees. Moreover, family child care homes are small businesses that have the potential to serve as assets to communities both economically (Gilman, 2001) and socially (Bromer, 2006).

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 (Morrissey, 2007; Kontos, Howes, Shinn, & Galinsky, 1995). Family child care 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; Marshall, et al., 2003), pointing 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 or organizations that offer on-going support and training to family child care providers are one strategy for quality improvement in family child care. In their landmark study of quality in family child care, Kontos et al. (1995) found that support group affiliation was a significant predictor of higher quality care. Yet no studies to date have looked systematically at the particular characteristics of support networks that are related to quality child care. According to a 2005 survey of states that invest in networks, only one state—Virginia—has implemented quality standards for family child care networks (Hershfield, Moeller, Cohen & the Mills Consulting Group, 2005).

Various funding and policy initiatives in the city of Chicago over the last decade have resulted in a range of staffed networks for family child care providers. 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 staffed networks in the frequency, type, and quality of provider services actually delivered.

The current study examines the relationship between affiliation with a family child care staffed network and quality of family child care as well as a comparison of staffed networks and provider-led associations. We use the term "staffed networks" to refer to programs that have at least one paid staff person who provides ongoing oversight and support to family child care providers in the network. See the glossary in this report for definitions of the terms "network" and "association." Clarity about the meaning of these terms as used in the report is critical to understanding the substance of this research.

Research Questions

This study addresses the following research questions:

1. Do family child care providers affiliated with a staffed network offer higher quality care than unaffiliated providers with similar characteristics?
2. Do staffed networks contribute to higher quality child care among affiliated providers?
3. What characteristics and services of staffed networks are associated with higher quality care among member providers?
4. How do staffed networks compare to voluntary, provider-led associations?
5. What policy recommendations can be made to improve the quality of services offered by staffed networks?

Overview of Research Study Design

The study took place during the years 2002 to 2004 and included 150 licensed family child care (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 included a third comparison group of 30 providers affiliated exclusively with a provider-led association. The comparison group of association-affiliated providers in this study was not representative of association providers in Chicago at the time of the study, but rather a sub-set of providers who were 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 (CIS), which measures provider sensitivity to children in care (Arnett, 1989).

Review of Previous Research

Review of Previous Research

Child Care Arrangements and Family Child Care

National surveys of child care arrangements find that 60% or more of all young children are in regular non-parental child care arrangements (Mulligan, Brimhall, & West, 2005) and up to 89% of children with employed parents are in some kind of non-parental arrangement on a weekly basis (Johnson, 2005). Non-parental child care takes place in a variety of center and home-based settings and is offered by a variety of providers. Home-based care most often takes place in the provider's own home (Mulligan et al., 2005) and includes regulated or licensed family child care providers, and unlicensed (or license-exempt) providers, often referred to as "kith and kin" or "family, friend, and neighbor" caregivers.

Compared to center-based programs, home-based child care providers care for fewer children and tend to offer less structured programs than centers. However, some providers transform parts of their homes into mini preschools and offer educational programs while others focus their programs around daily living and family routines. Unlike center-based teachers, family child care providers serve as both caregiver and small business owner.

Regulations for family child care vary from state to state with some states having minimal to no regulations (National Association of Child Care Resource and Referral Agencies [NACCRRA], 2008). Licensing usually involves meeting minimal standards for health and safety, minimal training or education requirements, and minimal oversight of the child care program through home visits, although some states depend on only a provider's signed statement that standards have been met. Many states, such as Illinois, exempt providers caring for fewer than 3 non-relative children and many providers may not seek licensure even when it is required.

Family child care accounts for a significant proportion of child care arrangements for young children. According to a recent analysis of the 1999 National Survey of America's Families (NSAF), 28% of children under age 5 with an employed parent are in center-based programs, 27% are cared for by a relative, 14% are in non-relative family child care, 4% are cared for by a nanny in the child's home, and remaining 27% are cared for by a parent or other arrangement (Sonenstein, Gates, Schmidt, & Bolshun, 2002). Low-income working parents in particular often rely on multiple arrangements and these arrangements often include family child care providers (Henly, Shaefer, & Waxman, 2006; Layzer & Collins, 2000).

Parents use family child care arrangements for a variety of reasons. Many parents prefer the intimate, family-like environment of family child care programs and the individual attention to their child(ren) from a provider with a small group of children. In fact, infants and toddlers are more likely to be cared for in regulated family child care programs than in centers (Johnson, 2005). Family child care providers often care for mixed-age groups of children which allows families to keep siblings together in child care. Some parents also feel more comfortable with a cultural and/or linguistic match between provider and child as well as with neighborhood proximity, both more common in family child care than in center-based programs (Morrissey, 2007).

Studies find that low-income families disproportionately use family child care and other home-based child care providers because of their flexible hours, lower fees, and convenient locations. For many low-income working parents, family child care and other home-based child care providers charge less than centers and are able to offer flexibility around hours and fees in

order to accommodate non-standard work schedules and fluctuating pay checks (Layzer & Collins, 2000; Bromer & Henly, 2004).

Quality in Family Child Care

Research shows that the quality of care received by children in their early childhood years from birth to school-age has direct consequences for both cognitive and emotional development as well as for later performance in school and adult life (Shonkoff & Phillips, 2000; Vandell & Wolfe, 2000). This knowledge has provoked much research on the definition and assessment of quality standards in child care centers, and increasing attention to licensed family child care programs. Increased federal and state investments in family child care and other home-based settings have furthered the need for research on quality improvement initiatives in home-based settings.

Most studies of child care quality find relatively low levels of high-quality child care across settings. In one of the first studies to examine and compare regulated and unregulated home-based child care Kontos et al. (1995) found that regulated or licensed family child care providers were more likely to offer higher-quality child care than unregulated relative caregivers. Yet only 10% of regulated family child care providers offered what would be considered "good" or "high" quality care. The National Institute of Child Health and Human Development (NICHHD) study of early child care (2000) found slightly higher levels of quality care across all child care types (centers and homes) with 17% rated "excellent", 41% rated "good", 31% rated "fair", and 11% rated as "poor" quality.

Studies of child care quality focus on child care providers' interactions with children and their preparation for working with children. These studies rely on observational assessments and provider surveys to determine quality of care. Researchers base their assessments on two components of child care quality: structural quality and process quality (Vandell & Wolfe, 2000; Kontos et al., 1995). Structural quality refers to characteristics of the child care environment such as group size and child to adult ratios as well as provider characteristics such as education level, specialized training in child care, and professional aspirations (Vandell & Wolfe, 2000). Process quality consists of observable aspects of the child care environment having to do with sensitive and responsive provider-child interactions, daily activities and curriculum, appropriate environment and materials, and health and safety practices. The Family Day Care Rating Scale, the FDCRS, (Harms & Clifford, 1989), and the Arnett Caregiver Interaction Scale, the Arnett CIS (Arnett, 1989), are two commonly used assessments of child care process quality.

Several studies have examined specific predictors of quality in family child care such as education, training, support, provider experience and income, group size, and ages of children in care. Most studies of family child care homes find that overall education levels as well as relevant education and training in child development, child care, or early childhood education are the best predictors of high-quality care as measured by standard assessments such as the FDCRS and the Arnett CIS (Kontos et al., 1995; Doherty, Forer, Lero, Goelman & LaGrange, 2006; Doherty, Lero, Goelman, Tougas & LaGrange, 2000; Burchinal, Howes & Kontos, 2002; Raikes et al., 2005; Marshall et al., 2003).

Some research also points to the importance of provider support in predicting high-quality child care. Studies show that providers who network with other providers, access community resources such as lending libraries, and belong to professional groups such as networks or associations, tend to offer higher quality child care (Kontos et al., 1995; Doherty et al., 2000).

Moreover, the professional and peer support that networks or associations offer providers may facilitate and motivate providers to pursue educational training that results in higher quality care.

Other provider characteristics that may predict quality in family child care are less concrete and more difficult to quantify and regulate. Aside from education and support group affiliation, there appear to be motivational and professional characteristics that are correlated with and may predict higher quality in family child care. Kontos et al. (1995) first introduced the idea of provider intentionality to characterize the motivations of family child care providers who are more likely to offer higher quality care. Intentional providers are child-centered in their childrearing beliefs and are motivated to do child care for child-focused reasons (child care as a career, love of children) rather than personal, adult-focused reasons (help out mothers, make money). Other researchers have also found that providers who view themselves as professionals are more likely to offer higher quality care than those who do not view themselves in this way (Doherty et al., 2000).

Despite some evidence that training, relevant education, and support may be important components of improving quality in family child care, many providers are not able to access these supports and professional opportunities. Some of the structural characteristics of family child care (home-based, single provider model, isolated from other colleagues) may serve as barriers to these quality improvement efforts.

The decentralized nature of family child care makes it difficult to deliver training, supervision, and other support services to providers. Studies find that many family child care providers report being well-connected to family and people in their immediate communities and neighborhoods, but have few connections with other family child care providers or groups (Kontos et al., 1995; Bromer, 2006).

Moreover, family child care studies share a consistent theme about providers' employment conditions: most providers earn low incomes, few have access to health care or retirement savings, and many are open for business at least 60 hours per week (Layzer & Collins, 2000; Doherty et al., 2000; Helburn, Morris & Modigliani, 2002; Marshall et al., 2003; Modigliani, 1993). Using federal data, Helburn et al. (2002) analyzed the income family child care providers would earn in other occupations with a given level of education and experience. With the exception of providers with less than high school education, they concluded that most providers earn substantially less than they could in other jobs, particularly providers with college degrees. This suggests that there are consistent economic incentives for child care providers to leave their occupation, particularly providers with higher levels of education. On the other hand, in some states or municipalities where programs such as Early Head Start reimburse providers at higher rates, incomes may be higher.

Family Child Care Quality and Low-Income Families

Several studies have found that low-income children are more likely to receive lower quality care in family child care homes than higher-income children (Morrissey, 2007; Kontos, et al., 1995; Helburn et al., 2002; Marshall et al., 2003). Kontos et al. (1995) found that family child care providers who charged higher rates and thus usually had higher incomes were more likely to score higher on measures of warmth and sensitivity to the children in their care than providers with lower incomes. Raikes et al. (2005) found that family child care programs with a higher density of families using government-subsidized child care offered lower quality care than programs with a lower subsidy density. The National Study of Child Care for Low-Income Families, which examined the quality of family child care for low-income children, reported that a majority of family child care

providers did not read or offer learning activities to children on a regular basis, and that television-watching was a regular, daily activity in most child care homes (Layzer & Goodson, 2006).

Findings regarding low-income children and child care quality have led researchers to believe that "child care quality may be more influential for children who experience greater individual and contextual risks" (Votruba-Drzal, Coley, & Chase-Lansdale, 2004, p.298). Many studies have demonstrated that the beneficial effects of high-quality early care and education programs are greatest for at-risk children (Vandell & Wolfe, 2000). These studies suggest that high-quality child care whether in a home or center may serve as a buffer or protective factor for at-risk, low-income children. Other 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 et al., 2004). Moreover, research on the effects of child care on maternal employment outcomes finds that for low-income mothers, high-quality and reliable child care has a positive impact on employment stability (for summary of research, see Vandell & Wolfe, 2000). These findings point to the need for more research on how to improve quality of child care for low-income children and families.

Quality Improvement Efforts and Family Child Care

Family child care has been increasingly looked to by states as an area for investment and expansion. According to the U.S. Child Care Bureau, 17% of children subsidized by federal child care programs were in licensed or regulated family child care homes (Child Care Bureau, 2006). The federal Head Start program offers services to families through family child care providers as well as through center-based programs. Similarly, some states have started to offer public pre-kindergarten services through family child care programs as well as through the more traditional public school settings (Morrissey, 2007). Many states have also developed quality rating systems (QRS) as a vehicle for improving quality of care across center and home-based settings (Zellman & Perlman, 2008). Some quality rating systems use accreditation through the National Association for Family Child Care as a benchmark for quality.

Training and Home Visiting Interventions

Despite these policy efforts, there are relatively few studies that evaluate the effectiveness of particular interventions and quality outcomes in family child care. Most studies examine a particular service such as a training program or a home visiting model and find modest to small effects on quality (Kreader, Ferguson, & Lawrence, 2005; Pearlmutter, Grayson, & Fernando, 2005; Kontos, Howes ,& Galinsky, 1996; McCabe & Cochran, 2008). Kontos et al. (1996), for example, found that a training program for family child care providers had a modest impact on global quality but no impact on provider sensitivity or responsiveness to children in care. As the authors of this study explain, provider-child interactions may be more difficult to impact through training than environmental and curricular-related aspects of care. DeBord and Sawyers (1996) found differential effects of a training program for providers affiliated with a professional provider association compared to unaffiliated providers. Unaffiliated providers showed the greatest improvements in quality from the training program while professionally affiliated providers did not improve quality of care as a result of training program participation.

Studies of home visiting programs in family child care also find significant effects of such interventions on quality of care. Based on several state-level child care studies, Raikes et al (2006) identified that visits to family child care homes by a mentor or support person were among the provider "assets" significantly associated with quality care. In a study examining the impact of a

technical assistance home visiting program on family child care quality, researchers found that the number of home visits to providers from a technical assistant who had participated in a one-time training on family child care home visiting had a small but significant effect on quality scores (Pearlmutter et al., 2005). In an evaluation of a more intensive home-visiting program, researchers at Cornell University (McCabe & Cochran, 2008) found that the combination of frequent home visits (twice a month) by a trained home visitor and regular networking meetings for providers had a significant effect on higher quality scores among participating providers.

These studies point to the paucity of research about the effectiveness of training and intervention programs in family child care. None of these studies examine combinations of direct services such as training and home visiting. Findings from the Quality Interventions for Early Care and Education (QUINCE) multi-site study which examines the impact of a consultation model of technical assistance and training to home and center based providers may offer important new information about the effectiveness of intensive and targeted interventions in family child care homes (see www.researchconnections.org for more information). Nevertheless, these studies suggest that on-going support or training from an external entity may be more effective at improving quality than efforts such as individual accreditation of family child care providers. Accreditation may work for some self-motivated providers, but many providers need the professional structure and on-going support of a network or support program to participate in quality improvement activities. Family child care staffed networks that offer providers a menu of services and on-going support as described below may present another promising avenue for quality improvement.

Support Networks for Providers

Family child care support networks or systems exist in many states and municipalities although definitions and types of services vary widely across locations (Hershfield et al., 2005; Hamm, Gault & Jones-DeWeever, 2005; Larner, 1994; Larner & Chaudry, 1993; Musick, 1996). In their survey of family child care systems nationwide, Hershfield et al. (2005) defined family child care networks and systems as organizations that offered services directly to children and families as well as provider supports. This current study defines family child care staffed networks as organizations that are funded and staffed to provide a range of services to providers including enrollment of families, administration of subsidy payments, training and home visiting to providers, and opportunities for peer and professional support.

Family child care providers who affiliate with networks or systems tend to serve predominantly low-income families. In a study of family child care providers in Massachusetts, Marshall et al. (2003) found that more than half the revenues of family child care providers serving mostly low-income families came from systems, and the remainder from parent fees, other subsidies, and the Child and Adult Care Food Program. Hershfield et al. (2005) document that a few states and municipalities have invested public funds into networks as a quality improvement strategy for subsidized family child care. Head Start, which serves children from low-income families, has also developed support networks to administer its programs through family child care providers (Hamm et al., 2005; Hershfield et al., 2005).

Alongside staffed family child care support networks and systems, provider-led associations may also serve an important support function for family child care providers. Provider associations are provider-led, voluntary groups of providers that range from informal support groups to larger and more professional groups that are established non-profit organizations. Some states have statewide provider associations that bring together affiliated community associations, and some of

these are, in turn, affiliated with the national professional organization for providers—the National Association for Family Child Care (NAFCC). Associations tend to offer peer support and networking opportunities for affiliated providers and focus their efforts on increasing the professionalism and recognition of family child care. This current report describes the services and functions of provider-led associations in the city of Chicago in comparison to staffed networks.

Support networks and quality outcomes. Studies that examine the effect of professional support on family child care quality often do not distinguish between staffed support agencies such as networks or systems and provider-led voluntary associations. Yet the few research studies that have examined the link between provider support groups and quality find that support from other providers and professionals has the potential to improve quality in family child care. Kontos et al. (1995) found that providers who were involved with other providers through provider associations and networks were more likely to delivery higher quality care. However, this study was not able to examine whether provider support networks had an independent effect on quality.

A handful of other studies have documented similar findings regarding network or association affiliation and quality of family child care. In a study of Canadian family child care providers, Doherty et al. (2000; 2006) found that network or association membership predicted higher quality. Specifically, the opportunity to network with other providers and access toy lending libraries and community resources was correlated with higher quality scores. Home visits to providers and other specific services of networks did not appear to be predictive of quality in family child care homes. However, in a study of the effects of policy level variables such as regulation on quality in family child care, Raikes et al. (2005) found that providers who were subject to higher levels of regulation including regular home visits, monitoring, and required training, offered higher quality child care. This finding points to the potential impact that a regular combination of services such as monitoring and technical assistance—activities that many staffed networks perform with providers—can have on improving quality in family child care.

By connecting providers to experienced and trained network staff, training opportunities, and other providers, staffed networks may help to ameliorate some of the barriers to quality and professionalism in family child care such as decentralization and isolation (Hamm et al., 2005; Hershfield et al., 2005). In a qualitative study of family child care networks in Chicago, Musick (1996) identified the central role of the network coordinator who worked directly with providers as offering professionalism to providers and advocating for providers in the network.

Staffed networks may be a particularly effective strategy for improving family child care in low-income neighborhoods. Larner (1994) identified characteristics of staffed networks that had success working with low-income providers. Such programs have enough resources, financial and material, to give low-income providers the support they need for such expenses as home improvements, equipment, and learning materials. They offer one-to-one contact with staff members who have a background similar to the provider's own, and who respect and can communicate easily with the providers.

Support networks and community development. In addition to improving quality of family child care, staffed networks may also have the potential to serve as a vehicle for low-income community development and infrastructure building (Gilman, 2001; Meyer, Smith, Porter, & Cardenas, 2003). Staffed networks are often housed in community-based organizations that may help increase community awareness and recognition of family child care as an important community service for families with young children (Gilman, 2001). Moreover, once staffed networks are well-established within a community, they may have the potential to extend their

support services to other home-based providers in the community such as license-exempt providers.

Staffed networks may also support the economic development of low-income family child care providers as small business owners and, in turn, promote family child care as an economic resource in low-income neighborhoods. In Chicago, for example, the Banking on Family Child Care program offered financial education and matched savings to network-affiliated providers in order to improve their network retention as well as their personal and professional financial well-being. The program included intensive financial education offered by local banking institutions as well as individual consultations. For each dollar that a participating provider put in an Individual Development Account, up to $2,000, the program provided a $1 match. The $4,000 could then be used for an asset purchase including purchase of a home, home repairs, business reinvestment including a car or van, an Individual Retirement Account, or higher education for the provider or a family member. In its first year, the program helped 45 providers from five staffed networks save more than $28,000. Some providers reported that network affiliation was an important part of their success with the banking program. This was particularly true for providers in staffed networks with coordinators who took a hands-on, involved approach to helping providers succeed in the program (Schoua-Glusberg, 2004).

Summary

In summary, this literature review has shown that family child care is a widely used form of non-parental child care, especially among low-income families. Low-income families often choose home-based care as a convenient, community-based, and familiar child care setting for their youngest children. Yet the quality of care in many family child care homes, especially those in low-income neighborhoods, tends to be inadequate to meet the developmental needs of young children. This crisis of child care quality in low-income communities necessitates a deeper investigation and understanding of effective strategies to improve the quality of care, especially in home-based settings where so many very young children spend a bulk of their time.

Family child care staffed networks offer a quality improvement strategy that has received almost no research attention despite the presence of these groups in low-income urban communities across the country. Some studies point to the importance of support group affiliation, yet more information is needed on the types of supports providers need to improve quality. This study sought to understand the particular characteristics of family child care staffed networks that were associated with higher quality child care among affiliated providers.

Local Background

Local Background

Recognizing the important role that high-quality family child care can play in developing and sustaining healthy communities, the Local Initiatives Support Corporation (LISC) took interest in bolstering staffed networks that support family child care. The John D. and Catherine T. MacArthur Foundation was similarly interested in ways to support quality in early care and education settings, especially family child care. These overlapping interests resulted in a MacArthur Foundation grant to LISC to support a research study on the effectiveness of staffed networks as a quality improvement strategy for family child care.

Family child care staffed networks in Chicago provide services to family child care businesses including referrals, visits to provider homes, training for providers, and business assistance. Similar programs in other parts of the country are referred to as systems, hubs, satellites or associations[1]. At the time of data collection (2002), 35 staffed networks in Chicago served an estimated 674 family child care providers and 13 associations provided services to about 200 providers. The remainder of the city's family child care businesses—roughly 1,040 providers or 60 percent of the total—remained unaffiliated.

Several changes in the local policy environment immediately preceding the study 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. Thus, some staffed networks were being run by organizations who sought funding for these programs and who had been running them for many years, but others were being run by organizations at the request of CDHS rather than because the networks were part of the mission and purpose of the sponsoring organization.

Despite substantial funding from public sources, there were few guidelines or accountability standards for networks. EHS required that networks meet some basic requirements such as a minimum number of visits to provider homes, low coordinator to provider ratios, and no more than four children in care, with only two children under 2 years of age, with one provider. EHS also required that coordinators have a bachelor's degree and that providers be working towards a CDA. Otherwise, EHS networks followed general guidelines for Head Start programs although these were not adapted for family child care homes. For staffed networks working with providers who did not have EHS slots there were virtually no standards. Consequently, there was great variation in the type and quality of services that staffed networks offered. Moreover, the grants did not tie funding for staffed networks to the number or quality of services the programs provided. This gave organizations sponsoring staffed networks an incentive to do as little as possible, particularly if the network had been established in response to CDHS request rather than by the initiative of the organization itself.

[1] Provider-led associations are *not* included in this study's definition of networks. See glossary for definitions of terms used in this report.

A two-tiered system of child care subsidies for low-income families in Illinois was another factor affecting staffed networks and providers in Chicago at the time of this study. Providers earned $21 per child per day for children subsidized by the Illinois Child Care Fund (ICCF) through federal vouchers for low-income, welfare-to-work, or teen parents. In contrast, providers earned $32 per child per day for infants and toddlers enrolled in EHS. Prior to 1998, network affiliation was required for a provider to offer subsidized care through ICCF, but in 1998, under the federal mandate of welfare reform, the state expanded eligibility to all licensed child care providers. This meant that providers did not have to be affiliated with a staffed network to access ICCF subsidies. Staffed networks retained a monopoly on the higher EHS program subsidies, however, and each newly established network was given some of the higher-paying EHS slots. As a result, providers were likely to be motivated to join staffed networks with open EHS slots to access the higher reimbursement rates rather than to access the services staffed networks offered. In fact, providers seeking only higher reimbursements may have looked for programs with the fewest requirements and least oversight.

Staffed networks were compensated on a two-tiered scale as well; they received $5 per day per child for the ICCF program and $7 per day for EHS. This meant that organizations sponsoring staffed networks were motivated to fill EHS slots and focus on paper compliance with the EHS program rather than on training and support of providers. Further complicating the situation was that network affiliation was no longer required for providers who offered subsidized care (parents could use vouchers to pay providers directly), and network membership was not open to providers who ran a group home with more than eight children.

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 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.

Clearly, more information was needed about whether and how staffed networks are an effective quality improvement strategy for family child care. This study was the first to take a detailed look at staffed networks in a large urban community and to examine the particular characteristics and services of staffed networks that were associated with higher quality child care.

Research Design and Methods

Research Design and Methods

This study employed a multi-method approach to understanding the relationship between quality of family child care and affiliation with a support organization. To accommodate both the need for evaluating self-selection of providers into staffed networks and the need for a separate, within-network analysis, the study included 80 staffed network-affiliated providers, 40 matched, unaffiliated providers, and 30 provider-led association-affiliated providers.[2]

To isolate the effect of network affiliation on quality of care, a "matched-control" design was used. This entailed studying a control group of non-affiliated providers who shared a pre-determined set of characteristics (the "match") with the network providers *except* with respect to their affiliation with a staffed network. In addition, given the presence of several provider-led associations in the Chicago area, the study included providers from these associations as a third comparison group. Providers affiliated with associations were not matched to either the network or control group providers.

This study involved data collection in several modes with organizational staff of networks and provider-led associations as well as with family child care (FCC) providers. Data collection took place during the period of 2002-2004. In-person, semi-structured interviews with network staff (directors and coordinators) and with association leaders were conducted to learn about network and association organizations and services to providers. Telephone surveys were also conducted with a selected sample of FCC providers affiliated with each type of group. To measure the process quality of care in each provider home, trained observers visited providers' homes, using the Harms-Clifford Family Day Care Rating Scale (FDCRS) (Harms & Clifford, 1989) and the Arnett Caregiver Interaction Scale (CIS) (Arnett, 1989). It should be noted that in this study, structural features of quality such as provider education and training, group size and ratios, were used as control variables rather than as quality outcomes. This study could not determine to what extent providers in networks or associations were more likely to obtain more education or care for fewer children as a result of being in a network or association.

Identification and Recruitment of Support Organizations and Staff

Staffed Networks

Staffed networks as defined in this study were funded programs that supplied services to a designated group of FCC providers who, in turn, delivered child care services to children and families enrolled by the network. Staffed networks had at least one dedicated staff member who provided and coordinated services to affiliated providers. The study began with an initial list of all agencies in Chicago that operated staffed networks to support FCC providers. The universe of functioning staffed networks at the start of the study numbered 33 (administered by 30 separate agencies). Interviews were conducted with staff at agencies representing 35 networks, including two that had recently stopped offering services to providers prior to the start of the study, in order to collect the broadest range of information about the structure and content of staffed networks.[3]

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[2] Comparison of network-affiliated providers with non-affiliated providers required sufficient numbers in both groups; however, a comparison among network-affiliated providers required large numbers within this single group. Adding association-affiliated providers as another comparison group, one in which self-selection would be expected to operate, required a sufficient N of association-affiliated providers for estimates of means for this group. The sampled numbers represent a compromise to fill each goal within the limits of study resources.

[3] The initial list of agencies required several modifications. One agency ceased operations amid larger funding problems and declined further participation in the study. Another agency appeared erroneously on the list because it had a name

The study sought to interview a coordinator and organizational director for every agency that sponsored a staffed network in Chicago. However, for some large agencies, the overall agency director had little to no knowledge about the networks. In these cases, interviews were conducted with a program director or sub-unit director whose position and knowledge concerning the network was more comparable to those of the directors of smaller agencies. For 30 of 35 staffed networks, both coordinator and director (in one case the interview was conducted simultaneously with both coordinator and director) were interviewed. In five cases, only one interview was conducted since a single person served dual roles or a position was empty. A network director, coordinator, or both were interviewed at 100% of the network agencies.

Provider-Led Associations

In contrast to staffed networks, provider-led associations were defined in this study as voluntary support groups organized by FCC providers to offer peer and professional supports to each other. The study began with an initial list of eight known provider-led associations. Six other provider-led associations were recruited into the study during the field period, based on information gathered from network staff, other association leaders, and providers. The lack of formal funding for provider-led associations made recruitment for associations more difficult than for staffed networks.

A total of 14 provider-led associations and interviewed leaders from each of these groups were included in the study sample, for a 100% response rate of the associations identified through snowball sampling. Only 12 of the provider-led associations were active during the field period of the study—one was in the process of dissolving and the other was effectively defunct (they had not held a meeting in close to two years). Because of the informal, voluntary nature of these groups, it is possible that the study missed other existing voluntary provider support groups that would have been eligible. Table 1 summarizes the numbers and types of interviews conducted with support organization staff.

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very similar to an agency running a staffed network. Two agencies on the list had discontinued their networks but retained the directors and coordinators on their staff. Three agencies had two separate networks running simultaneously.

Table 1
Summary of Numbers of Cases by Organizational Type for Network Staff and Provider-Led Association Leader Interviews

	Staffed Networks	Provider-Led Associations
Interview Completed with Group Representative[a]	35	14
Functioning Groups Identified	33	12
Type of Staff Interviewed		
Association Leader	n/a	12
Director and Coordinator separately[b]	29	n/a
Director and Coordinator together	1	n/a
One person acting as Director and Coordinator[c]	3	n/a
Director only[d]	1	n/a
Coordinator only[e]	1	n/a
Total Staff/ Leader Interviews Completed	64	12

[a] Interviews were scheduled and completed with two association leaders of groups in the process of dissolving; one because the leader could not motivate the members to share the responsibilities of running the group and the other due to serious health problems for the leader and no willing successor. Interviews were scheduled and completed with two staffed networks that recently closed because the research protocol allowed for including providers if the network had closed within three months of the study observations.
[b] One agency had two staffed networks, so there was a single director for two coordinators. Thus, the study had three interviews between the two networks instead of the expected four.
[c] These were cases in which one person explicitly held both positions.
[d] The coordinator position was unfilled during the field period.
[e] In effect, this network had only a coordinator and no director.

Recruitment of Family Child Care Providers

Three groups of FCC providers were recruited for this study: 80 providers randomly drawn from all the staffed networks in Chicago roughly in proportion to network size[4]; 40 control group, unaffiliated providers selected to match network-affiliated providers along key demographic variables (age, race/ethnicity, gender, years of education, years of experience, and type of neighborhood area as a proxy for service population); and 30 providers affiliated with a provider-led association randomly drawn in proportion to the size of each association.

To qualify for participation in the study, providers in this study had to meet eligibility criteria based on licensing status, exclusive affiliation, and length of affiliation. Providers in all three comparison groups had to be currently licensed or awaiting renewal (accepted because DCFS had a long backlog for renewals and providers had no control over this). Affiliated providers had to have been enrolled with the network or association for at least six months.[5] Finally, eligibility for providers in the two affiliated groups was restricted to those affiliated exclusively with a staffed network or a provider-led association. Providers who were affiliated with both a network and an association or affiliated with more than one network or association were excluded from this study.

[4] One network was an order of magnitude larger than all the rest. Had the study maintained proportional representation with this small overall sample size, the network-affiliated provider group would have been entirely dominated by members from a single network, making between-network comparisons impossible. The enrollment of providers from this large network was capped at 12 for this reason. Further, other networks were not always represented in proportion to their total size due to a lack of eligible and willing providers in their group.
[5] If the network or association shut down during the field period, a provider was still considered eligible for up to three months after the network ceased to function. The study only included providers who were listed by leaders as members and who also affirmed that they did indeed actively belong to an association.

Those previously belonging to another network or association had to have left the other group at least one year prior to the study. In fact, almost a third of the association provider members (31%) were disqualified from participation in this study because they also belonged to a staffed network. Since these providers were not interviewed, their reasons for joining both a network and an association are not known. It is possible that these providers found different types of help and services from these organizations and/or they may have had financial incentives to join both. Thus, the providers in the study sample may not represent network or association providers in general but rather a sub-set of providers who only affiliated with one support organization.

The study sampled individual providers from staffed networks in some proportion to the size of the network. However, given these strict eligibility requirements combined with the fact that several organizations had very few affiliated providers (one network only had two enrolled providers), the number of affiliated providers per organization in the study was quite small. The sampling frame of eligible participants continued to change throughout the field period as information was accumulated and assumptions were updated. Seven providers in the sample were the only representatives of providers in their respective networks. On average, the study included 2.8 affiliated providers per staffed network. Moreover, not all the staffed networks and provider-led associations were represented in the provider sample. The 80 staffed network providers were drawn from only 26 of the 33 staffed networks that were active during the field period of the study. The 30 association-affiliated providers were drawn from only 9 of the 12 active associations (see Table 2).

Public policy changes further complicated the sampling plan: during the field period, funding was pulled for Early Head Start slots that had been mistakenly allocated to staffed networks with providers outside of previously designated areas of the city. This resulted in some providers losing slots subsidized at a higher rate and some additional staffed networks closing down altogether before the study had completed a target number of provider interviews and observations. Additional details about the sampling and recruitment process can be found in Appendices A and B.

Table 2
Summary of Numbers of Cases by Organizational Type for Affiliated Provider Observations

Organizations included in the study sample	Staffed Networks	Provider-Led Associations
Organizations whose leaders were interviewed	35	14
Organization had eligible providers	30[a]	9[a]
Organization had eligible providers who agreed to observation	26[b]	9

[a] Two networks on the original list of 35 closed down and three networks had no providers who met the study eligibility criteria. Of the 14 associations identified, three were not operating and two had no providers who met study eligibility criteria. Two of the three non-operational groups were defunct and one was in a sort of limbo - the leader had been seriously ill and the group had not met or collected dues for over a year. It was unclear to the leader which providers might still be considered members, so this group was omitted from consideration.

[b] Of the remaining 30 functioning networks, the study could not recruit participation from providers in 4 cases: 3 cases with only one eligible provider each and 1 case with two eligible providers. Thus, only 26 networks were represented by one or more provider in this study.

Control Group Selection and Matching

The matched control group created a comparison that isolates the effect of network affiliation on quality. It is important to understand how the control group providers were selected for this study in order to correctly interpret the comparisons described in this report. The control group was not representative of Chicago's non-affiliated providers as a whole, but rather matched to the network group in this study. It is likely that the non-affiliated control group providers were distinct from non-affiliated providers at large because the study specifically recruited control providers according to their overall education, age, experience levels, and neighborhood types to show similar distributions to the network providers. Also note that the control group was not matched to the association providers – association providers represented a separate point of comparison for the network providers.

Quota cells were designed to select a control group of providers that matched the network providers on six characteristics which were hypothesized to have a relationship to the quality of care a provider offered:

- Age
- Gender
- Education
- Race/ethnicity
- Years of experience as a family child care provider, and
- Neighborhood type (see Appendix G for a description of the neighborhood types).

The study did not match provider-by-provider simultaneously for all characteristics since half the number of control cases were completed compared to the number of network cases (see Appendix A for more detail). Instead the control group was selected to reproduce the distribution of each of these characteristics in the network group. The overall distribution of each characteristic alone was considered and distributions on these characteristics were matched between samples. For example, if 20% of the network-affiliated providers were between the ages of 30 and 39, then a similar proportion of unaffiliated providers in this age category were recruited. Correct proportions also had to be calculated for other categories (gender, education, race/ethnicity, years of experience and neighborhood type) at the same time. Because matching took place on a rolling basis (time did not permit completion of all network cases prior to beginning matched control cases), quotas were updated as the study progressed.

"Neighborhood type"[6] was used as one of the matching criteria for selecting control-group providers in order to address how neighborhood characteristics and local constraints (such as run-down housing, dangerous or absent park space) might affect provider quality. Since providers tend to serve children who live nearby, it was expected that the provider's neighborhood type would serve as a general proxy for the children and families in terms of housing density, income level and social class, language spoken, and family structure.

[6] Christopher Winters at the University of Chicago Library created "neighborhood types" using Census 2000 demographic characteristics for each of the census tracts in Cook County. The tracts were characterized and grouped into ten types. Network providers in this study lived in eight of these ten types of areas. More detail about how these types were constructed appears in Appendix G.

Data Collection

Interviews with Organizational Support Staff

A draft interview guide (found in Appendix C) was developed and pre-tested for the network staff and association leaders with similar organizations in suburban locations outside of the city of Chicago so as to preserve the full set of organizations within city limits for the main study. All interviews with network director, network coordinator, and association leaders were conducted in person.

Interviews with network staff and association leaders focused on organizational history and goals as well as services offered to member providers. During the pre-test, questions were sorted into sections that network directors and coordinators seemed most suited to answer. During the actual interviews, respondents were asked for information they could provide based on their role and job description, the amount of time they had been in their jobs, and other specifics. The questions were asked in an open-ended fashion (see Appendix C for a copy of the interview guide) and those conducting the interview took notes. Interviewers wrote up field notes after each interview documenting additional information from the visit (see Appendix A for information about interviewer training).

Interviews with Providers

All 150 providers in the study completed a phone interview (see Appendix E for the questionnaire) prior to the home observations. Providers were interviewed in the three groups to gather basic information about themselves and their FCC programs. This phone interview protocol was designed to gather provider reports about network and association services that could be compared with and added to agency data about provider services. Non-affiliated providers answered an abbreviated set of questions.

Observational Measures of Quality in FCC Homes

This study used two observational measures to assess the process quality of early care and education in providers' homes:

1. The Harms-Clifford Family Day Care Rating Scale (FDCRS)
2. The Arnett Caregiver Interaction Scale (CIS)

Observers completed the FDCRS and the Arnett CIS for all 150 providers in the study. For some, but not all, cases, the systematic data from the rating observations was supplemented by additional, non-uniform notes observers made when something unusual or noteworthy struck them about the case. Appendix A includes additional information about observer training and reliability.

Family Day Care Rating Scale (FDCRS). The *Family Day Care Rating Scale* is a widely used measure of process quality in FCC (Harms & Clifford, 1989). The FDCRS focuses on easily observed aspects of the child care environment such as child care space and furnishings, daily routines, interactions between provider and children, and presence of learning activities. The FDCRS rates providers on 32 standards with scores ranging from a low of 1, designating "inadequate" quality, to a high of 7, a designating "excellent" quality. The intermediate scores of 3 and 5 correspond to "minimal" and "good" respectively. Appendix F describes the items in the FDCRS as well as details on how the scale was used and scored.

Arnett Caregiver Interaction Scale (CIS). The FDCRS was supplemented with the Arnett Caregiver Interaction Scale (1989) in order to emphasize the quality of the providers' interpersonal interactions with the children. This is a key characteristic of process quality that many researchers agree is not fully captured by the FDCRS alone (Vandell & Wolfe, 2000; Shonkoff & Phillips, 2000; Kontos et al., 1995; Marshall et al., 2003). The CIS assesses the quality of the relationships and interactions between the caregivers and the children in their care and was designed for use in either centers or homes. The CIS can be interpreted by using factor analysis. Four items emerged from a factor analysis of the 29 CIS items that were used for this study: "Positive Interaction", "Critical and Harsh", "Controlling", and "Arbitrary." These factors were based on the collection of items that loaded high for each factor in this particular sample.[7] The CIS can also be scored simply by reverse-scoring negative items and averaging the item scores to yield a score that ranges from 1 to 4. (The 30 scale items as well as details about how the scale was scored in this study are described in Appendix F.)

Data Analysis

Numerical responses (e.g. the number of providers affiliated with a group) and yes/no or checklist responses from the interviews were entered into an SPSS data file. Using the field note and phone interview write-ups, additional variables were abstracted to describe salient differences between staffed networks that emerged during the interviews (See Appendix A for additional detail).

In the analyses of network services and quality, provider reports of services were used when available rather than network reports of services offered. Network staff reports were not always a reliable source for the amount and type of services offered to providers and significant discrepancies were found between network and provider reports of services. Network staff reported offering services about which some of their affiliated providers had no knowledge. Because network leaders were motivated to put their best foot forward and report any services they offered to any member providers, while providers had no incentive either to over or under report the services their staffed networks provided, it was decided that using provider reports was a more reliable measure of network services that individual network members had actually received. Data collected from network staff interviews were used to elaborate and describe specific network services associated with higher quality care. For example, direct training from networks was found to be an important predictor of higher quality among affiliated providers. Additional information about training was gathered from field notes from network staff interviews from those networks where providers reported receiving direct training. (Table H.1 in Appendix H shows the discrepancies in provider and network reports regarding services.)

The following section describes network and association characteristics, leaders, and services and characteristics of providers in the study sample.

[7] Most studies using the Arnett CIS use the four factors identified by Arnett (1989) in his study of child care center teachers: sensitivity, harshness, detachment, and permissiveness. The factors and weightings found in his data are simply applied to new data sets to construct indices without running a new factor analysis for specific data. Given the unique characteristics of the current study sample, it was important to run a factor analysis and use the resulting factors that best fit this sample.

Sample Description: Support Organizations and Providers

Sample Description: Support Organizations and Providers

Support Organizations

Staffed networks and provider-led associations both offered support to affiliated FCC providers, yet these support organizations differed in their organizational structure, staff, leadership, and services. Table 3 summarizes descriptive differences that are detailed in the next section.

Table 3
Comparison of Key Features of Staffed Networks and Provider-Led Associations

Key Features	Staffed Networks	Provider-Led Associations
Organizational Characteristics	• Part of an established social service-providing umbrella organization • Funded by external agencies (e.g. Early Head Start)	• Independent group of providers • Funded by member dues, occasional one-time grants
Staff and Leaders	• Paid staff to work directly with providers • Staff were not providers • Some coordinators had specialized training to work with FCC providers	• No formal, paid staff to work with providers • Voluntary and fluctuating leadership • Leaders were also FCC providers
Services	• Services focused on initial training for beginning providers and raising quality of care for children • Benefits often included access to other umbrella group services or facilities for children or their families	• Services focused on professional development of experienced providers • Benefits often included social activities for providers outside hours of caring for children

Staffed Networks

The 35 staffed networks in this study received funding both from the state child care subsidy system as well as from funding through the local department of youth services through an Early Head Start grant. Each of the networks was sponsored by an umbrella organization: there were no independent staffed networks in Chicago at the time of data collection for this study. The 30 non-profit organizations that sponsored staffed networks in Chicago at the time of this study consisted of organizations that offered an array of services designed to alleviate poverty and its consequences such as social service agencies, local affiliates of national organizations, center-based child care programs, and churches. Some of the well-established social service agencies had sponsored staffed networks for many years—one of them for 22 years. Most staffed networks, however, had been in operation for 4-8 years.[8]

Most organizations (70%) delivered services to people from a range of age groups, from infants to pregnant women to seniors. Others focused solely on children's services (30%) including

[8] The 35 networks include two recently discontinued networks.

one or more child care centers in addition to the staffed network. Many of the organizations operated out of more than one site (63%) while others were stand-alone agencies (37%), delivering all their services from one location.

Staffed networks varied greatly in the number of providers they served with a range of 2 to 315 and a median of 8 providers served per network.[9] One outlier network in particular recruited an unusually large number of providers. Table 4 shows the coordinator to provider ratio across the staffed networks with a majority of networks having what would be considered an optimal ratio of fewer than 12 providers per coordinator (Head Start Bureau, 2008).

Table 4
Number of Providers for Whom Each Coordinator is Responsible

Number of Providers /Coordinator	Frequency	Percent
No coordinator at the time	1	3 %
1-12 providers per coordinator	27	77 %
13-20 providers per coordinator	3	9 %
21+ providers per coordinator	4	11 %
Total	35[a]	100 %

Note that proportions here are based on all the cases for which interviews were conducted, including two networks that were no longer operating. The numbers for those groups come from the agency reports of the networks' size when they closed.

Provider-Led Associations

The 12 active provider-led associations in this study were qualitatively distinct from staffed networks.[10] Associations were initiated and run by FCC providers to offer peer support, mentoring, and professional encouragement to provider members. Associations were independent of any sponsoring agency and did not have paid staff. Nine had obtained 501(c)(3) not-for-profit status or had begun the process. Moreover, associations had inconsistent and limited funding from provider member dues, one-time grants, or private donations to offer special events, materials, trainings, and other services to their provider members. None of the association leaders discussed an annual budget, and it seems that, in most cases, money was raised as needed for specific events, or supplies, or training.

Associations focused their goals on provider issues, which this study categorized as peer support, professionalization, and political advocacy. Associations that focused on peer support planned a wide array of activities ranging from meetings, to trainings, to group discounts on supplies, to vacations or field trips for the providers and/or their children. The focus for these groups was primarily camaraderie and cost-cutting. Associations with professionalization as their primary motivation aimed to professionalize the role of in-home child care providers and move beyond the "babysitter" model, as one provider leader explained. These associations tried to move

[9] Numbers of providers per network were variable throughout the data collection period due to changing mandates that affected numbers of slots networks had available as well as the closing of networks during this period.
[10] Unlike networks where discontinued programs were included in the analyses, only the 12 active associations were included in these analyses. The two discontinued network programs retained statistics about membership and other characteristics immediately prior to closing that enabled them to be included in the study's overall portrait of networks in Chicago. However, due to the informal nature of associations, it was unclear when associations ceased to function since there were no paid staff and times between meetings or activities were widely variable. Further, it was unclear how many members the discontinued associations had, since membership varied over time.

beyond peer support to help educate providers to become better professionals. Two associations that were motivated by political advocacy formed in response to encouragement from state legislators who worried that providers in their district were not applying for available money and thus did not get their share of early childhood money from the state. Helping providers with political advocacy in particular seemed to be a unique contribution of provider-led associations. None of the staffed networks reported helping providers in this arena.

Membership in the associations varied quite broadly. Some groups had smaller numbers of clearly defined and active members, whereas others claimed as many as 75 providers who might or might not identify as members themselves. Requirements for and definitions of membership varied across associations: some groups had a formal process for joining while others encouraged any provider to attend meetings, trainings, or presentations. Seven out of 12 associations required members to have a valid, current FCC license from the state. Some groups levied regular membership dues while others charged nothing. Eight of the 12 associations operated within a defined geography.

Support Organization Staff and Leaders

All of the staffed networks in this study had a position of one or more coordinators to oversee the direct operations of the network (although that position was vacant in one agency and one person served the dual functions of director and coordinator at three others). In most, but not all cases, coordinator positions were full time. Five of the networks had multiple coordinators. A majority of networks (54%) had one full time staff position and various other staff such as social workers or other specialized staff who provided services both to children and families in center-based programs and the organization's network. The coordinator was generally supervised by a program or organizational director.

In contrast, associations did not have paid staff and were run by individual provider leaders. Interviews were conducted with 14 association leaders, 12 of whom headed active, functioning associations at the time of the interview. One of those 14 was preparing to shut down her association at the time of the interview because she could not recruit any of the member providers to help with the work of running the association. Another was recovering from serious health problems and could not find a willing replacement. Although the group had not officially disbanded, they had not met in nearly two years.

Qualifications of Staff and Leaders

Specialized training of network coordinators was one of the key predictors of higher quality among affiliated providers in this study. Tables 5 and 6 describe levels of general education and relevant education for network coordinators and association leaders.

Table 5
Highest General Degree of Coordinators and Leaders

Highest General Degree	Network Coordinator		Association Leader	
	n	Percent	n	Percent
Master's Degree	10	29 %	1	8%
Bachelor's Degree	14	41%	5	42%
Associate's Degree	7	21%	4	33%
Some college-level courses	2	6%	1	8%
High school diploma or GED	1	3%	1	8%
None	0	0%	0	0 %
Total	34[a]	100%	12	100%[b]

[a]One Coordinator position was vacant for the duration of the field period
[b]Due to rounding error, percentages actually total to 99%

Table 6
Relevant Education of Coordinators and Leaders

Highest Relevant Education	Network Coordinator		Association Leader	
	n	Percent	n	Percent
Masters Degree	3	9%	0	0%
Infant Studies Certificate Program	12	35%	1	8%
Bachelor's Degree	1	3%	0	0%
Associate's Degree	5	15%	5	42%
CDA	3	9%	0	0%
Training / Some Courses	5	15%	4	33%
None	5	15%	2	17%
Total	34[a]	100 %[b]	12	100%

[a] One Coordinator position was vacant for the duration of the field period
[b] Individual percentages sum to 101% due to rounding error

Seventy percent of the coordinators held degrees at the college level or beyond. Eighty-eight percent of network coordinators had some relevant education in early childhood education or child development which included some coordinators who had college coursework but not degree in these areas. Although coordinators were not asked directly about where they had obtained specific training or education, 35% of staffed networks reported that they had a coordinator who attended a post-baccalaureate certificate program in infant studies customized for network coordinators. Ten coordinators from 10 networks (38%) with providers in the study sample reported that they participated in this certificate program.

All but two association leaders had an associate's degree or higher. In addition, 10 of the 12 leaders had some professional training in child development or early childhood education. Several had completed college courses in child development and one leader had completed the infant studies certificate program that several of the network coordinators participated in as described earlier.

Experience of Staff and Leaders

Although coordinators were not asked if they had direct experience as FCC providers, four coordinators volunteered that they had been FCC providers and eight reported they had worked as teachers prior to becoming a coordinator. Most coordinators had worked in the network for fewer than five years as shown in Table 7. A small cadre of network coordinators had been working in their network on a long-term basis of at least 11 years.

All 12 of the active association leaders had over 10 years experience working in the child care field and four had been in child care for more than 20 years. However, despite their many years of child care experience, half had been leaders of their associations for fewer than five years.

Table 7
Experience of Coordinators and Leaders

	Network Coordinator Percent (n=34)	Association Leader Percent (n=12)
Years of experience in current position		
Less than 1 year	35%	0%
1-5 years	41%	58%
6-10 years	3%	33%
11+ years	21%	8%[a]
Prior experience caring for children		
Experience as FCC provider[b]	12%	92%
Experience as a teacher[c]	24%	8%

[a]Due to rounding error, this column sums to only 99%
[b] Coordinators or leaders were not asked directly if they had experience as providers or teachers. These data are based on coordinators or association leaders who volunteered this information during the interviews or included it in their response to questions about their training and education.
[c] Teaching experience here included any experience teaching preschool through elementary school. Teaching at higher grade levels was not included.

Networks with Specially-Trained Coordinators

As described above, some coordinators participated in a specialized certificate program for coordinators working with FCC providers. This specialized training was a key predictor of higher quality care among network-affiliated providers in this study. The program took place at a local institution of higher education[11] and was designed at the request of the local department of youth services as part of their work to implement a new Early Head Start grant. Although this 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 8): graduate-level coursework 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. Appendix I includes a sample syllabus from this certificate program.

[11] 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, a list of network coordinators who attended the infant studies certificate program was obtained in order to break out those who had received this training from those who had other relevant education in the area of child development. These names were then matched to coordinators who had been interviewed at networks with providers in the study.

Table 8
Characteristics of Post-Baccalaureate Certificate Program for Network Coordinators

Program Component	Description
Coursework and supervised internship	Program was a graduate-level, academic sequence of four semester-long courses followed by a supervised internship.
Focus on infant-toddler care	Course work focused on working with providers who care for infants and toddlers and their families. Course work also covered knowledge base specific to infant/toddler development and care.
Adapted for network coordinators	Curriculum focused on how to support FCC providers in their work with children and families.[a]
Relationship-based curriculum	Program emphasized supportive relationships among coordinators and between instructors and coordinators. Modeling of relationship-building helped coordinators develop supportive and effective relationships with providers in their networks and may have helped providers develop supportive relationships with children and families in care (Gilkerson & Kopel, 2004; Stott & Gilkerson, 1998).
Funding and endorsement	Coordinators were fully funded to participate in the certificate program by local and federal government entities, and sponsored by their network agencies.

[a]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.

As Table 9 shows, coordinators who participated in this certificate program—defined in this study as "specially-trained coordinators"—were more likely to work at networks that were newer, started because of a community need, used a quality assessment tool with providers, and had a ratio of 12 or fewer providers per coordinator.

Table 9
Characteristics of Staffed Networks with Specially-Trained Coordinators vs. Networks without Specially-Trained Coordinators

Network program characteristics	Network had specially-trained coordinator (n=12)	Network did not have specially-trained coordinator (n=23)
Mean years of program operation	6.0	9.3
Proportion of organizations who initiated network because saw need in the community	75% (n=9)	65% (n= 15)
Proportion used formal evaluation tool	92% (n = 11)	55% (n= 12)
Proportion with 12 or fewer providers per coordinator	83% (n= 10)	78% (n= 18)
Organization serves only children	30% (n= 3)	24% (n=6)

Support Organization Services

Staffed networks and associations in Chicago varied in the type and frequency of services offered to affiliated providers. Based on reports from network staff and network-affiliated providers, the following five dimensions of services were conceptualized[12] that were offered by networks (although not uniformly or consistently) to affiliated providers (summarized in Table 10): visits to FCC homes, education and/or training for providers, supportive professional relationships, material resources, and business services.

Table 10
Five Dimensions of Support Organization Services

Type of Service	Description
Visits to FCC Homes	▪ Monitor quality ▪ Check for licensing violations ▪ Observe and work with children ▪ Talk to providers about their work with children and parents ▪ Meet with parents
Education/ Training	▪ Knowledge of child development ▪ Training for providers at the network site ▪ Referral to off-site training and education ▪ Tuition reimbursement programs
Professional and Supportive Relationships	▪ Regular provider meetings ▪ Telephone help ▪ Opportunities for feedback to the network ▪ Peer mentoring programs
Material Resources	▪ Lending libraries ▪ Free toys, books, equipment
Business Services	▪ Recruitment and enrollment of families ▪ Payment of fees ▪ Administration of subsidies ▪ Help with taxes

Note. Types of services are based on network staff and network-affiliated provider reports of services offered and received.

Provider-led associations offered a narrower range of services to affiliated providers than staffed networks. Table 11 details the types of these services organized by the five dimensions described above.

[12] See Appendix H for more detail. To confirm that the dimensions identified here were based on knowledge of the services and theoretical validity, factor analysis was conducted to make sure the indicators held together empirically as single dimensions. This was particularly important for the Supportive Professional Relationships dimension which was originally conceptualized to include opportunities to mentor and be mentored in addition to the three services included (formal opportunities for feedback, regular telephone help and regular provider meetings). However, the mentoring indicators did not load with each other or with the other three and also proved to be non-significant or negatively associated with higher quality in multivariate analyses.

Table 11
Services Offered by Organizations to Affiliated Providers

Types of Services	Percent Network Providers (n=80)	Percent Association Providers (n=30)
Visits to FCC Homes		
Formal quality assessment tool was used during visit [a]	66%	0%
Any visits to FCC homes in last 6 months	83%	30%
Visit to FCC home at least 6 times within last 6 months	48%	0%
Visit to FCC home at least 10 times within last 6 months	29%	0%
On one of last 2 visits, coordinator /association leader:		
• Talked with provider about a child or worked with a child	83%	20%
• Talked with provider about a parent	54%	3%
• Talked with provider about health and safety	31%	13%
• Checked for licensing violations	61%	7%
Developmental screening of child and/or referrals for child were made on last visit	78%	23%
Education		
Initial training to providers	39%	3%
Tuition reimbursement at other organizations	39%	48%
External education/ training through referrals last year	60%	53%
Direct, education/ training offered at organization site	91%	67%
Direct education that provider obtained at organization	73%	67%
Supportive Professional Relationships		
Opportunity to give organization formal feedback	33%	47%
Telephone access to organization staff/ leader	93%	97%
Access to regular meetings with providers	81%	90%
Introduction to an experienced mentor for advice	46%	73%
Opportunity to become a mentor	48%	57%
Material Resources		
Toy or book lending library	65%	40%
Free materials for child care program	76%	33%
Discounts on materials for child care program	31%	20%
Business Services		
Helps with authority e.g. intervened with landlord	25%	10%
Collected parent fees	46%	10%
Helped with advertising and recruitment of families	88%	48%
Screened families for providers	85%	17%
Helped providers access subsidy vouchers	24%	18%
Taxes/ financial help for providers	43%	57%
Referred children to providers	74%	7%
Helped providers become licensed	34%	17%

Note. Responses are based on provider report of either receiving a service or knowing organization offered a service.
[a] This was not reported by providers and so is based on network staff report. Association leaders did not report using an assessment tool although this was not asked specifically in the interview protocol.

By and large, the association leaders were not deeply involved in the day-to-day operations of the providers. For example, many did not know how many funded spaces for children the providers held or if any of the providers had available openings. Some association-affiliated providers received occasional home visits from association leaders although visits during working hours were rare because leaders of provider associations were providers themselves, busy with their own child care homes all day. Some associations conducted one-time mandatory home visits when a new provider joined the organization in order to make sure the provider was in good standing. Other associations visited providers' homes only when requested by the provider. One association held meetings in affiliated providers' homes on a rotating basis, yet these meetings occurred at times when no children were present. None of the associations used a quality assessment tool in their monitoring and none had a self-assessment tool for their members to use.

More than half of association-affiliated providers offered direct education and training or referrals to external training opportunities. Some presentations were based on materials the presenting member obtained at an outside workshop, while others were more informal provider exchanges based on personal experience. Some common training topics included business and professional development topics such as insurance, licensing procedures, and paying estimated taxes.

Nearly all association-affiliated providers reported access to regular association meetings. Meetings were oriented towards peer support and offered providers a chance to unwind and share stories from the field. One leader told us that she interspersed the monthly meetings with training and leisure activities to give the providers a break.

In addition to these services, association leaders reported helping providers with grant-writing, group trips to professional conferences, advocacy efforts (e.g. getting insurance for providers), field trips and other group activities for children, and assistance to providers joining the USDA food program.

Providers

Matched Characteristics

Table 12 summarizes the demographic characteristics on which the 80 network-affiliated providers were matched to the control group of 40 unaffiliated providers (see Appendix A for more detail about each of these matched characteristics). The table also includes the third comparison group of 30 association-affiliated providers.

Table 12
Demographic Characteristics of Providers by Affiliation Status

Provider Characteristics	Network (n=80)	Control (n=40)	Association (N=30)
Gender			
Female	100%	100%	100%
Male	0	0	0
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
Minimum	26	28	30
Maximum	68	76	66
Age Range			
Age 30 or under	6%	3%	0%
Age 30 – 39	20%	18%	43%
Age 40 – 49	33%	40%	23%
Age 50 – 59	33%	30%	17%
Age 60+	9%	10%	17%
Years of Experience			
Mean numbers of years in child care	5.6	5.9	7.2
Newly licensed providers (0-3 years)	46%	48%	33%
Experienced providers (more than 3 years)	54%	52%	67%
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%
AA degree	19%	18%	17%
BA degree or higher	10%	15%	13%

The 30 association-affiliated providers in this study were selected as a comparison to the network-affiliated providers and were not matched on any variables to either the network or control groups of providers. The network and matched control-group providers were almost two-thirds African American (including Afro-Caribbean) and one-third Latina. Only 1% of the network providers were white/Caucasian and only 2% of the network providers were Asian. It is likely that this reflects the fact that staffed networks typically target their services to low-income families. Neighborhoods with concentrations of low-income families in Chicago are predominantly African-American and Latino areas. All but three providers in the association sample were African-American. None of the associations in Chicago identified in this study included any Latina members.[13] To set the context for these percentages, the 2000 U.S. Census figures for the city of Chicago are 37% African American, 26% Latino, 31% White, and 5% Asian (Summary File 1, 100% data).

[13] Asians comprise less than 5% of Chicago's population, so it is perhaps not surprising that no Asian provider groups were identified in this study. However, Hispanics represent a little over a quarter of Chicago's population. Several of the networks served primarily Latina providers. It is possible that the study missed provider-led associations that served Latina providers.

The average age of all providers in this study fell between 45 and 47 years. Network and control group providers averaged just under six years of experience in child care. In contrast, association members were almost exclusively established providers, more likely to be licensed prior to group membership. The bulk of the providers in all groups had some college education but no degree. Table 13 shows the distribution of providers by the type of neighborhoods in which they lived. Almost all of the providers in this study lived in poor or working-class neighborhoods in the city of Chicago (See Appendix G for description of how neighborhood types were constructed.) Association providers were less likely to live in Spanish-speaking neighborhoods than network providers, which is to be expected since none of the association providers in this sample was Latina. Also, about 10% of association providers lived in areas with a higher median income—those labeled in Table 13 as type 4 and characterized by very well-off young singles. This is reflected in the tract-level income statistics shown at the bottom of the table. This means that association providers were likely serving children from slightly higher-income families, on average, than were network providers.

Table 13
Comparison of Neighborhood Types by Provider Affiliation Status

Neighborhood Types	Network (n=80)	Control (n=40)	Association (n=30)
1. Very densely populated, poor, heavily African-American, English-speaking disproportionately female-headed households	35%	33%	30%
2. Poor, mostly English-speaking, mostly African-American disproportionately female-headed households—primarily neighborhoods surrounding type 1 neighborhoods	18%	18%	43%
3. Somewhat densely populated, some foreign-born and non-English speakers, mostly working-class, white ethnic	13%	15%	0%
4. Densely populated, mostly white, very well-off with many young singles and non-family households	1%	3%	10%
5. Densely populated, poor, heavily Spanish-speaking	19%	15%	7%
6. Densely populated, poor, part-Hispanic, many non-family households, gentrifying (white)	11%	10%	7%
8. Working-class, mostly white ethnic, suburban-like housing (single family homes with small yards)	3%	5%	3%
9. Suburban-like housing, well-off, mostly white	1%	3%	0%
Average of tract median household incomes from census 2000	$34,421	$36,221	$37,927
Average proportion persons below poverty from census 2000	23%	20%	19%

Note. See Appendix G for more detail on construction of neighborhood types. Note that the labels for the categories were revised somewhat to line up with the actual neighborhoods in the study. The categories were originally developed for the entire Cook County census region, so include some groups (e.g. linguistically isolated but speaking a language other than Spanish) which did not actually appear in the study's sampled tracts. Hispanic here refers to ethnicity, while Spanish-speaking denotes areas with high levels of non-English-speaking Spanish speakers. Further, the numbering of the areas was preserved to facilitate comparisons with the original coding – there were no cases in neighborhoods categorized as types 7 or 10 of the original set.

Other Provider Characteristics

Part of the quality of child care depends upon the nature of the caregivers, as described above, and part of it depends upon the nature of the child care program that providers offer. In addition to the variables used to select the matched control group of providers, other demographic characteristics of providers (economic status and relevant education) as well as program characteristics (age of children in care) emerged as important variables to control for when examining the relationship between network affiliation and quality. Since providers could only be matched on a limited number of characteristics, additional factors were considered through statistical controls.

Economic status. Table 14 compares three indicators of economic status for the three provider groups. It shows that average household income and average monthly income from the provider's child care business were both slightly higher for network providers than for control providers or association providers. This likely reflects the fact that some network providers had Head Start slots, which, during the field period, paid $10 more per day per child than other state-funded slots.

Table 14
Income of FCC Providers by Affiliation Status

Provider Income and Home Ownership	Network (n=80)	Control (n=40)	Association (n=30)
Average Household Monthly Income	$3,447	$3,041	$3,194
Average Monthly Income from Child Care Business	$3,004	$2,535	$2,863
Own home (vs. rent)	75%	75%	73%

Relevant education. The amount of relevant education pertaining specifically to early childhood education and child development is also an important predictor of the quality of child care (Kontos et al., 1995; Doherty et al., 2000; 2006; Burchinal et al., 2002). Network and control providers were not matched for relevant education, but for overall education. Table 15 shows the percentages of providers who undertook post-high school coursework or earned degrees in fields deemed directly relevant to care of young children: early childhood education, child development or infant studies. Although the mean years of relevant education were similar for network and matched control providers, 10% more control than network providers had no relevant education of any kind. Association providers were also notably lower than network providers in terms of the amount of relevant education and the number of on-going training hours they obtained in the previous year. Only a small percentage (7%) had obtained their CDA compared to 30% of network-affiliated providers.

These differences are accounted for by the higher proportion of network providers with a Child Development Associate Certificate (CDA) or some progress toward this certificate, and by the higher proportion of network providers with Associate's Degrees (a two-year college degree). This is not surprising because Head Start mandated that providers were working towards their CDA. Half of the network providers in the sample had some families in Early Head Start, and all of the staffed networks received some Head Start support. Thus, all comparative analyses controlled for relevant education.

Table 15
Relevant Education of Providers

	Network (n=80)	Control (n=40)	Association (n=30)
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 Relevant Education			
Mean years of relevant college education[a]	.92	.88	.46
Mean progress toward a CDA[b]	.42	.32	.12
Mean hours of training in the past year[c]	32	33	24

[a] Mean years of relevant college education ranged from 0 to 5 and was computed from the years of post-secondary education specific to child development, early childhood education and infant studies. In Chicago, a provider who completed a CDA was typically awarded 7 hours of college credit.
[b] The Child Development Associate (CDA) credential is a specialized training program administered by the Council for Early Childhood Professional Recognition. In the standard form it requires 120 clock hours of training, work with an advisor, and a final paper-and-pencil test. The CDA score assigned to providers in this study ranged from 0 to 1. One (1) meant a completed CDA. Other percentages were the proportion of total hours towards the 120 required to complete a CDA multiplied by 80%. Thus, those who completed all hours but did not yet take and pass the test were awarded a score of 0.8. The reported percent is the average score for all the providers in the group.
[c] Fifteen hours were required to retain licensed status but many kinds of hours counted toward this minimal requirement including training the provider had already had in the past.

FCC program characteristics. Network providers and control providers were not matched on characteristics of their child care programs. Table 16 presents information about providers' child care programs according to the number of caregivers, the number and ages of the children, providers' own children, and Head Start participation. Some program characteristics hypothesized to be related to quality were controlled for in the multivariate analyses.

Table 16
Characteristics of FCC Programs by Affiliation Status

Program Characteristic	Network (n=80)	Control (n=40)	Association (n=30)
Mean number of children enrolled	6.8	7.2	7.1
Mean number of children on day of observation	5.3	5.1	5.2
Infants (under age 1) enrolled	55%	58%	60%
Mean age of oldest child	4.5	5.0	4.7
Provider's own child present	5%	38%	7%
Homes with one or more assistants	75%	77%	80%
Mean number of children per caregiver	4.1	4.1	3.8
Percent with any Early Head Start slots	53%	0%	0%
Percent with any DCAC slots (state voucher)	74%	93%	87%
Percent with any private fee-paying families	39%	60%	70%
Mean percent of children in care from private fee-paying families[a]	11%	24%	38%

[a] This is the percentage of enrolled children whose families paid fees privately without subsidy. Providers in staffed networks that collected parent co-pays for state vouchers and providers with Early Head Start "slots" might have had open slots—that is, spaces designated for a particular pay method that were not filled at the time of interview. Unfilled slots were not counted in the denominator for this percentage.

On average, providers across the three groups were very similar in most of these program characteristics. They typically had seven children enrolled, including part-timers, while five children were present on the day of the observation. Between 55% and 60% of the programs had one or more babies enrolled, and few or no school-aged children. Most providers had one assistant.

On the other hand, the groups differed markedly in several ways. First, almost half of the network providers had at least one Head-Start-funded family enrolled. Related to this, only 40% of network providers had private fee-paying parents in the mix of families they served compared with 60% of control providers and 70% of association providers. Similarly, only 11% of the network providers' families, on average, made private fee arrangements compared with almost a quarter of the children cared for by providers in the unaffiliated control group and 38% of association providers. In other words, network-affiliated providers in this sample were more likely serving children whose families qualified for state vouchers or the Head Start program than control or association providers. Finally, unaffiliated control group providers were much more likely than network providers or association providers to have one or more of their own children in care, despite their similarities in age to the other providers.

Findings

Findings

Staffed Network Affiliation and Quality

One of the main goals of this study was to examine the relationship between network affiliation and quality of child care in affiliated providers' homes. The following sections compare quality scores for providers who were affiliated with staffed networks to unaffiliated providers and to association-affiliated providers in order to understand the effect of network affiliation on quality of care in FCC homes. Then findings focus exclusively on network-affiliated providers to see which particular network services and characteristics were associated with quality outcomes after controlling for consequential individual provider characteristics. Finally, findings from provider reports about how support group affiliation helped improve quality and business are described in order to gain a deeper understanding of how different types of support affiliations may impact provider practices and quality of care.

Quality: Network and Unaffiliated Providers

The FDCRS (Harms & Clifford, 1989) and the Arnett CIS (Arnett, 1989) were used as measures of process quality and provider sensitivity in FCC. (See Appendix F for correlations between quality measures.)

Table 17 compares mean FDCRS scores, ranges of scores, and percent good quality, adequate quality, and inadequate quality between the network-affiliated group and the control group of providers. Despite the overall low scores (the average FDCRS score for the 120 providers in these two groups was low, averaging 3.79 and none of the providers scored a 6 or 7), network providers scored significantly higher than control providers. The average FDCRS score for network-affiliated providers was 3.99 or adequate as compared to the average score for unaffiliated providers of 3.38 or "minimally adequate." Moreover, 10% of network-affiliated providers scored a 5 or above indicating "good" quality whereas none of the unaffiliated providers scored in the "good" range. Similarly, 11% of network-affiliated providers scored a 2 indicating "inadequate" or "poor" quality compared to 40% of unaffiliated providers scoring a 2. In other words, although most network-affiliated providers had quality scores that indicated adequate but not good quality care, very few offered poor, inadequate care. By contrast, none of the unaffiliated providers offered good care and nearly half offered care that may be considered harmful to children.

Table 17
Mean FDCRS Quality Scores for Network Providers and Unaffiliated (Control) Providers

FDCRS Score	Network (n=80)	Control (n=40)
Mean FDCRS score[a] (*SD*)	3.99*** *(.71)*	3.38 *(.83)*
Range[b]	2.17-5.41	2.00-4.94
Percent Good Quality (score of 5 or above)	10%	0%
Percent Adequate/Custodial (score of 3-4)	79%	60%
Percent Inadequate Quality (score of 1-2)	11%	40%

[a]FDCRS scores are on a 1-7 scale.
[b] The distributions of score by category are significantly different between the staffed network and control groups (Chi Square) at $p \leq .001$
*** Difference between staffed network and control providers is significant at $p \leq .001$

Table 18 gives additional descriptive information about differences in FDCRS quality between network-affiliated providers and unaffiliated, control providers in this study. The mean FDCRS sub-scale quality scores reported here show that the overall low quality in this sample of providers was driven by low scores in the *Basic Care* and *Space and Furnishings* categories.[14] Yet despite these low scores, network-affiliated providers scored significantly higher than control providers on every sub-scale. Moreover, the greatest statistical differences between network providers and unaffiliated control providers were in *Space and Furnishings*, *Learning Activities*, *Social Development*, and *Adult Needs*.

Table 18
Mean FDCRS Sub-Scale Quality Scores for Network Providers and Unaffiliated (Control) Providers

	Network Providers (n=80)		Control Providers (n=40)	
FDCRS Sub-Scales	*M*	*SD*	*M*	*SD*
Space and Furnishings**	3.8	.97	3.1	.85
Basic Care*	3.2	.88	2.8	.85
Language and Reasoning**	4.2	1.07	3.6	1.21
Learning Activities***	4.1	.96	3.4	1.16
Social Development***	4.5	98	3.8	1.28
Adult Needs***	5.4	.92	4.5	1.03

Note. FDCRS sub-scale scores are on a 1-7 scale.
* p ≤ .05; ** p ≤ .01; *** p ≤ .001

Quality differences as measured by the Arnett Caregiver Interaction Scale (CIS) were not as robust or significant as quality differences measured by the FDCRS. As Table 19 shows, although network affiliated providers scored higher (more sensitive and responsive) on the Arnett CIS than unaffiliated providers, this difference in mean scores was not statistically significant.

Table 19
Mean Arnett CIS Scores for Network Providers and Unaffiliated (Control) Providers

	Network Providers (n=80)	Control Providers (n=40)
Mean Total CIS Score	3.20 (*SD* =.34)	3.09 (*SD* = .39)

Note. Based on 29 items, omitting item 27 and reversing negative items. Differences between staffed network and control providers was significant at the p=.12 level.

However, as Table 20 shows, significant differences in scores for the CIS subscale that indicates negative interactions were found between network-affiliated providers and the control group of unaffiliated providers. Providers who were affiliated with a network were less likely to exhibit critical and harsh behavior with children such as scolding, threatening, and reprimanding children than were control group providers. Network-affiliated providers were also less likely to emphasize obedience and control than were unaffiliated providers. (For more information on quality measures see Appendix F).

[14] According to field observations, these low scores were driven by health and safety violations regarding diaper changing. For example, providers scored low for lack of sanitary hand washing between changes, and using beds instead of changing tables for diaper changes. However, these are common practices in families, and many of the providers in this study were caring for small numbers of children (fewer than 4).

Table 20
Mean Arnett CIS Sub-Scale Scores for Network Providers and Unaffiliated (Control) Providers

	Network Providers (n=80)		Control Providers (n=40)	
Arnett CIS Sub-Scales	*M*	*SD*	*M*	*SD*
Positive Interaction	2.93	46	2.84	.52
Critical and Harsh	1.34**	.38	1.55	.46
Controlling	1.92+	.38	2.05	.44
Arbitrary	1.88	.44	1.88	.46

** p≤ .01; + p≤ .10

Ordinary least-squares regression analyses were then used to examine the effect of network affiliation on quality. First, a base model was estimated by entering variables into the equation in batches. Since there is scant research on network affiliation and quality, it was important to examine the relationship between other provider and program variables and quality suggested by research or that seemed theoretically sensible. Often multiple indicators for similar constructs were identified —for example, age and years of experience; household income and home ownership; number of children enrolled; and number of children in care on the day of observation. Indicators were selected that seemed most reliable based on how these items were asked and that seemed theoretically closest to the concept of interest. Reduced models were then estimated using backwards, stepwise deletion. In the end, three control variables remained with a significant relationship to quality. These three control variables included selected indicators that were not part of the match selection criteria: years of relevant post high-school education, age of youngest child in care, and household income. These three variables are indicators of provider and program characteristics that proved important in prior research and that were believed to be important for this set of providers based on field observations. Indeed, relevant education and fewer infants and toddlers in care were significantly associated with higher quality scores. Level of household income was also associated with higher quality, with providers that had higher incomes scoring higher on the FDCRS.

Next, network affiliation was added as an explanatory variable to examine the added value of network membership to quality (see Appendix J for correlations between these variables). Network membership was the most significant predictor of global quality as measured by the FDCRS even after controlling for other provider characteristics associated with quality (see Table 21). Relevant education, for example, continued to have a significant relationship to quality. Adding network membership to the regression nearly doubled the explained variance in FDCRS quality scores across network-affiliated and control group providers. Moreover, Table 22 shows that network membership accounted for a half point difference on average in FDCRS scores between network affiliated and unaffiliated providers. Thus, the findings suggest that network affiliation appeared to have an independent effect on the quality of child care offered by affiliated FCC providers.

Network membership was not, however, significantly associated with provider sensitivity as measured by the Arnett CIS, although it did have a positive relationship to this measure of quality (full regression output for each model appears in Appendix K). Here, relevant education continued to have a positive and significant relationship to provider sensitivity. Considering the many factors that may impact a providers' level of sensitivity to children, it seems unlikely that a variable such as staffed network affiliation, which was far removed from the daily interactions between providers

and children, would directly impact these intimate interactions. The FDCRS, on the other hand, represents a more global and broad picture of the child care program (including environment and materials as well as provider-child interactions) and thus it is not surprising that the relationship between staffed network affiliation and FDCRS quality was so robust.

Table 21
Standardized Estimates of Relationship between Network Membership and Quality (N=120)

	FDCRS	Arnett CIS
	β	β
Model with control variables alone		
Relevant education	.26**	.21*
Age of youngest child in care	.21*	.16+
Household income	.16+	ns
Explanatory model: Staffed network membership added		
Staffed network membership	.35***	ns
Relevant Education	.26**	.21*
Age of youngest child in care	.22**	.17+
Household income	ns	ns

Note: For model with control variables alone, R^2 = .15 for FDCRS and .08 for Arnett CIS; For explanatory model, R^2 = .26 for FDCRS and .10 for Arnett CIS.
ns= not significant; + p ≤ .10; * p ≤ .05; ** p ≤ .01; *** p≤ .00

Table 22
Non-Standardized Estimate of Relationship between Network Membership and Quality (N=120)

Network Affiliation	FDCRS	Arnett CIS
	B (*SE*)	*B* (*SE*)
Effect of staffed network membership compared to no affiliation	.59*** *(.14)*	.11 *(.07)*

Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models after controlling for provider's relevant education, age of youngest child in care, and household income.
*** p≤ .00

As described earlier, networks varied in the services offered and the qualifications of network staff. In fact, one network in the sample had over 300 providers and offered few services to those providers. The quality scores of providers in this outlier network were significantly lower than quality scores of providers in other networks. In fact, multivariate analyses also revealed that the effect of network membership was strengthened when these outlier cases were omitted from the analyses and a significant positive effect was even found for Arnett CIS scores. This further suggests that what a network offered providers had consequences for the quality of care offered by providers to children (see Appendix K for details of this analysis).

In order to test out this idea of affiliation with a good or effective network, the study examined the effect of membership in a network with a specially-trained coordinator compared to being unaffiliated with any network or association. As described earlier, the local department of youth services funded some network coordinators through an Early Head Start grant to attend a specially designed post-baccalaureate certificate program in infant studies at a local institution of higher education. This program was adapted specifically to the needs of FCC network coordinators with syllabi designed to teach coordinators how to work with and develop supportive and effective relationships with providers (see Appendix I for infant studies certificate syllabi). It should be

noted that only 17 providers were affiliated with these 10 networks that had a specially-trained coordinator. These small numbers suggest areas for further investigation and research.

Table 23 shows the mean quality scores of providers in networks with a specially-trained coordinator compared to unaffiliated providers. Providers in networks with a specially-trained coordinator had significantly higher FDCRS and Arnett CIS scores than unaffiliated providers.

Table 23
Mean Quality Scores for Providers in Networks with Specially-Trained Coordinators and Unaffiliated Providers

	FDCRS		Arnett CIS	
	M (SD)	n	*M (SD)*	n
Providers affiliated with network that has a specially-trained coordinator	4.40*** *(.73)*	17	3.29+ *(.31)*	17
Unaffiliated Providers	3.39 *(.83)*	40	3.09 *(.39)*	40

+p ≤ .10; ***p ≤ .001

Table 24 shows the relationship between affiliation with an effective network—one with a specially-trained coordinator—and quality. Providers affiliated with these particular networks scored, on average, close to a point higher on the FDCRS than unaffiliated providers.

Table 24
Non-Standardized Estimate of Relationship between Membership in a Network with a Specially-Trained Coordinator, No Affiliation, and Quality (N= 57)

	FDCRS	Arnett CIS
	B (*SE*)	*B* (*SE*)
Effect of belonging to a network with a specially-trained coordinator compared to no affiliation	.88*** *(.22)*	ns

Non-standardized coefficient and standard error reported for Ordinary Least Squares regression model after controlling for provider's relevant education, age of youngest child in care, neighborhood poverty level, years of experience, household income of provider, and number of children on day of observation. Reduced models shown here were estimated using backward stepwise deletion and a p ≤ .20 criterion for variable removal. The number and mix of variables remaining in each reduced model varies by model.
ns Not significant; *** Significant at p ≤ .00

Quality: Network and Association Providers

As Table 25 shows, when the full sample of network-affiliated providers was compared to association-affiliated providers, no significant differences were found in FDCRS quality scores or Arnett CIS scores between the two groups although average scores for network providers were slightly higher than those for association providers. Multivariate analyses comparing all network-affiliated providers to association-affiliated providers also did not reveal any significant effect of network membership on quality of care between these two groups of providers (see Appendix K for regression output).

Table 25
Mean Quality Scores for Network Providers and Association Providers

	FDCRS		Arnett CIS	
	M (SD)	n	*M (SD)*	n
Network Providers	3.99 *(.71)*	80	3.20 *(.34)*	80
Association Providers	3.82 *(.72)*	*30*	3.11 *(.45)*	*30*

However, when providers who were affiliated with networks that had a specially-trained coordinator were compared with association-affiliated providers, a significant relationship was found between network membership and higher quality scores. Providers in networks with a specially-trained coordinator scored significantly higher on the FDCRS than providers affiliated with associations (see Table 26).

Table 26
Mean Quality Scores for Providers in Networks with a Specially-Trained Coordinator and Providers in Associations

	FDCRS		Arnett CIS	
	M (SD)	n	*M (SD)*	n
Providers affiliated with network that had a specially-trained coordinator	4.40* *(.73)*	17	3.29 *(.31)*	17
Providers affiliated with provider-led association	3.82 *(.72)*	30	3.11 *(.45)*	30

Note. FDCRS scores are on a 1-7 scale; Arnett CIS scores are based on 29 items, omitting item 27 and reversing negative items.
* $p \leq .05$

Next, ordinary least-squares regression analyses were used to examine the effect of affiliation with a network that had a specially-trained coordinator on quality. Providers affiliated with a network that had a specially-trained coordinator had significantly higher FDCRS scores than providers affiliated with a provider-led association, controlling for provider and program characteristics. As Table 27 shows, providers in these particular networks scored, on average, a little more than half a point higher on the FDCRS than providers in provider-led associations. This finding emphasizes the potential of networks with highly-qualified staff to positively impact the quality of care offered by affiliated providers. Moreover, although the study was not able to control for whether provider professionalism or motivation accounted for these higher quality scores, many providers reported joining networks for the monetary gain rather than for the professional qualifications of network staff or services offered by networks.

Table 27
Non-Standardized Estimate of Relationship between Affiliation with a Network that Has a Specially-Trained Coordinator, Association Membership, and Quality (N=47)

	FDCRS	Arnett CIS
	B (*SE*)	*B* (*SE*)
Effect of membership in a network that has a specially-trained coordinator	.58* *(.22)*	ns

Non-standardized coefficient and standard error reported for Ordinary Least Squares regression model after controlling for providers' relevant education, age of youngest child in care, neighborhood poverty level, years of experience, household income of provider, and number of children on day of observation. Reduced models shown here were estimated using backward stepwise deletion and a $p \leq .20$ criterion for variable removal. The number and mix of variables remaining in each reduced model vary by model.
ns Not significant; * $p \leq .05$

Network Services and Quality

Based on the conceptual model of network services described earlier, the study employed a series of analyses to examine the impact of clusters of services and network coordinator qualifications on quality of care as measured by the FDCRS and the Arnett CIS. Reduced models using backward stepwise deletion of control variables are shown below. This deletion of variables approach was used because little is known about the impact of network services on provider practices with children. (Appendix J shows correlations between network services and quality measures and Appendix K shows detailed regression output including full and reduced models with control variables.)

Analyses focused on 80 providers from 26 staffed networks because the remaining networks did not have affiliated providers who were eligible for the study.[15] The following three control variables were used: provider's relevant education, age of youngest child in care, and whether or not provider has Early Head Start slots. These three variables represent provider characteristics (education of provider), program characteristics (presence of very young children in program) and policy characteristics (Early Head Start participation) that were hypothesized to have a statistically significant relationship to quality in the base model described above.

It should be noted that throughout all of the regression analyses examining network services and quality, relevant education of the provider remained a significant predictor of quality as measured by both the FDCRS and the Arnett CIS. Although a significant correlation between provider relevant education and network services received by providers (see Appendix J) was not found, it is possible that the relevant education received by providers from their networks explains part of the network's effect on quality of care. Yet, network providers may have obtained relevant education from many sources and at different points in time. The cross-sectional research design of this study did not disentangle the sources of providers' relevant education beyond the direct training and education they reported receiving from their network in the year preceding their interview.

[15] To preserve a clean comparison between providers affiliated with different networks, providers who belonged to multiple networks or who had previously belonged to a different network within a year of the field period were disqualified. For similar reasons, providers who belonged to both a network and an association were also disqualified. Finally, to ensure that networks would have had time to have an effect on provider quality, those who belonged to a network for less than six months were also disqualified from participation in the study. These criteria screened out some networks all together because no providers met eligibility criteria.

Moreover, these analyses included Early Head Start as a control variable because providers who received Early Head Start funding may have offered higher quality care than providers who did not have Early Head Start children in their homes given the high standards for care set forth by Head Start. However, there were little to no difference in average quality scores either in bivariate or multivariate analyses between network providers who had Early Head Start slots and network providers who did not have Early Head Start. At the time of this study, all 35 networks had Early Head Start slots and there were limited guidelines outside of a required frequency of weekly visits, a bachelor's degree requirement for coordinators and the general Head Start standards to guide their work with providers. Networks may have varied in how they implemented Early Head Start standards in FCC homes and two networks had Early Head Start slots but did not have any active Early Head Start providers who were eligible for the study. On the other hand, some networks may have carried over Early Head Start guidelines (such as frequency of visits to provider homes) to all of their affiliated providers regardless of Early Head Start slots. (Correlations between the control variables and the explanatory variables are shown in Appendix J.)

Finally the study could not control for self-selection of higher quality providers into networks with higher quality services. However, it seems unlikely that this was the case as there were both constraints and monetary incentives beyond the specific services of networks or qualifications of network staff that may have motivated providers to join networks. Many providers at the time of the study were constrained geographically to joining particular networks and many providers mentioned their quest for higher-paying Early Head Start reimbursement rates as a reason for joining one network over another.

Network Services Associated with Higher Quality

In the following analyses, large effects on quality are defined as those that had a statistically significant non-standardized regression coefficient of .5 or greater for the FDCRS. Modest effects on quality are defined as those that had a statistically significant non-standardized regression coefficient of less than .5 for the FDCRS.

Professional and supportive relationships. Networks that offered opportunities for providers to develop supportive relationships with network staff through feedback to staff, regular meetings, and telephone help, had the greatest effect on FDCRS quality among affiliated providers compared to other network services. Specifically, Table 28 shows that opportunities for providers to give the network formal feedback were associated with more than a half point increase in quality as measured by the FDCRS. Moreover, telephone help from a network coordinator and regular meetings at the network, alone, did not impact quality and could not be considered a substitute for frequent in-person home-visiting. However, when combined with the opportunity to give feedback, these services (telephone help and meetings) were associated with two thirds of a point increase on the FDCRS compared to networks that did not offer all three of these opportunities for professional provider-staff relationships.

Such feedback opportunities may be indicative of strong and responsive relationships between network staff and affiliated providers. Through provider surveys or designated times on meeting agendas for provider feedback, network coordinators may have used provider feedback to develop relevant meetings and trainings for providers. Such responsiveness and respect between providers and coordinators may have helped to support quality care.

In addition to these combinations of supportive interactions, providers in networks that intervened with landlords and other authorities on behalf of providers had higher quality scores on

both the FDCRS and the Arnett CIS than providers in networks that did not offer providers this support to their businesses. Field observations suggest that business intervention and advocacy on behalf of providers by network staff were indicators of a network's responsiveness to the needs of providers and the presence of strong network staff-provider relationships in this sample. These strong relationships may have formed a critical context for other areas of quality improvement. In other words, when there were strong staff-provider relationships, there may have been a stronger possibility of network staff helping providers to improve the quality of their programs.

Moreover, professional and supportive provider-staff relationships may have helped providers feel less isolated and alone in their work. Networks that encouraged providers to give feedback and ask for help suggest there were responsive and positive relationships between network staff and affiliated providers. The provider-to-provider relationships that developed at regular meetings may have also contributed to providers' professional development.

Table 28
Non-Standardized Estimates of Relationship between Network Staff-Provider Supportive Relationships and Quality (N=80)

	Quality Measures	
	FDCRS	Arnett
Services focused on staff-provider relationships	*B* (*SE*)	*B* (*SE*)
Providers had access to telephone help from network coordinator	ns	ns
Network coordinator held regular meetings for providers	ns	ns
Network offered providers opportunities to give formal feedback to the network.	.61*** *(.15)*	ns
Network offered all three professional development opportunities (telephone help; regular meetings; and way to give formal feedback)	.68*** *(.15)*	ns
Network intervened with authority (e.g. landlord) if providers had a problem	.38* *(.17)*	.16+ *(.09)*

Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models after controlling for provider's relevant education, age of youngest child in care, and whether or not provider has Head Start slots. Reduced models shown here were estimated using backward stepwise deletion and a $p \leq .20$ criterion for variable removal.
ns not significant; + $p \leq .10$; * $p \leq .05$; *** $p \leq .00$

Visits to FCC homes. Visits to FCC homes had a modest effect on quality among affiliated providers (see Table 29). Providers in staffed networks that offered high-frequency visits to FCC homes (at least 10 times within a 6 month period), and that focused visits on helping providers work with children and parents, had significantly higher FDCRS scores (close to one third of a point) and more sensitive interactions with children than providers in networks that did not offer high-frequency visits to FCC homes. It should be noted that high frequency visits to FCC homes in this sample were a proxy for visits to FCC homes that focused on direct care of children. All of the providers who reported high frequency visits also reported network coordinators working directly with a child or talking with the provider about a particular child or parent.

Table 29
Non-Standardized Estimates of Relationship between Network Visits to FCC Homes and Quality (N=80)

	Quality Measures	
	FDCRS	Arnett
Characteristics of visits to FCC homes	*B* (*SE*)	*B* (*SE*)
Network used formal quality assessment tool in visits to FCC homes (based on staff report)	.34* *(.16)*	ns
Network visited provider at least 10 times in last 6 months	.30+ *(.17)*	.17* *(.08)*
Network talked with provider about child and/or worked with child AND visited at least 10 times in last 6 months	.30+ *(.17)*	.17* *(.08)*
Network talked with provider about parent AND visited at least 10 times in last 6 months	ns	.21* *(.10)*

Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models after controlling for provider's relevant education, age of youngest child in care, and whether or not provider has Head Start slots. Reduced models shown here were estimated using backward stepwise deletion and a p ≤ .20 criterion for variable removal. The number and mix of variables remaining in each reduced model varies by model.
ns not significant; + p ≤ .10; * p ≤ .05

Although the interviews with providers did not probe systematically for examples of activities during visits to FCC homes, field notes from interviews with network staff who conducted high frequency visits described typical activities during visits (see Table 30).

Table 30
Child-Focused Activities Used in Visits to FCC Home

- Role model working with children
- Doing hands-on activities with children
- Following-up on specific problems regarding a child or parent
- Reviewing lesson plans/curriculum
- Observing children

Note. Based on network staff report.

Moreover, 78% of providers who reported high frequency visits to their homes also belonged to networks that had what could be considered a good coordinator to provider ratio of no more than 12 providers per coordinator. However, coordinator to provider ratio alone had no significant effect on quality, suggesting that low ratios between coordinator and providers could not alone guarantee high-quality visits to provider homes (see Appendix K for regression output). For example, one network coordinator who had only two providers in her network reported that during visits to FCC homes she socialized with providers and watched television.

Providers in networks that used a formal quality assessment tool during visits to FCC homes also had significantly but modestly higher (less than a half a point) FDCRS scores on average than providers in staffed networks that did not use an assessment tool; however, no significant effect on Arnett CIS scores (see Table 29) was found. As reported earlier, formal quality assessment tools were used during visits to FCC homes by 66% of the 26 networks in the study sample with providers also in the study (see Table 11). These assessments ranged from established tools used in the early care and education field such as the National Association for the Education of Young Children's accreditation checklist to network-developed checklists. Providers in networks that

used these types of tools during visits to FCC homes had at least a third of a point higher FDCRS score than providers in networks that did not use formal quality assessment tools. Such assessments tend to focus on environment and materials rather than provider-child relationships which may explain the impact on FDCRS quality and not on the Arnett CIS.

Visits to FCC homes not only offered providers support regarding working with children and parents but they may have also offered a form of monitoring. The isolated nature of FCC homes differs from the multiple staff structure of center-based programs where the teachers, directors, and other staff often play informal and formal monitoring roles for each other. Moreover, the use of formal quality assessments during visits to FCC homes may have signaled that a network understood the importance of high quality child care and sought to set standards of quality for its affiliated providers.

Education and training. Another area of network services that had a modest effect on quality of care among affiliated providers was direct training and education by the network to providers. Table 31 shows that providers in staffed networks that offered direct training or education at the network site either to new providers just joining the network or to already-established network-affiliated providers had, on average, significantly higher quality scores (close to a third of a point) and more sensitive interactions with children than providers affiliated with networks that did not offer training directly to providers at the network.

Table 31
Non-Standardized Estimates of Relationship between Network Education and Training of Providers and Quality (N=80)

	Quality Measures	
	FDCRS	Arnett
Types of education and training services	*B* (*SE*)	*B* (*SE*)
Network helped new providers get training for first time	.27+ *(.16)*	ns
Providers received direct education and/or training at the network	.33+ *(.17)*	.19* *(.08)*

Note. Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models[1] after controlling for provider's relevant education, age of youngest child in care, and whether or not provider has Head Start slots. Reduced models shown here were estimated using backward stepwise deletion and a $p \leq .20$ criterion for variable removal.
ns not significant; + $p \leq .10$; * $p \leq .05$

This finding suggests that networks had the potential to increase the level of relevant education held by affiliated providers. Direct training by the network added significant value to the quality of care offered by affiliated providers above and beyond the level of relevant education held by those affiliated providers. Moreover, because relevant education was used as a control variable and providers may have obtained much of their relevant education through their network affiliation, the effect of networks through provider education may be even greater than indicated by the results from these analyses.

The finding that networks that trained new providers had higher quality providers than staffed networks that did not train new providers points to a particular strength and potential of networks to improve quality of care among newly-licensed, less experienced providers.

Networks offered a range of training and education for providers. Trainings at the network site may have been more responsive to the needs of providers in the network and may have been more accessible and convenient for providers than external trainings or educational opportunities. Moreover, on-site training at the network for providers likely involved opportunities for network staff to interact with providers around issues related to care of children and families, supporting the earlier finding that supportive and responsive staff-provider interactions were a key to higher quality care. Some networks had strict guidelines for affiliated providers regarding training requirements such as mandatory monthly trainings. Although the study did not gather detailed information about training curricula or workshop content, interviews with network staff suggest that trainings tended to focus on health and safety, activities for children, professional and business practices—especially working with parents, child development, social-emotional issues of children, and special needs children.

Network services and provider experience. Some particular network services had a greater effect for newly licensed providers compared to more experienced providers. Newly licensed providers were defined as providers who received their license 0-3 years ago. Experienced providers were defined as providers who received their license more than 3 years ago. Two network services—visits to FCC homes focused on helping providers work with children and use of a quality assessment tool in homes—had differential effects for new and experienced providers.

For more experienced providers, visits to FCC homes that focused on helping providers work with children had a greater effect on FDCRS quality than for newly licensed providers. In contrast, for newly licensed providers, use of a formal quality assessment tool during visits to FCC homes had a greater effect on FDCRS quality than for experienced providers. (See Appendix K for regression output).

Network Services Not Associated with Quality

Several areas of network services had no significant effect on higher quality care among affiliated providers (see Table 32). Although these services were not associated with quality among network-affiliated providers, such services may have served as an incentive for providers to join and remain in networks.

Table 32
Network Services Not Associated with Higher Quality Care among Affiliated Providers

Service dimension	Services
Peer relationships	• Peer mentoring opportunities
Monitoring visits to FCC homes	• Monthly visits (6 times in 6 months) • Checking for licensing violations • Discussing health and safety information
External education/ training	• Referrals to external trainings • Tuition reimbursement programs
Material resources and business services	• Lending libraries and free toys, books, equipment. • Recruitment and enrollment of families, payment of fees, administration of subsidies, help with taxes, help with licensing

Peer mentoring. Peer mentoring opportunities—both links to a mentor as well as opportunities to become a mentor to other FCC providers—were not associated with higher quality among affiliated providers (see Table 33). In fact, providers in networks that offered providers opportunities to become peer mentors to other providers had, on average, significantly lower FDCRS scores than providers in networks that did not offer such opportunities. Mentoring opportunities involved provider to provider peer support and most likely did not involve direct interactions and relationship building between network staff and providers, which this study found to be an important component of effective networks. Moreover, field observations suggested that providers who became mentors often treated mentoring as an upward career step and left their less-qualified assistants in charge of their child care programs while they focused their time and energy on helping other providers. This resulting absenteeism of providers from their own programs may also help to explain the lower quality scores of these programs.

Table 33
Non-Standardized Estimates of Relationship between Peer Mentoring and Quality (N=80)

	Quality Measures	
	FDCRS	Arnett
Peer support services	*B* (*SE*)	*B* (*SE*)
Network offered providers a link to a provider mentor	ns	ns
Network offered providers an opportunity to be a mentor to other FCC providers	-.34* *(.15)*	ns

Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models after controlling provider's relevant education, age of youngest child in care, and whether or not provider has Head Start slots. Reduced models shown here were estimated using backward stepwise deletion and a $p \leq .20$ criterion for variable removal.
ns not significant; * $p \leq .05$

Monitoring visits to FCC homes. Several characteristics of visits to FCC homes were not significantly associated with higher quality care among network-affiliated providers. Lower frequency monthly visits to FCC homes (6 visits to an individual provider within 6 months instead of high frequency visits of 10 visits in 6 months) had no significant association with higher quality care. None of the specific content areas (working with a child, talking to a provider about a child, working with a parent) offered outside of high frequency visits (e.g. a one-time visit to work with a child) had an impact on quality. Visits focused on monitoring health and safety or licensing violations instead of visits focused on working with children also had no significant association with higher quality care. Visits focused on health, safety, and licensing violations may be redundant with licensing visits and may assure a basic level of safety but not focus on the quality of interactions between providers and children.

External education and training. Networks that made referrals to external training and educational services for providers were not significantly associated with higher quality care among affiliated providers. Networks that offered tuition reimbursement programs also did not have a positive effect on the quality of care offered by affiliated providers. These findings regarding external training and referrals further support the finding that network staff-provider interactions and relationships were a central component of effective networks and higher quality care among affiliated providers. Referrals to external trainings or tuition reimbursement programs did not involve relationship-building or interactions between network staff and providers. Such referrals may have resulted in higher levels of relevant education, a variable that was associated with quality and was controlled for in testing network effects.

Material resources and business services. Providers in staffed networks that offered material resources such as book and toy lending libraries or free program supplies to providers did not have significantly higher quality scores than providers in networks that did not offer these material resources. Moreover, providers in networks that offered business services related to help with licensing, recruitment of families, parent fees, subsidy payments, and tax preparation did not have higher quality scores than providers in networks that did not offer these services.

Although material resources and business services did not impact quality of care in this sample of network-affiliated providers, Table 34 shows that material resources and some business services may have helped providers in their businesses. A majority of providers reported that help with recruitment of families and free supplies did improve the business aspects of their FCC programs and substantial percentages of providers reported that other network services such as help with payments, taxes, and business practices in general did help them improve the financial and administrative aspects of their FCC programs.

Table 34
Provider Report of How Staffed Network Affiliation Improved Business

Staffed Network Service or Characteristic[a]	Percent of staffed network providers who agreed that network service improved business (n=80)
Fill child care slots	60 %
Reduced cost or free supplies	55 %
Affiliation impresses parents	53 %
Information on how to develop a handbook, contract, and other written materials	42 %
Increased and more regular payment	38 %
Help with business skills	37 %
Information on how to depreciate things for tax purposes	33 %
Provider can charge more now because offers higher quality of care	33 %
Training/ information on how to apply for grants	32 %
Other[b]	6 %

[a] Items were prompted.
[b] "Other" was open rather than prompted and included: giving the provider confidence; access to knowledgeable people; links to parents who can pay more; simplification of the paperwork; advertising on R's behalf

In summary, three service areas offered to providers by networks were associated with higher quality care among affiliated providers: professional and supportive relationships between providers and network staff, frequent visits to FCC homes focused on helping providers work with children (including use of a formal quality assessment tool), and direct education and training to providers at the network site. All three of these service areas involved a network staff member (most often the coordinator) working directly with providers in the network. Professional and supportive relationships (combination of feedback opportunities, meetings and telephone help), had the greatest significant effect on FDCRS quality of these services—accounting for half a point higher FDCRS score among affiliated providers. Visits to FCC homes and direct training to providers had modestly significant effects on quality—accounting for less than half a point higher FDCRS score among affiliated providers.

Services that did not have a significant effect on quality of care such as material resources and business services as well as monitoring for licensing violations may not have involved the direct, face-to-face interactions and relationship-building that occurred during visits to provider homes and on-site training sessions. The relationship-building and trust that occurred in networks between network coordinators and providers appear to be central to how these networks supported higher quality care among their affiliated providers. As the following sections show, the training of network coordinators was another key component of effective network services.

Network Coordinator Qualifications and Quality

In addition to network services, a coordinator's qualifications were hypothesized to have a meaningful effect on the quality of care offered by providers in their network. Two areas of coordinator qualifications had a significant yet modest relationship to higher quality care: prior experience working with children and specialized coordinator training. As Table 36 shows, providers in networks with a coordinator who had prior experience working with children in either a FCC or center-based setting had significantly higher FDCRS scores than providers in networks with coordinators who did not have this experience. Length of time as a coordinator did not appear to have a significant relationship to higher quality care among affiliated providers.

Networks with a specially-trained coordinator (participated in a graduate-level certificate program customized for coordinators) also had a significant and modest effect on quality among affiliated providers. Providers in networks with a specially-trained coordinator scored .40 points higher on the FDCRS compared to providers in networks without a specially-trained coordinator. As Table 35 shows, coordinators having a higher level of general education (a master's degree) or relevant education more generally (not just this specialized coordinator training) were not significantly associated with quality of care among affiliated providers.

Table 35
Non-Standardized Estimate of Relationship between Network Coordinator Qualifications and Quality (N=80)

	Quality Measures	
	FDCRS	Arnett
Network coordinator experience	*B* (*SE*)	*B* (*SE*)
Network coordinator had prior experience working with children either in a FCC or center-based setting	.32+ *(.18)*	ns
Network coordinator had been in coordinator position for at least one year	ns	ns
Network coordinator education and training		
Network coordinator had a Masters degree	ns	ns
Network coordinator has some relevant education	ns	ns
Network coordinator attended specialized certificate program in infant studies with focus on FCC networks	.40* *(.19)*	ns

Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models after controlling for provider's relevant education, age of youngest child in care, and whether or not provider has Head Start slots. Reduced models shown here were estimated using backward stepwise deletion and a $p \leq .20$ criterion for variable removal.

ns not significant; + $p \leq .10$; * $p \leq .05$

A variety of coordinator characteristics such as level of general education, relevant education, experience, and motivation for the job were examined in order to understand the effect of specialized coordinator training in this study. Only level of general education was significantly correlated with attending the certificate program. This makes sense given that the certificate program was graduate-level training. However, coordinators who participated in the certificate program were not more likely to have more relevant education, more experience, or better motivation to help providers than coordinators who did not attend the training (see Appendix J for correlations between coordinator characteristics and specialized coordinator training). These comparisons strengthen the finding that graduate-level specialized training in infant studies for network coordinators had an independent effect on quality among network-affiliated providers.

The relationship between specialized coordinator training and structural characteristics of the networks such as ratio of coordinator to providers in a particular network was also examined. As reported earlier, 80% of networks with a specially-trained coordinator also had coordinator-to-provider ratios of less than 1 to 12. A reasonable caseload of providers clearly made it possible for specially-trained coordinators to put into practice their training with providers in their network. Thus, a good coordinator-to-provider ratio appears to be a mediating structural component of networks to allowing highly trained coordinators to work effectively with providers in their networks (See Appendix J for correlations between specialized certificate program participation, coordinator-to-provider ratio, and quality).

Coordinator Training Combined with Network Services

The ten network coordinators who participated in the certificate program were the only coordinators at their network and thus it was likely that providers were receiving services directly from these coordinators.[16] The following set of analyses tested interaction variables to see whether the combination of a service and the presence of a specially-trained coordinator (still controlling for relevant education, Head Start, and age of youngest child in care) boosted the effect of the service alone. It should be noted here that due to the small number of cases in these overlap groups, these findings should be tested in future research.

First, a summary of mean quality scores (FDCRS and Arnett CIS) for providers in networks with different combinations of a specially-trained coordinator and direct services to providers shows how this combination enhanced the quality scores of affiliated providers (see Table 36). Quality scores of providers were greater when networks had a specially-trained coordinator who delivered services compared to quality scores of providers in networks that offered services without a specially-trained coordinator. Providers in networks that had a specially-trained coordinator and offered a package of services including direct training to providers, visits to FCC homes focused on working with children and parents, and supportive staff-provider relationships, had the highest FDCRS scores—5.07 on average—which is considered in the "good" range of quality.

[16] Five networks with providers in the study had multiple coordinators who worked with providers. Only one coordinator at each network was interviewed and the coordinator in each of these five networks did not participate in the certificate program. However, it's possible that other coordinators in those five networks whom were not interviewed and thus could not be identified did attend the program. Removing providers associated with those five networks reduced the total number of cases to a number too small for reliable multivariate analysis, but the mean quality scores remained significant in the same pattern for this smaller group (see Appendix A).

Table 36
Mean Quality Scores for Providers in Networks with a Specially-Trained Coordinator and Providers in Networks without a Specially-Trained Coordinator

	Network has specially-trained coordinator				Network does not have specially-trained coordinator			
	FDCRS		Arnett CIS		FDCRS		Arnett CIS	
	M (*SD*)	n	*M* (*SD*)	n	*M* (*SD*)	n	*M* (*SD*)	n
All network cases	4.40** *(.73)*	17	3.29 *(.31)*	17	3.89 *(.67)*	63	3.18 *(.35)*	63
Provider got direct education from network last year	4.49** *(.65)*	16	3.33 *(.27)*	16	3.95 *(.65)*	42	3.23 *(.29)*	42
Coordinator spoke with provider about or worked with a child on one of last two home visits	4.48** *(.69)*	15	3.30 *(.32)*	15	3.84 *(.69)*	51	3.17 *(.35)*	51
Coordinator spoke with provider about a parent on one of last two home visits	4.67*** *(.57)*	11	3.40* *(.28)*	11	3.71 *(.63)*	32	3.12 *(.38)*	32
Network provided regular meetings, telephone help and formal channels for provider feedback	4.83* *(.53)*	8	3.44 *(.25)*	8	4.31 *(.57)*	16	3.23 *(.32)*	16
All of the above	5.07*** *(.23)*	6	3.48* *(.26)*	6	4.07 *(.37)*	8	3.11 *(.31)*	8

*p ≤ .05 **p ≤ .01 ***p ≤ .001

Multivariate analyses examined the effect of these combinations of a specially-trained coordinator with direct services to providers on quality among affiliated providers. Networks with a specially-trained coordinator enhanced the effectiveness of direct services offered to providers by the network. All of these combination effects were considered large—over half a point increase on the FDCRS (see Table 37).

Table 37
Estimates of the Relationship between Specially-Trained Network Coordinators, Network Services, and Quality (N=80)

Combinations of a specially-trained network coordinator and network services	Quality Measures	
	FDCRS	Arnett
	B (*SE*)	*B* (*SE*)
Network coordinator attended specialized training course AND providers received direct training at the network	.52** *(.19)*	ns
Network coordinator attended specialized training course AND worked with a child or talked about a child during one of the most recent visits to FCC home	.52** *(.19)*	ns
Network coordinator attended specialized training course AND coordinator talked about a parent during one of the most recent visits to FCC home	.71** *(.21)*	.20+ *(.11)*
Network coordinator attended specialized training course AND offered regular provider meetings, telephone help and formal channels for provider feedback	.85** *(.24)*	.24+ *(.12)*
All of the above	.91** *(.25)*	.23+ *(.13)*

Non-standardized coefficients and standard error reported for Ordinary Least Squares regression models after controlling for provider's relevant education, age of youngest child in care, whether or not provider has Head Start slots, coordinator training, and network services. Reduced models shown here were estimated using backward stepwise deletion and a $p \leq .20$ criterion for variable removal. ns not significant ; + $p \leq .10$; * $p \leq .05$; ** $p \leq .01$

Providers in networks that had a specially-trained coordinator and who received direct education from the network had higher FDCRS scores on average than providers in networks that did not fall into this group, controlling for provider and program characteristics. This finding illustrates the importance of post-baccalaureate coordinator education. Coordinators often organized and even led the network training workshops for providers. It makes sense that coordinators who themselves received specialized training in working with providers and families around best practices with young children would be able to prepare and offer high-quality trainings to providers.

Providers in networks that had a specially-trained coordinator and who reported that their coordinator talked about or worked directly with a child or talked with them about a parent during a visit to the FCC home also had significantly higher FDCRS scores than other network providers. These findings suggest that coordinators who had in-depth training and education around how to help providers work with young children and families were able to help providers improve their practices with parents and children. Coordinators with specialized academic training (such as the post-baccalaureate certificate program described earlier) may not need to conduct as many visits to FCC homes to impact quality. The analyses show that specially trained coordinators who worked with children during visits to FCC homes had a greater effect on quality than frequency of visits alone. Although some frequency of visits was obviously necessary for coordinators to have an impact on provider practices, the study could not identify an ideal number of visits (see Appendix J for correlations between variables and Appendix K for detailed regression output).

Providers in networks with a specially-trained coordinator that also offered supportive staff-provider relationships through the combination of regular meetings for providers, telephone

help, and formal means for giving the network feedback, had significantly higher quality scores than providers in networks that did not have a specially-trained coordinator and supportive staff-provider relationships. Again, it seems likely that having a well-trained coordinator multiplied the positive effects of interactions between coordinators and providers at networks.

Finally, those networks with a specially-trained coordinator that also offered the full range of services listed here—direct training of providers, visits to FCC homes focused on working with children and parents, and supportive staff-provider relationships—had the largest effects on quality. This package of services combined with a highly qualified coordinator resulted in almost a full point higher FDCRS score among affiliated providers.

In summary, these findings illustrate the fact that multiple factors must come together at once for strong network effects on quality. Services that bring specially-trained coordinators in direct contact with providers through training for providers at the network, visits to FCC homes, and supportive staff-provider relationships have the potential to improve quality among affiliated providers. Specialized training of coordinators will do little good if these coordinators do not have an opportunity to directly train providers and interact with them during visits to FCC homes. Although the study could not control for self-selection into certain networks by providers, interviews with providers suggested that providers did not choose 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 were not associated with quality in this study.

Provider Perspectives on Support Group Affiliation, Quality, and Business Success

Provider-led associations offered a different array and intensity of services to providers compared to the services offered by staffed networks. On average, association providers reported receiving or knowing about fewer services from their associations that were related to higher quality scores in this study such as high frequency visits to FCC homes, use of formal quality assessments, and direct training to both new and experienced providers.

Provider reports about their experiences with support group membership further illustrate differences between staffed networks and provider-led associations in this study. Interviews with providers asked whether or not membership in a group had an effect on the quality of care provided. Providers who agreed that membership had improved their quality of care were prompted with a series of ways in which their group affiliation might have improved their quality. Providers were also asked if there were any other ways in which membership affected quality of care.

As Table 38 shows, network providers were significantly more likely than association providers to agree that affiliation with their organization had improved the quality of care they offered children. Significantly more network providers on average than association providers reported that services such as screening children, help with guidance and discipline, and access to supplies had improved their quality of care.

Network providers were also more likely than association providers to agree that membership had given them access to education to further their careers and this difference approached statistical significance. There was no area in which more association providers than network providers reported a positive effect from their affiliation on quality.

Table 38
Provider Report of How Group Membership Improved Quality of Care

How membership improved quality of care[a]	Staffed Network Providers (n=80)	Association Providers (n=30)
Gave access to education to further career	71 %+	53 %
Learned more about how children develop and what they need	68 %	55 %
Got new ideas about things to do with children	68 %	63 %
Felt less isolated from other adults	61 %	60 %
Access to somebody who screened children	60 %***	20 %
Got new ideas for guidance and discipline of children	60 %**	27 %
Learned to screen children for special needs	55 %**	23 %
Access to more and better supplies	55 %**	27 %
Learned more about healthier food	45 %	37 %
People to do special activities with children	30 %	20 %
Other[b]	24 %	13 %

+ $p \leq .10$; ** $p \leq .01$; *** $p \leq .001$

[a] Items were prompted.

[b] "Other" was open rather than prompted and included: invitations to classes and workshops; advice about dealing with parents; an opportunity to mentor other providers; helpful feedback; written resources; professionalization; links to other knowledgeable providers.

Table 39 also shows that the only area where network and association providers differed by fewer than 5 percentage points was "felt less isolated from other adults." Both networks and associations linked providers with one another. However, consistent with interview reports from association leaders and network staff, many associations did not seek to do a lot beyond facilitating informal support among providers. Networks, in contrast, were more likely to include peer support services that brought together affiliated providers and focused on quality child care, such as training at the network site.

Although the study did not find a direct relationship between business services offered by networks and quality of care, significantly more network providers than association providers reported that affiliation helped their family child care business (See Table 39). This may be due to the fact that network providers, at the time of this study, were interested in the higher remuneration associated with Early Head Start and in access to children and state subsidy payments.

Table 39
Provider Report of Whether Group Membership Aided Business

Provider felt that membership helped her business	Network Providers (n=80)	Association Providers (n=30)
Yes	55 %**	21 %
No	44 %**	79 %
Unsure	1 %	0 %

** $p \leq .01$

Table 40 summarizes the ways in which providers reported that affiliation had positively influenced their business. Network providers were significantly more likely than association providers to report that affiliation helped their business by giving them access to reduced-cost or

free supplies, helping them impress parents, and enabling them to get paid more or get paid more regularly. Network providers more frequently reported that membership helped them to keep their spaces for children filled than did association providers. Thus, network affiliation may have had an additional benefit of improving providers' business practices although these aspects of network services were not associated with improving quality of care for children and families. Further, these services may be important factors in attracting providers to join and remain affiliated with networks.

Table 40
Provider Report of How Group Membership Affected Business

How membership improved business[a]	Network Providers (n=80)	Association Providers (n=30)
Helps keep slots filled	60 %*	35 %
Access to reduced cost or free supplies	55 %***	21 %
Membership impresses parents	53 %**	24 %
Provider learned to develop a handbook, contract and other written materials	42 %	35 %
Gets paid more and/or more regularly	38 %**	0 %
Helped provider with business skills	37 %	31 %
Taught provider how to depreciate things	33 %+	17 %
Provider can charge more now because offers higher quality of care	33 %	28 %
Provider learned to apply for grants	32 %	41 %
Other[b]	6 %	10 %

+ $p \leq .10$; ** $p \leq .01$; *** $p \leq .001$

[a] Items were prompted.

[b] "Other" was open rather than prompted and included: giving the provider confidence; access to knowledgeable people; links to parents who can pay more; simplification of the paperwork; advertising on R's behalf

Summary of Findings

This study found that affiliation with a staffed network was a strong predictor of quality in FCC homes in a low-income urban context. Moreover, the study found that the role of network coordinators was key to supporting quality in FCC homes. Staffed network-affiliation had a positive yet modest association with quality of care when comparing staffed network-affiliated providers with unaffiliated providers even after controlling for other provider and program characteristics associated with quality such as a provider's relevant education, household income of the provider, and ages of children in the FCC program. The study also found that providers affiliated with a network that had a specially-trained coordinator who participated in a post-baccalaureate certificate program in infant studies offered significantly higher quality care than providers affiliated with provider-led associations.

Several network services, network coordinator qualifications, and combinations of these services and staff qualifications led to higher quality care among network-affiliated providers and some service areas did not impact quality in this study. Table 41 summarizes these findings regarding network effects on quality. Three areas of direct services to providers had a significant relationship to higher quality care: supportive staff-provider relationships through meetings, telephone help, and feedback opportunities; visits to FCC homes focused on helping providers work with children and parents; and direct training to providers at the network. All three of these

service areas involved direct interaction between network coordinators and affiliated providers and indeed the combination of services that fostered supportive staff-provider relationships was found to have the largest independent effect on quality.

Large effects were also found from networks that offered a combination of a specially-trained coordinator and direct services to providers. Specially-trained coordinators in this study were found to enhance the effectiveness of network services for providers and to be a key predictor of large effects on quality among affiliated providers. A possible explanation for this finding involved the focus of this specialized training on infant studies. This finding confirms earlier research that more infants in care are associated with lower quality care in FCC homes (Doherty et al., 2006). Thus, it seems likely that this specialized coordinator training in infant studies helped coordinators work with providers around the particular challenges and opportunities of working with infants and toddlers and may have increased the quality of care offered to very young children in these settings.

Some areas of staffed network services were not associated with higher quality care among affiliated providers. These services did not involve interactions and relationship-building between network staff and providers, a key element of effective networks and services. In particular, staffed networks that monitored homes for licensing violations and health and safety regulations, provided referrals to external trainings and tuition reimbursement programs, and offered mentoring programs did not have a relationship to higher quality care. These services may not have involved direct and supportive interactions with network coordinators who were key to supporting quality care. However, these services may still be important aspects of professional and business development in FCC as was suggested by provider reports of how these services helped their businesses. This study did not look at other outcomes that may be associated with higher quality care such as income augmentation, stability, provider turnover, or job satisfaction.

Although the study found meaningful effects of staffed network services on quality as measured by the FDCRS, few (and modest) significant associations were found between staffed network services and provider sensitivity and responsiveness as measured by the Arnett CIS. This may be partially explained by the small sample size in this study. Other researchers have also noted that provider-child interactions may be too "ingrained" to change through variables such as training and support services that are far removed from the daily interactions between providers and children (Kontos et al., 1996).

Table 41

Summary of Effects of Network Coordinator Qualifications and Network Services on Global Quality (FDCRS) Among Network-Affiliated Providers (N=80)

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

[a] Large significant effects are defined by non-standardized regression coefficients that are .50 or higher for the FDCRS.
[b] Modest significant effects are defined by non-standardized regression coefficients that are lower than .50 for the FDCRS.
[c] No effects on quality are defined as no significant positive effect on FDCRS scores.
[d] Participated in a post-baccalaureate certificate program in infant studies customized for coordinators working with FCC providers

Finally, descriptive differences between staffed networks and provider-led associations may help explain the relationship between affiliation and quality. Staffed networks tended to focus their efforts on new providers while provider-led associations focused their efforts on seasoned providers. Staffed network affiliation may be a particularly effective quality improvement strategy for newer, less experienced providers although this is a question for further study. Provider-led associations did not have specially-trained staff members and did not offer providers a consistent set of quality-focused services. Associations tended to focus on professional advocacy and peer support in contrast to staffed networks which focused on quality of child care and child and family well-being. Finally, providers in staffed networks were more likely than providers in associations to report that affiliation improved both their quality of care as well as their business practices.

Recommendations

Recommendations

Policy Recommendations

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 found that affiliation with a staffed network was 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 high-quality 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 found that the combination of a specially-trained coordinator and direct services to providers focused on working with children was a key component of staffed networks that had higher quality providers. An approach to quality improvement that includes specially-trained staff who deliver training and technical assistance to providers may be 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 have contributed 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.

In this study *structural features* of networks referred to components that could 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 (as shown in Table 42). *Process features* of networks in this study referred to components that were not easily regulated but were observable, such as visits to FCC homes that helped providers work effectively with children and parents, strong coordinator-provider relationships that were 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. Head Start may be a promising sponsor of networks as some of the services associated with quality in this study were mandated by Head Start standards, including coordinator to provider ratios and frequency of visits to FCC homes. However, Head Start standards alone may not be enough to ensure quality outcomes. Indeed, the study finds no differences in quality between providers who had Early Head Start slots and those who did not.

Table 42
Structural and Process Features of Staffed Network Services Associated with Higher Quality Care

Structural Features of Networks	
Network Coordinator Qualifications	• Participated in a post-baccalaureate certificate program focused on providing support to FCC providers who care for very young children and their families • Prior experience working with children either in FCC or center-based setting
Visits to FCC Homes	• High-frequency visits to FCC homes (at least 10 times within 6 months or possibly fewer if coordinator has specialized training) • Low coordinator to provider ratio (no more than 12 providers per coordinator) • Use of a formal quality assessment tool in visits to FCC homes
Education/ Training	• Training and education at the network site for affiliated providers. • Introductory training for new providers
Process Features of Networks	
Visits to FCC Homes	• Content of visits to FCC homes was focused on helping the provider work with children and parents
Professional and Supportive Relationships	• Opportunities for professional and supportive relationships between coordinators and providers—a combination of regular meetings, telephone help, and opportunities to give feedback

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, were not directly related to quality of care for children in this study 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

higher-paying 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.

Program Recommendations

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

Staffed networks should invest resources in 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 found that specially-trained coordinators who attended a post-baccalaureate certificate program in infant studies enhanced the effectiveness of direct services to providers including training for providers, visits to FCC homes, and staff-provider interactions. This coordinator certificate program was 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 FCC or center-based settings. Direct experience working with children may help 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 found that networks that offered this combination of opportunities for staff-provider interactions had 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 found that the following characteristics of visits to FCC homes had a significant relationship to higher quality care among affiliated providers:

- network used a formal quality assessment tool in FCC homes,
- specially-trained coordinator worked with children during visits to FCC homes,
- specially-trained coordinator talked to providers about children during visits to FCC homes,
- specially-trained coordinator talked to providers about parents during visits to FCC homes,
- network staff made regular and frequent visits to FCC homes (at least 10 times in 6 months or possibly fewer if coordinator had 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 should 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 should encourage more experienced providers to join or form their own associations. Provider-led associations may be an additional support for providers in networks and dual affiliation may be beneficial to many providers. This study found that associations offered different kinds of supports to providers than networks did—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 found 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 and descriptive 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) and provider sensitivity to parents may be an under-recognized aspect of child care quality (Bromer, Paulsell, Porter, Weber, Henly & Ramsburg, forthcoming). 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 license-exempt providers serving low-income families. The current study found that some network services were more effective for newly licensed providers while other services were more effective for more experienced providers. Future research could examine the different ways networks support quality across provider types, 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.

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Glossary

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 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. A large group FCC home license permits up to 16 children of different age combinations depending on the staffing.
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 and 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 low-income 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 referrals or direct services for providers.

Specially-trained network coordinators are coordinators who attended 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(c)(3) 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 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).

About the Herr Research 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 eight and their families. Our researchers design and conduct original research, evaluations, and analysis on the optimal organizational design, funding mechanisms, monitoring practices, and implementation strategies of early childhood programs and services. We then channel this knowledge to government officials, program administrators, advocates, foundation officers, and other participants in the policy process to improve the overall effectiveness of programs and policies or young children and their families.

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

Erikson Institute is an independent institution of higher education that prepares child development professionals for leadership through its academic programs, applied research and community involvement. It is the nation's only graduate school to focus exclusively on child development from 0 to age 8. Erikson advances the ability of educators, practitioners, researchers and decision-makers to improve the lives of children and families.

Appendix A

Methods Detail

Appendix A—Methods Detail

This appendix presents detailed information documented by the University of Chicago Survey Lab to supplement the study methods presented in the body of the report. It is organized into the following sections:

1. Considerations in study design
2. Identifying and sampling networks and associations
3. Recruitment of network directors, coordinators, and association leaders
4. Identifying and recruitment of eligible providers
5. Degree of network-control match
6. Interviewer/observer training
7. Data quality limitations

Considerations in Study Design

The study had two primary purposes:

1. To test whether or not network programs increase the quality of care among member providers
2. To identify what services or aspects of the programs, if any, were associated with higher quality outcomes.

These twin goals created conflicting demands with respect to concentration of resources. To discover whether or not network programs resulted in higher average quality of care, we needed to maximize our ability to compare network-affiliated providers with providers not affiliated with networks. To determine which elements of network programs were associated with higher quality outcomes we needed to maximize the total number of network providers. Thus, within the limits of the study resources, we needed to include as many network providers as possible while still preserving sufficiently-sized comparison groups to address the problem of self-selection.

Ideally, we would have included equal numbers of network and matched, unaffiliated providers. To accommodate both the need for evaluating self-selection of providers into networks and the need for a separate, within network analysis, however, we instead worked with a two-to-one matching design. The original plan was for 100 network-affiliated providers, 50 matched control cases of non-affiliated providers and 30 association-affiliated providers. The difficulty of recruiting participation through a period of turmoil in Chicago's network program funding extended the initial field period resulting in additional costs and the numbers had to be reduced accordingly. In the end, we included 80 network-affiliated providers, 40 matched, unaffiliated providers, and 30 association-affiliated providers.

Identifying and Sampling Networks and Associations

The initial list of agencies that operated a network required several modifications. One agency ceased operations at the start of our study amid larger funding problems and declined further participation. Another agency appeared erroneously on the list because it had a name very similar to an agency running a child care network. Two agencies on the list had discontinued their child care networks but retained the directors and coordinators on their staff. Three agencies had two separate networks running simultaneously.

An initial list of eight known provider associations was also modified. Since associations are voluntary groups, we had no assurance that this list was exhaustive. Throughout the initial field period, we asked those we interviewed if they knew of other associations. One of the associations on the initial list proved to be defunct. Another was in the process of dissolving. We added six other associations during the field period as we learned about them and recruited them into the study.

Recruitment of Network Directors, Coordinators, and Association Leaders

It took some time to recruit participation from every network entity. We began recruitment in July of 2002, and we completed our last interview in January of 2003. To recruit participation from network directors and coordinators, the Survey Lab faxed the network director a cover letter explaining the project, its purpose, and what we would ask of them. We followed the fax with a phone call to set up appointments with willing directors. At the time of phone follow up we also requested a referral to the network coordinator for an interview. In order to make the most efficient use of time and expenses, we conducted interviews with the director and network coordinator from a single agency in the same day in as many cases as possible. We always requested separate interviews, but in one case the director insisted on being interviewed at the same time as the network coordinator. We employed the same fax-with-phone-follow-up procedure to recruit association leaders. The text of recruitment letters can be found in Appendix B.

We maintained a written record of all contacts with prospective participants. This record contained each recruiting step taken, e.g., letters written, faxes sent, numbers of calls made and by whom, messages left, additional incentives offered. The cases took an average of 52 days to complete (either scheduled or deemed out of scope). Table A.1 below outlines the recruitment statistics for this phase of study.

Table A.1
Study Participant Recruitment Summary

PART I: Field Period July 2002-January 2003		
	Networks	Associations
N of groups identified	35	14
Proportion of known groups covered	100%	100%
Interviewed two staff members	30	0
Interviewed one staff member	5	14
N of Interviews completed	64*	14
Average # of recruitment attempts required	13	6
Averages days to complete	58	34

*One coordinator-director pair was interviewed simultaneously, so while we interviewed 65 individuals, we conducted only 64 distinct interviews.

In addition to in-person interviews, we asked the network staff and association leaders to provide our project with a copy of their latest annual report and with any other printed materials they had available for active or prospective network members. In consideration of the time and effort it required for agency leaders and their staff to provide our study with interviews and other requested materials, we offered a "thank you" of $50 to participating respondents.

Very few associations had any print materials to share, demonstrating their relatively informal character. All networks had some materials, but many were reluctant to provide us with copies and others promised to send materials at a later date but never did so despite follow-up calls. Further, in a few instances we had great difficulty obtaining a list of currently-affiliated providers from the organizations, though eventually all of the organizations did provide such lists. We attempted to update these lists at two points during the field period because of turnover we noticed during recruitment. However, it was often not possible to get a second, updated list, particularly where it had been difficult to get an original list.

Identification and Recruitment of Eligible Providers

We initially sampled network providers to represent network-affiliated providers in Chicago more generally and we initially sampled association providers to represent association-affiliated providers

in Chicago more generally. This was accomplished with random samples of cases stratified by organization and proportionate to the size of each group. However, we then screened for length of affiliation and number of affiliations. To ensure that networks and associations had time to exert some influence on members in the sample, we only selected providers who had been affiliated with their group for a minimum of six months. To ensure that any observed differences between groups were not contaminated by multiple affiliations, we only selected providers who belonged exclusively to a single association group or network program at the time of screening, and, if they had prior affiliations, who had ceased to belong to a different group or program more than a year in the past. This screening means that our network and association providers represent somewhat restricted subsets of their larger peer groups: those with unique affiliation for at least one year who had been with their current organization for six months or more.

We made a determination that providers who had been in network within two months of our observation and otherwise met eligibility criteria could still be included in the final study sample if the network had recently closed.

In our original design, we intended to select the control cases after we completed all of the network cases. This would have allowed us to match the distribution of control cases quite exactly to the distribution of network cases along key dimensions such as years of experience, levels of education, neighborhood area, and the like. However, in practice, waiting for the completion of all the network cases proved infeasible, so we selected matched controls on a rolling basis, adjusting targets as we went. We were able to retain a good match, but some categories are more tightly matched than others.

The original plan was to sample individual providers from organizations in proportion to the size of each group. However, eligibility requirements allowed for only a subset of providers from each organization. In some cases, we found no eligible providers in a network or association. In order to determine the number of eligible, affiliated providers for each network or association, we had to call and screen. Therefore, our sampling frame of eligible participants continued to change throughout the field period as we accumulated information and updated our assumptions.

Network and Control Group Providers

Sampling. To draw the network sample, we first deleted the names of providers from our lists that appeared as members of more than one network or as members of an association in addition to a network. Next, for networks with lists of providers, we used a table of random numbers to select a random sample of each according to the designated target number of cases for that group. In the case of networks whose lists of providers were still pending at the time of initial sampling, we created dummy slots according to the total number of member providers reported by the network. Then, we randomly sampled slots in the same manner that we selected providers. Once lists arrived, we put the names from the lists into the slots in order and selected those falling into slots that had been pre-sampled.

For the sample of control cases, we began with a list of licensed family child care providers provided by the Illinois Bureau of Licensing and Certification at the Department of Children and Family Services. We used this as our master list and compared provider names/addresses to those on lists obtained from the networks. In this way we were able to identify licensed providers with no network or associational affiliation for the control group. We screened potential cases to confirm membership or non-membership in a network or association for the past year as well as the present time prior to interview.

We selected control providers to represent a mix similar to network providers in terms of age, race/ethnicity, education, years of experience, and neighborhood type. We looked at the demographic distribution of network providers along these dimensions and sorted those we recruited into categories. As network providers participated, we kept track of how many were in

each race or ethnic group, how many were in each type of neighborhood area, in each of four age groups, how many were in each of several experience categories and how many were at each level of education. We recruited control providers to maintain similar proportional distributions across each set of categories. So, for example, if 10 network providers had associate's degrees, representing 1/8 of our completed cases, then we aimed to recruit 1/8 of 40 or 5 control providers with associate's degrees. We used quota cells to ensure that when we located an unaffiliated provider with an associate's degree, the provider's other characteristics (neighborhood type, years of experience, race/ethnicity, age) fell into categories that still needed representation.

We constructed the categories for the quota cells based on information from the network interviews in order to choose sensible ranges and cut-points. We recruited providers to cover the entire geographic area of each network to the greatest extent possible.

Recruiting. As with the network staff and association leaders, we recruited providers by first making written contact to explain the study and to provide a call-in number for those interested in participating. In accordance with Survey Lab and University policy for the protection of human subjects, participants in research must receive an explanation of the study, of the voluntary nature of participation, and of the confidentiality of data collected before any actual interviews and/or observations can take place.

As with the expert interviews, we maintained contact records to track recruitment progress. We screened the interested providers by phone to determine their eligibility and whether or not they fell into an open quota cell before scheduling an interview or observation.

Because we needed to proceed with in-home observations before we had a complete list of providers and before all selected providers had been screened, we drew the sample in stages, including many rounds of replacing cases found ineligible on screening with new prospects.

As stated earlier, we initially aimed for a sample of network providers in proportion to the overall size of their network membership. We adjusted this plan in two ways. First, a few of the networks contained so few providers (e.g., one had two providers) that the target number of cases to sample in strict proportional terms would have been less than one. We allocated a minimum of one provider to each network. Second, one extremely large network had nearly eight times the number of providers as those in the next largest network. In this case we limited the number of providers we selected. One of the aims of this study is to understand what factors make one network superior to another, so we did not want to have a single network dominating our sample. The principal investigator set a cap of 12 on the number of providers to recruit from this very large network.

Once we began screening selected providers, we found additional providers who were ineligible by virtue of having joined the network too recently or having belonged recently to other networks or associations. When all providers for a network proved ineligible, or when there were fewer eligible providers than the target number of completed cases for that network, we reallocated slots to networks with remaining eligible cases. We filled these slots using random selection with target quotas that preserved a representative distribution across networks to the best degree possible. We screened 431 network providers of whom we found 201 to be eligible for participation in the study.

Initially, we offered all providers an incentive of $90 for cooperating with the study. As we expected to spend about three hours on each site visit, this comes to $30 an hour for their time – an amount we felt was sufficiently high to compensate for the added stress of a visit and interview during the providers' regular work day. We paid this amount to 66 providers for whom we scheduled interviews and observation between May and December of 2003.

By August of 2003, we began to encounter difficulty in recruiting providers and increased the incentive amount to $100. We paid this amount to thirteen providers scheduled between August and November of 2003. We increased the amount of the incentive a third time to $150 to recruit

members of networks for whom we had very few eligible providers. We paid 71 providers $150 for their participation. However, even with an offer of $150, many providers were still reluctant to allow us to observe their child care homes for the required three-hour rating period in addition to completing a questionnaire by phone. It took an average of 43 days and nine recruitment attempts to achieve a 55% final response rate from eligible network providers.

Association Providers

Sampling. We sampled association providers in much the same way as networks with the additional complication that we had no known universe of associations from which to draw a sample. The client provided us with an initial list of associations and we asked all network directors and coordinators if they knew of any others. We generated a final list of 12 operating groups over the field period. Because we discovered new groups throughout the field period, we had to both delete and add to the sample to maintain a reasonably representative distribution of the thirty selected providers across the identified associations. When we discovered a new association, we randomly removed some of the as-yet-unscreened cases from other associations to free up sample slots for cases from the newly discovered association. We did not remove the providers we had already selected.

Recruiting. In the process of recruiting association providers, we ran into some problems with defining exactly what membership means. One group in particular provided us with a long list of members who themselves might not agree with their designation as members. When we called prospective study participants listed by this association, many either expressed uncertainty with regard to belonging to the association in question or stated outright that they were not members. In some cases, providers had attended a single meeting or seminar sponsored by an association where they signed in for the event. Their name then appeared on the association's membership list. In this case, we limited participation to those who reported that they were members of the group. For all association and network providers we confirmed group membership as a part of a screening interview prior to recruiting participation in the study.

Only nine associations included eligible providers who also agreed to participate. It took an average of 43 days and eight recruitment attempts to obtain the final set of association providers. At 55% our final response rate among eligible association providers was identical to our response rate among eligible network providers.

Matched Control Group

We selected control cases purposively rather than randomly. We intended this set of providers to serve as a comparison group for the network providers, rather than as a representative sample of all unaffiliated providers in Chicago.

As with network and association providers, we sent invitational letters to unaffiliated providers and followed up with phone calls to recruit cooperation and to screen providers for eligibility. We offered the same incentive structure to all providers we contacted during the same study period. It took an average of 43 days and an average of six recruit attempts per case to get participation from the matched controls. We could not calculate a response rate for unaffiliated providers because they were sampled in a purposive fashion. Any unaffiliated provider who fulfilled the eligibility and match criteria could substitute for any other.

Degree of Network-Control Group Match

The match in distributions between the network and control group providers for the designated characteristics was close but not perfect, for several reasons. Age and years of experience in child care were correlated, but not identical. When we had to make trade-offs between the two, we emphasized years of experience over age. Control group providers were well matched in average

age, but there were more providers over age 65 in the control group. The two groups were matched within a few months on years of experience.

Since virtually all family child care providers are female, and only female providers fell into the network sample, it was not difficult to match the control group exactly by only recruiting female providers for this sample. The number of African Americans in the control group was also perfectly matched to the number of African Americans in the network group. We did not have the same level of success, however, in obtaining Latina providers for the control group. In general we found Latina providers more reluctant than African-Americans to permit us to visit their child care homes. Further, Latina providers with lower education were less willing to participate than were their more-educated counterparts. Thus, in order to recruit a sufficient number of Latina providers, we ended up with a somewhat more educated group of control providers than network providers and more White providers than in the control group.

We were able to match the distribution of control providers quite closely with the distribution of network cases by neighborhood type. Details about what is meant by "neighborhood type" are found in Appendix G. We believe, from our data and field notes, that this in turn brought a better match in terms of the characteristics of the children and families enrolled in these FCC programs than would have been the case matching only individual provider characteristics.

Interviewer and Observer Training

We carried out three types of data collection for this project: in-person interviews with semi-structured questions; close-coded phone interviews; and in-person observations using validated rating scales.

Training for In-Person Interviewing

The in-person interviews with network program directors, network coordinators and association leaders were carried out by four senior Survey Lab staff and three advanced graduate students with qualitative interviewing and note-taking experience. The two co-directors, both with Ph.D.s in Sociology and both with many years of experience conducting interviews, carried out the initial interviews with organizational staff. The initial interviews were conducted in pairs, with each co-director accompanied by either our operations supervisor or our operations manager. In each case, the co-directors primarily conducted the interviews while the operations staff primarily took notes. Co-directors then reviewed and added to notes written up by operations staff after each interview.

Next, we reversed the roles with operations staff primarily conducting interviews and co-directors primarily taking notes. Again, the operations staff reviewed and added to notes taken by co-directors during these joint interviews. Six interviews were conducted in Co-director/operations staff pairs. Senior staff next briefed three graduate research assistants on the larger purpose and design of the project and all read through the project proposal. After reading through the interview guide to familiarize themselves with the questions, each of the three RAs went on paired interviews with one of the four senior staff. Each went on a minimum of five paired interviews. After this stage of paired interviews, these seven Survey Lab staff conducted the remaining in-person interviews alone. In total, we conducted 22 of the 78 in-person, network and association staff interviews in pairs.

Training for Phone Interviewing

All staff at the Survey Lab watched an initial training video that covered basic elements of interviewing technique. Supervisory staff expanded on the video themes in a question and answer session. Next, interviewers familiarized themselves with the questionnaire and carried out mock interviews with each other and with supervisory staff. Before a new interviewer could begin calling live cases, he or she had to successfully conduct a mock interview with one of the Survey Lab's senior

supervisors or co-directors. Phone interviews were conducted in the presence of a phone shop supervisor who monitored calls and provided additional advice or retraining as needed.

Training for Observational Quality Rating

Our interviewers received training in the use of the Family Day Care Rating Scale instrument, a validated research instrument for assessing aspects of quality care. In addition, we were trained to use the Arnett Caregiver Interaction Scale. The initial training took place over a three-day period by an author of the scale, Debby Cryer, from the University of North Carolina – Chapel Hill. The training focused on inter-coder reliability which Dr. Cryer assessed after the basic training video and classroom training and visits to three provider sites. The two co-directors and the operations supervisor each independently rated the three provider sites along with Dr. Cryer. After each visit, we compared scores on an item by item basis and discussed all differences.

We conducted pre-tests in teams of four (each member of the team filling out the items in the scale independently of the others), varying the composition of the staff in our groups across cases. After each pretest case, the interviewers compared their ratings and discussed the basis for their choices. We used bilingual interviewers to observe and interview in the homes of bilingual or Spanish-speaking providers. These visits lasted about three hours, and took place in the morning, in order to observe children's arrival, a snack or eating time, and active playtime.

Pre-test cases were carried out with all four initial raters simultaneously and independently rating the same homes. We recruited homes in the near suburbs around Chicago and in some neighborhoods well outside of those dominated by networks to avoid encroaching on the final provider sample population. It took a total of five pretest cases for all four rater scores to converge at a level of 80% overlap in item scores. This includes the initial pretests with Dr. Cryer (two homes) and three additional homes beyond.

Additional graduate student research assistants were trained in a similar fashion, first using written materials and the training video and next accompanying one of the initially trained raters until independently scored scales were at least 80 percent consistent with two of the four initially trained raters. Observers whose scores did not converge within three or four trial cases were dropped from the study. A total of nine different staff, including the co-directors and operations staff, carried out the 150 observations. Staff conducted additional paired interviews midway through the field period to maintain reliability in coding cases. Dr. Cryer responded to queries by email throughout the field period when we required advice about ambiguous indicators in specific rating situations.

Data Quality Limitations

Data Cleaning

Due to the untimely death of the original principal investigator, there was a long delay between data collection and analysis. This meant that coding and data entry errors that would normally show up as logical inconsistencies in early data runs did not surface immediately. We did re-contact providers, network staff and association leaders where this was possible to resolve data problems at the start of the analysis period, but this effort was less effective than would normally be the case due to the passage of time. Where we could not resolve data discrepancies satisfactorily, data were coded as missing.

The relatively small number of cases and great quantity of data associated with each case means that a very small proportion of the variables include missing data. However, it is equally true that because some of the data were collected in open-ended fashion, there are many variables at the organizational level for which commensurate response is lacking across all cases. The latter does not reflect "missing" data in the sense of questions left unasked, but rather that some respondents volunteered information along one dimension of a response while others volunteered information

along another. This is characteristic of qualitative data. We coded the organizational staff interview responses into a "quantitative" template, but this is not how the original questions were structured.

Handling Textual Data

Data from our interviews with agency staff were primarily textual in nature. That is, although we asked questions from a standard interview guide, many of the responses were open-ended rather than being selected from a pre-set series of coded response choices. Interviewers took notes during interviews and wrote up their notes more fully at the end of an interview. When the interview was conducted by a team pair, the primary note-taker wrote up the first full set of notes which the primary interviewer reviewed and augmented.

Based on the answers respondents provided, we developed an SPSS template with a list of response types for many of the questions in our guide. This initial set of variables was a direct translation of question responses into variables with exhaustive and non-overlapping response categories.

Once the initial SPSS grid of questions was created, interviewers coded response choices into the grid on return from their interviews with Coordinators and Directors. These variables were tweaked over the course of the study, adding categories or entirely new variables as needed. In practice, much of the detail of the personal interviews with network and association staff was encoded into the SPSS file once the template was relatively complete, and less was captured in the notes.

Inferences about Coordinator Characteristics

At the outset of the study, the qualitative interviews with agency or program directors and coordinators were understood to be generating global information about the purpose and implementation of network programs from the agency point of view. Since there was great variety in what sorts of services networks provided and how they provided them, this was conceived of as a descriptive mission to catalogue the variation. We set out to interview one director and one coordinator for each network to provide a "top down" and "bottom up" view of the program's purpose, resources and actual operation. However, we did not interview every coordinator or staff person who ever made a home visit. This results in some lack of specificity when we moved in the analysis phase to characterize the quality of home visits for particular providers.

Our interviews with network agency staff revealed that most home visits and regular provider training sessions were conducted by program coordinators. Home visitors beyond coordinators were often specialty staff such as social workers who might be dispatched to particular provider homes only in case of a specific request for a specific service. Other visitors had narrowly defined roles such as checking for licensing violations or delivering checks. It was, by and large, the network coordinators who were in charge of regular visits, linking providers with services and directly providing the advice and help providers looked for from the network program.

Because we only interviewed one network coordinator for each agency and five of the networks in our study had multiple coordinators, we lack the educational and background training characteristics of some of the coordinators who visited some providers in these networks. We did not query providers about who specifically provided them with visits or services, so there is no way to link service provision to one person's training with 100% accuracy in this study. This is consequential because we found that a specialized training program for coordinators had a significant impact on the quality of care in the homes supervised by those coordinators.

All ten coordinators with providers in our sample who attended the specialized training program worked in networks with only one coordinator. Thus, we are confident that the provider reports of home visits and other services delivered by coordinators in these networks refer to these specifically-trained individuals. However, for five networks we cannot be certain that coordinators we did not interview were not among those who participated in the special training program. If we

remove all the providers associated with those five networks from our sample, we see that the FDCRS score is still significantly higher for providers with specially-trained coordinators than for providers in other networks. One of the groups with multiple coordinators was our outlier group that showed lower average quality of care outcomes than the remaining network affiliates. The fact that results for the special training variable remain significant after removing this low-scoring group shows the results are not merely being driven by this one outlier group. These results are summarized in Table A.2.

Table A.2
Comparison of Mean Quality Scores for Providers in One-Coordinator Networks by Special Training Status of the Coordinator

		FDCRS*	Arnett
No special training for coordinator	Mean Score	3.8646	3.19
	N of cases	34	34
	Std. Deviation	.70616	.397
Coordinator got special training	Mean	4.3956	3.29
	N of cases	17	17
	Std. Deviation	.73205	.313
Total	Mean	4.0416	3.22
	N of cases	51	51
	Std. Deviation	.75134	.371

* Difference in scores is significant at $p < .05$ ($p = .016$)

Multi-mode data collection

Although the ex-post coding of information collected in a qualitative fashion into fixed choice fields for analysis introduces a certain amount of random noise and error into some of our quantitative measures, it is also true that our mixed-mode design allowed for some triangulation of results. As we reviewed the means, regressions and other numeric output, our interpretations of the patterns were informed by knowledge based on field observations. Collectively, our field team spent 450 hours inside daycare homes making observations while children were present. In addition we conducted personal phone interviews with 150 home daycare providers lasting about half an hour each. We spoke in an open-ended way with 76 different network program directors, network program coordinators and association leaders about both big picture and program-specific concerns related to home daycare network programs and voluntary provider associations. The range of issues we heard about across these interviews and the variety of providers we observed provided useful context for interpretation of quantitative results.

Appendix B

Recruitment Materials

Appendix B—Recruitment Materials

Text of initial letter faxed to network directors (printed on letterhead)

DATE
Dear [NETWORK DIRECTOR],
Research confirms that early childhood care has important consequences for later school performance and adult life. Although evidence suggests that in-home childcare providers linked by formal networks and associations offer higher quality care than others without such support, it is not clear *how* groups such as yours improve the quality of in-home care. In order to understand what aspects of network support contribute most to improving the quality of in-home care by licensed family childcare businesses, the John D. and Catherine T. MacArthur Foundation has funded this project to study this important segment of early childhood care.

To carry out this research, we need your help! The study involves several parts: an interview with you, the director, a second interview with your network coordinator and, later, interviews with a number of your member providers supplemented by direct in-home observation. Per our phone conversation, since you will be answering questions that we would normally ask the childcare network coordinator, your interview will take approximately an hour and a half of your time. In addition, we will be requesting an annual report or other document that summarizes the financial and administrative aspects of your organization. We understand that you are a busy professional with many demands on your time. For this reason, the budget for this work includes a stipend of $50 to participating respondents to defray the cost of your time. If you wish, we will also send you a summary report of the research results when the study is completed.

LISC—The Local Initiatives Support Corporation—holds the direct contract with the MacArthur Foundation to carry out this research. LISC is subcontracting the data collection piece of this study to the University of Chicago Survey Lab. It is very important that the information you provide for this research remains confidential, and having a separate and professional research organization carry out the actual interviews facilitates this. Neither your name nor the name of your organization will be linked with study results. Nor will the study release evaluations of individual networks or associations or individual childcare providers. Rather, networks and associations will be grouped by type and analysis will focus on the fit between these categories and the average strengths and weaknesses of member providers. Altogether, we hope to interview directors of 38 different networks and 8 associations.

For the next phase of this study, we will interview a sample of in-home childcare providers from all Chicago networks and associations. To draw a properly representative sample, we will request membership lists from all participating organizations. Sampled providers will receive a letter much like this one explaining the project. Those who volunteer to participate will receive a stipend for their time. As with the interview we are requesting from you, all information collected from providers will remain entirely confidential.

Your participation in this research is entirely voluntary. However, we hope that you see the value of a study such as this. The University's Institutional Review Board (IRB) protects the rights of research participants and if you ever feel your rights have been violated in this study, you are encouraged to contact: Social and Behavioral Sciences IRB Office (773/834-5805), 5848 S. University Avenue, Chicago, IL 60637(sbsirb@ura.uchicago.edu). Please phone me if you have questions about aspects of the research itself.

A member of the Survey Lab team will be contacting you soon to discuss the project and, if possible, to set up an interview appointment. We appreciate your serious consideration of this request.

Sincerely,

Virginia H. Bartot, Ph.D., Director
University of Chicago Survey Lab
(773) 834-3667

Text of initial letter faxed to association leaders (printed on letterhead)

DATE

Dear [ASSOCIATION LEADER],

Research confirms that early childhood care has important consequences for later school performance and adult life. Although evidence suggests that in-home childcare providers linked by formal networks and associations offer higher quality care than others without such support, it is not clear *how* groups such as yours improve the quality of in-home care. In order to understand what aspects of association support contribute most to improving the quality of in-home care by licensed family childcare businesses, the John D. and Catherine T. MacArthur Foundation has funded this project to study this important segment of early childhood care.

To carry out this research, we need your help! The study involves several parts: an interview with you, the director, and, later, interviews with a number of your member providers supplemented by direct in-home observation. Your interview will take 45 minutes to an hour of your time. In addition, we will be requesting an annual report or other document that summarizes the financial and administrative aspects of your organization. We understand that you are a busy professional with many demands on your time. For this reason, the budget for this work includes a stipend of $50 to participating respondents to defray the cost of your time. If you wish, we will also send you a summary report of the research results when the study is completed.

LISC - the Local Initiatives Support Corporation – holds the direct contract with the MacArthur Foundation to carry out this research. LISC is subcontracting the data collection piece of this study to the University of Chicago Survey Lab. It is very important that the information you provide for this research remains confidential, and having a separate and professional research organization carry out the actual interviews facilitates this. Neither your name nor the name of your organization will be linked with study results. Nor will the study release evaluations of individual networks or associations or individual childcare providers. Rather, networks and associations will be grouped by type and analysis will focus on the fit between these categories and the average strengths and weaknesses of member providers. Altogether, we hope to interview directors of 38 different networks and 8 associations.

For the next phase of this study, we will interview a sample of in-home childcare providers from all Chicago networks and associations. To draw a properly representative sample, we will request membership lists from all participating organizations. Sampled providers will receive a letter much like this one explaining the project. Those who volunteer to participate will receive a stipend for their time. As with the interview we are requesting from you, all information collected from providers will remain entirely confidential.

Your participation in this research is entirely voluntary. However, we hope that you see the value of a study such as this. The University's Institutional Review Board (IRB) protects the rights of research participants and if you ever feel your rights have been violated in this study, you are encouraged to contact: Social and Behavioral Sciences IRB Office (773/834-5805), 5848 S. University Avenue, Chicago, IL 60637(sbsirb@ura.uchicago.edu). Please phone me if you have questions about aspects of the research itself.

A member of the Survey Lab team will be contacting you soon to discuss the project and, if possible, to set up an interview appointment. We appreciate your serious consideration of this request.

Sincerely,

Virginia H. Bartot, Ph.D., Director
University of Chicago Survey Lab
(773) 834-3667

Standard initial recruitment letter sent to providers

Date

Dear _____,

We are writing you with regard to a study of in-home daycare providers we are currently conducting. The purpose of this study is to understand how the quality of care of providers who belong to associations and networks differs from that of unaffiliated providers.

To carry out this research, we need your help! We know you are a busy professional, so we are offering **$90 for your time**. The study involves two parts: a telephone interview with you, and an observation of your daycare home. If you choose to participate, a trained interviewer will come to your home on a day when you are providing regular care for children. The observer will also ask you a few questions about things they cannot observe. Observers will stay out of your way and ask questions only when it seems non-disruptive.

- The telephone interview will be scheduled for a **time convenient for you,** including evenings and weekends.

- Observers will not interfere with your childcare duties. They will seldom talk and will stay out of your way. The observation will *not* take any extra time out of your day.

- Observers will *not* interact with the children.

- All information is **confidential** – nobody will know which providers participate and which do not. No identifying information will be linked with anything you tell us or with our coded observations.

- Your participation is entirely voluntary. You may refuse to answer any question and you may end the interview or the visit at any time.

For more information or if you have additional questions, please call us at (773) 834-3674.

Your experiences and opinions are important. We look forward to hearing from you.

Sincerely,

Martha Van Haitsma, Co-Director
The University of Chicago Survey Lab

Missed appointment letter

DATE

Dear _____,

We had an appointment with you regarding our study of in-home daycare providers on _____. Perhaps due to your busy schedule or other priorities we could not reach you on the date/time scheduled. We are writing you in hopes that the previously arranged phone interview and home visit can be re-scheduled. You have been selected from a representative sample, which means that no one else can be substituted for you. As we explained to you over the phone, the purpose of this study is simply to understand how the quality of care of providers who belong to associations and networks differs from that of unaffiliated providers.

To carry out this research, we need your help! We know you are a busy professional, so we are offering **$90 for your time**. As mentioned before, the study involves two parts: a telephone interview with you that we will schedule at any time that is convenient for you (this includes evenings and weekends), and an observation of your daycare home at a time most convenient for you. Please find enclosed a copy of the phone interview – if you look thought the questions ahead of time the interview will go much faster. If you choose to participate, a trained observer will come to your home on a day when you are providing regular care for children. The observer will also ask you a few questions about things that were not observed. The observer will stay out of your way and ask questions only when it seems non-disruptive.

- The observer will not interfere with your childcare duties. The observer will seldom talk and will stay out of your way.

- The observer will *not* interact with the children.

- All information is confidential – nobody will know which providers participate and which do not. No identifying information will be linked with anything you tell us or with our coded observations.

- Your participation is entirely voluntary. You may refuse to answer any question and you may end the interview or the visit at any time.

For more information or if you have additional questions, please call us at (773) 834-3674.

Your experiences and opinions are important. We look forward to hearing from you.

Sincerely,

Martha Van Haitsma, Co-Director
The University of Chicago Survey Lab

Recruitment flyer for $150 incentive

Dear X,

We need your help! We are offering you *$150* for your participation in a study of in-home daycare providers!

- The study involves two parts: a telephone interview and an in-home observation. Phone interviews will be scheduled for your convenience, and in-home observers will be *non-disruptive* and will not interact with the children.

- All information is ***confidential*** – nobody will know who participates and who does not. No identifying information with anything you tell us or with our coded observations.

- Your participation is entirely voluntary. You may refuse to answer any question and you may end the interview or visit at any time.

After the home visit, we will pay you ***$150*** as a "thank you" for your help.

For more information, or if you have any additional questions, please call us at (773) 834-3674. We look forward to hearing from you!

Sincerely,

Martha Van Haitsma, Co-Director
The University of Chicago Survey Lab

Project Information Sheet for Providers

Information Sheet Family Child Care Network Study

Who is funding and who is conducting this study? The John T. and Catherine D. MacArthur Foundation funds this study. The University of Chicago Survey Lab will conduct the field research on behalf of The Local Community Initiatives Support Corporation (LISC/Chicago). The Principal Investigator is Dr. Susan Kontos at Purdue University, an expert in this field of study.

What is the purpose of this research? The purpose of this study is to discover what aspects of membership in daycare networks and/or associations help mold effective licensed in-home daycare providers in the city of Chicago. The study will not evaluate individual programs. It is expected that findings will be used to improve daycare outcomes for children and their families.

What will be involved for participants in this study? In the first part of the study, University of Chicago Survey Lab researchers will conduct interviews with network and association personnel. These interviews will last forty-five minutes to one hour. In the second part of the project, Survey Lab researchers will visit and observe a sample of licensed Chicago daycare providers who are members of the networks/associations and providers who are not affiliated with any group. They will also conduct an open-ended interview with the providers at this time. There will be no interaction by the University of Chicago interviewers with any of the children in the daycare settings, only observation.

Will there be a financial incentive to compensate for my time? Yes, all participants will be paid a fee as a way of saying "thank you" for their cooperation. We will also send you a summary of our findings when the study is over.

Will anyone know what I say in the interview? No. Your name and the name of your organization will not be linked to the answers you give in the interview. Stringent procedures protect your confidentiality in this study: Questionnaires are kept in alarmed and locked offices and file cabinets; data reside on password-protected computer files in these offices. Only authorized Survey Lab personnel, who sign a strict confidentiality pledge, have access.

How can I be sure my rights are protected? Your participation in this research is entirely voluntary. Without the help of experts like you, we could not conduct this work. The University of Chicago's Institutional Review Board (IRB) protects the rights of research participants and if you ever feel your rights have been violated in this study, you are encouraged to contact: Social and Behavioral Sciences IRB Office (773/834-5805), 5835 S. Kimbark Avenue, Chicago, IL 60637 (sbsirb@ura.uchicago.edu). If you have questions about aspects of the research itself, please contact Dr. Virginia H. Bartot (773/834-3667 or vhbartot@midway.uchicago.edu).

Appendix C

Interview Guide

Appendix C—Network Staff and Association Leader Interview Guide

CASEID _____
Interviewer _____
First I'd like to get a little background about you and this organization.
0.1 How long have you been working in this field? _____
0.2 How long have you been in this position? _____
0.3 How about your education – how far in school did you go? _____
0.4 Have you had professional training in child development and running a daycare business?
_____

1. What date was this organization founded? _____
   1A. When did you establish a family childcare network as part of your program? _____
2. Why did you start a family child care network? Can you describe the purpose and nature of the network at the time it was founded?
3. Can you describe how your organization has evolved since it was founded? What factors are most important now in shaping the structure and direction of your organization?
   - □1 Market pressures (competition, economic business cycles.)
   - □2 Funding pressures
   - □3 Provider needs and demands
   - □4 New information about early development
   - □5 Other, specify
4. How does the network affect your organization financially?
   - □1 Makes money
   - □2 Loses money
   - □3 Breaks even
   - □4 Other, specify_____
5. Are you a stand-alone organization or are you part of a larger organizational structure?
   □1 Stand-Alone
   □2 Part of Larger Organization → Can you describe how your program fits in with the larger group (administratively, financially and with respect to decision-making)

6. How big is your staff? ___ FTE's →What are their roles?
7. How do you recruit the staff that will interact with your providers?
8. What qualifications do they need to hold such positions?
   8A. Coordinators:
   8B. Other Staff:

9. How long have your network coordinators held their current positions?
   Number of coordinators _____
   Tenure of coord. 1 _____
   Tenure of coord. 2 _____
   Tenure of coord. 3 _____
   Tenure of coord. 4 _____
   Tenure of coord. 5 _____
10. How many providers are currently in your network? ___

11. Is the number growing, getting smaller or staying about constant? Are you intentionally trying to (expand/maintain/consolidate), are you just reacting to demand for your services or what?
   - □1 Growing
   - □2 Maintaining
   - □3 Consolidating
   - □4 Intentional
   - □5 Reactive
   - □6 Both

Explain:

12. Is there a limit to the number of providers you will accept?

Approximate capacity – providers they can handle = _____

- □1 Have more demand than can handle – must turn providers away
- □2 Have more capacity than providers – trying to recruit more providers
- □3 Approximately balanced capacity and demand
- □4 Other, specify _____

13. How is your organization funded?

Number of current funders ___

Funding organizations:

_____
_____
_____

Does this include any (Code All that Apply)

- □1 Federal Funding (direct contract?)
- □2 State Funding (direct contract?)
- □3 City Funding (direct contract?)
- □4 National Foundation Funding
- □5 Local Foundation Funding
- □6 Local business support
- □7 Contributions from individuals (specify_____)
- □8 User fees (specify_____)
- □9 Umbrella organization funds (specify_____)
- □10 Other, specify _____

14. Is the bulk of your funding from one/a few of these or does it come pretty equally from all?

- □1 Single main source → _____
- □2 Several main sources → _____
  _____
  _____
- □3 All contribute relatively even amounts
- □4 Other, specify _____

15. Do your funding *sources* vary a lot from year to year?

- □1 Stable sources from year to year
- □2 Funding sources vary somewhat year to year
- □3 Funding sources vary a lot from year to year
- □4 Other, specify_____

16. How stable is the *amount* of funding you get year to year?

- □1 Stable level of funding
- □2 Growing level of funding
- □3 Shrinking level of funding
- □4 Fluctuations up and down
- □5 Other, specify _____

17. How is your *network* funded?

Funding organizations:

_____
_____
_____

Does this include any (Code All that Apply)

- □1 Federal Funding (direct contract?)
- □2 State Funding (direct contract?)

□3 City Funding (direct contract?)
□4 National Foundation Funding
□5 Local Foundation Funding
□6 Local business support
□7 Contributions from individuals
□8 Provider fees
□9 Parent organization funds
□10 Other, specify _____

18. Do your *network funding sources* vary a lot from year to year?
□1 Stable sources from year to year
□2 Funding sources vary somewhat year to year
□3 Funding sources vary a lot from year to year
□4 Other, specify_____
19. How stable is the *amount* of *network* funding you get year to year?
□1 Stable level of funding
□2 Growing level of funding
□3 Shrinking level of funding
□4 Fluctuations up and down
□5 Other, specify _____
20. Is it more difficult to raise money for your center-based programs than it is for your network? (or less difficult?) Why do you think that is?
□1 Center-based fund raising more difficult
□2 Network fund raising more difficult
□3 Network and center-based equally difficult
□4 Other, specify _____
21. What are the challenges of operating a network? How do they compare to the challenges of running a center?
22. What was your operating budget last year? _____
23. Can I get a copy of your annual report? Are there other financial reports, organizational charts or administrative materials I could get copies of to help me understand how your group operates? For example, do you keep records of the number of home visits or of the amount or type of services used by providers [Collect as much documentation as possible – if there is nothing formal, ask if there are individual records we could abstract from]

24. What services do you provide to your network/association members? (check relevant boxes and specify details for each with notes – ask open-end first, then prompt for any services not mentioned to make sure whether or not these are offered)
□1 Direct education and training (written materials, programs)
□2 Links to education and training opportunities
□3 Discounts on educational or other business supplies
□4 Lending library
□5 Enrichment programs for children (art, music, story-telling, etc.)
□6 Developmental screening and referrals for special-needs children
□7 Help line for providers to call with questions
□8 Interventions with landlords or lobbying state, county or city agencies (e.g. zoning, fire regulations, budget cuts)
□9 In-home monitoring
□10 Collecting money from parents or other financial services
□11 Screening providers recruited to the network
□12 Advertising / recruitment of clients / screening of clients (for providers)
□13 Help obtaining subsidized slots
□14 Regular meetings for member providers to meet each other
□15 Programs for children during childcare hours during which providers have their own program of training, enrichment, etc.

25. Are there other services you provide your members that we haven't talked about?
26. How do you monitor your providers? How frequently does this occur?
27. How do you get feedback from your providers? Anything formal/regular?
28. How would you describe your organization's relationships with other childcare network organizations?

□1 Cooperative □1 Formal
□2 Competitive □2 Informal
□3 Non-existent

29. Where are your providers located? Is there a particular population or neighborhood you are targeting for service?
30. How do you recruit providers? Are they screened? How?
Describe your application process:
31. What qualifications do providers need to become independent contractors?
32. Is there basic training you require of new providers? What is that? (Ask for specific content and number of hours)
33. How do providers maintain their independent contract status?

□1 Dues [Rate= _____]
□2 Continuing education [Specify minimum requirements]
□3 Accepting home visits [For what purposes? How often?]
□4 Filling out forms [Specify what information is collected]
□5 Other, specify_____

34. Are your network (association) standards different from state standards? What happens when providers fall out of compliance? What if they are in compliance with state standards but not with your standards? How would you know if a provider falls out of compliance with state standards?

35. Do you have a way to assess the quality of your providers? How? How do you define success among your providers?
36. Do you reward your providers for good performance (bonuses, gift certificates, etc.)?
37. Do you provide incentives for providers to stay with your network?

[FOR ASSOCIATIONS, SKIP THIS REMARK AND CONTINUE ASKING QUESTIONS ON NEXT PAGE] These are all the questions I have for you, but I have some other questions to ask your network coordinator. Is there anything I haven't covered about your organization that you wanted to tell me?

*I need to get a list of your providers to draw a sample for the next phase of this study. We won't tell you who we select into the sample and we can't provide any individual results of our measures to you either because we need to maintain the confidentiality of the provider. However, we could give you average measures for all the providers we talk to in your network.
We'll be using a standardized observational scale to rate the overall quality of care provided. Participation of providers in this study will be entirely voluntary.

[Beginning of questions we expect will be more appropriate for Network Coordinators. The assignment of questions to one or the other will be determined by the pretest cases. Association leaders will be asked all the questions]
Number of Providers _____
38. How many total childcare slots does your agency have ? _____

A. How many slots on average do you make available to each of your providers?
B. How many slots are currently open? ___ Is that typical? (explain)

39. How are those slots funded?

Number Federal slots ____ rate $ ____
Number State slots ____ rate $ ____
City slots ____ rate $ ____

40. Do your providers accept private pay clients?

□1 Yes
□2 No

41. On average, how many private pay clients do your providers have?
_____ per provider
42. What rates do your providers charge their private pay clients?
$_____
43. How would you characterize your providers overall in terms of (look for distributions, groupings and cut-points that could help in setting quotas)
- Racial/ethnic composition
- Age and gender
- Numbers of kids they care for
- Education and training
- Types of kids they serve (age mix, race/ethnicity, geographic area, class status of parents, etc.)
- Geographic concentrations

44. What kinds of care services are offered by your providers?
□1 infant care (up to 12 months)
□2 toddler care (1-3 years)
□3 preschool (3-5 years)
□4 School-age care (6+) before & after school
□5 School-age care (6+) for school holidays
□6 School-age care (6+) for summer
□7 Back-up care School-age care (6+)
□8 Full day care
□9 Part-day
□10 Sick child care
□11 Odd hours
□12 Back-up care
□13 Full day care
□14 Part-day care
□15 Special needs
□16 Teen moms
□17 Other, specify _____

45. How do you pay your providers? Do you send them checks? Do they come to pick them up? How often?
□1 by mailed check → How often? Every _____ _____
□2 provider picks up check in person → How often? Every _____ _____
□3 Other, specify _____

46. Do you collect parent fees for your providers or do your providers collect them on their own?
□1 Network / Association collects parent fees
□2 Providers collect parent fees

What happens if a provider reports that a parent is behind in their co-payments?
Can providers charge parents fees in addition to their subsidy?
Late fees? rate $ ___
Before hours fees? rate $ ___

47. What rates do providers typically charge? [If varies by type of care, note on different lines]

$_____ to $_____ per infant _____

$_____ to $_____ per toddler _____

$_____ to $_____ per pre-schooler_____

48. What is the range of provider annual income from in-home childcare provision?

$_____ to $_____ annually

49. What sort of turnover do you have among your providers? How do you measure this?
50. What are the primary causes of turnover?
    A. For those who leave the network even though they stay in childcare
    B. For those who leave family childcare altogether
51. Can you describe the various ways that you come into contact with your providers? About how often is the typical provider in contact with your organization in a year?

TYPE	FREQUENCY
□1 Org phones provider	□1 Most providers in contact at least 1/day
□2 Provider phones org	□2 Most providers in contact at least 1/week
□3 Program providers attend (optional)	□3 Most providers in contact at least 1/mo
□4 Program providers attend (required)	□1 Most providers in contact at least 3/yr
□5 Regular mailings/newsletters sent	□1 Most providers in contact less often
□6 Regular feedback solicited (How? How often?)	
□7 Home visits by agency staff	
□8 Other, specify	

52. How often do you make home visits to each provider? _____ times per _____
    How long is a typical visit _____ hours
    What are some of the visits focused on?
53. Are home visits to providers announced or un-announced?
    □1 Announced
    □2 Un-announced
54. Can you think about the last home you visited and tell me what you did while you were there? Is this typical? (IF there are multiple standard types of visit – e.g. an annual visit vs. a requested visit – have the coordinator give concrete descriptions of the last of each type conducted)
55. When you make home visits, are these only for monitoring purposes or are services provided during the visits as well?
56. [IF OTHER THAN MONITORING HAPPENS DURING VISITS TOO, ASK] Does the same person do both the monitoring and the provision of other services during a home visit? Do these things happen during the same visit?
57. What events do you hold for your providers? How often are these scheduled? Can you describe the last event
(when was last event?)
(when was last meeting?)
58. Are there services that you like to make available to providers in the future? What is stopping you from offering these services now?
59. At the last event, about what percent of your total providers attended? Is this typical?
60. Is there anything I haven't asked about provider networks or about your organization that you wanted to add?
61. Do you have any printed materials for your providers (brochures, guidelines, standards, training materials, etc.)? I would like to get copies of whatever materials you disseminate to your providers. You might also ask for a copy of the application for enrollment with the network or association.

FOR ASSOCIATIONS ASK THIS HERE
*I need to get a list of your providers to draw a sample for the next phase of this study. We won't tell you who we select into the sample and we can't provide any individual results of our measures to you either because we need to maintain the confidentiality of the provider. However, we could give you average measures for all the providers we talk to in your network.
We'll be using a standardized observational scale to rate the overall quality of care provided. Participation of providers in this study will be entirely voluntary.

Appendix D

Provider Screening Materials

Appendix D—Provider Screening Materials

LISC Phase II (Providers) Help Sheet
This sheet will help you determine the eligibility of each respondent.

R QUALIFIES if

- He/she currently belongs to listed network or association **AND**
  - has belonged **for at least 6 months AND**
  - does **NOT** belong to any other network or association.

  OR
- He/she belonged to listed network or association until it closed **LESS THAN 2 MONTHS AGO**

AND

- belonged for at least 6 months while the group was operational
- did not belong to any other organization during the time was part of the group
- has not been part of a new group for the less-than 2 months since the original group went defunct

R DOES NOT QUALIFY IF

- He/she belongs to **both** a network and an association

OR

- He/she belongs to more than one network or association

OR

- He/she has been in a network or association for less than six months

R MAY QUALIFY IF

- He/she **used to belong to the network or association on the record of calls**, but has been out for a year or more.

OR

- He/she does not belong to the currently listed organization but **belongs to another network or association in our sampling frame**.

OR

- He/she does not belong to the currently listed organization but **belongs to another network or association *NOT* in our sampling frame**.
  - If R was a member of that network or association less than a year ago, he/she **does not qualify**.

LISC PHASE II – PROVIDER SCREENER
CaseID: _____

INTERVIEWER: FILL OUT BEFORE PLACING CALL TO R.
A. Is this provider expected to be affiliated with a network or association?

1 Network → [name] _____
2 Association →[name] _____
3 No Affiliation expectected, Go to second paragraph introduction

B. **Today's Date: ____/____/_____** C**. Time Begin: _____:_____am/pm** D. **Interviewer Initials**_____

Introduction:

Hello, my name is _____ and I'm calling from The University of Chicago Survey Lab. We are conducting research on in-home childcare in Chicago. The purpose of this study is to discover what it is about membership in childcare networks and associations that helps providers improve the quality of in-home childcare. During the first part of the study, we talked to directors of both associations and networks, and now we would like to talk to providers. The study consists of two parts—a phone interview and an in-home visit that we would do at a time that is convenient for you. **If you qualify, we will offer you $75 for the phone interview and another $75 for the in-home visit (you would receive a total of $150 for your participation in both parts)**.

IF WE DON'T EXPECT AFFILIATION BEGIN HERE
Hello, my name is _____ and I'm calling from The University of Chicago Survey Lab. We are conducting research on in-home childcare in Chicago. The purpose of this study is to see if there is any difference between providers who belong to daycare networks and those who do not. We have already interviewed providers who do belong and are now working on interviewing providers who do not belong to daycare networks or associations. The study consists of two parts—a phone interview and an in-home visit that we would do at a time that is convenient for you. **If you qualify, we will offer you $75 for the phone interview and another $75 for the in-home visit (you would receive a total of $150 for your participation in both parts)**.

All information is **confidential** – no one outside of the University of Chicago will know which providers participate and which do not. Your name will not be used in any of our reports. Your participation is entirely **voluntary**. You may refuse to answer any question and you may end the interview at any time.

Can I ask you a few questions to see if you qualify? **GO TO S0.**

S0. The first question I need to ask you is: Do you currently have a license to operate a family childcare business in your home from DCFS?

1 Yes → **SKIP TO S1**
2 No → Have you applied for a license?

□1 Yes → Is this application for renewal or for your first license? [**IF 1ST LICENSE**]

□2 No → READ: **"I'm sorry, right now we are looking for licensed providers. Thank you for your time."**

INTERVIEWR - R DOES NOT QUALIFY IF:

- IS NOT CURRENTLY LICENSED BY DCFS (OR HAS NOT APPLIED OR NOT LICENSED BEFORE)
- **BELONGS TO *BOTH* A NETWORK AND AN ASSOCIATION**
- **BELONGS TO *MORE THAN ONE* NETWORK OR ASSOCIATION**
- **HAS BEEN IN A NETWORK/ASSOCIATION FOR *LESS THAN SIX MONTHS***

HOWEVER, R
MAY QUALIFY IF R is currently licensed, if R USED TO BE IN A NETWORK/ASSOCIATION, BUT HAS BEEN *OUT FOR MORE THAN A YEAR. IF ONCE AFFILIATED, BUT OUT A YEAR OR MORE*, ASK MATCHED CONTROL QUESTIONS [BEGIN WITH M4].

S1. Do you currently belong to [IF EXPECT AFFILIATION: Name the network or association we expect R to be a member of/ IF NOT EXPECT: a network or association]?

□1 Yes, currently belongs to named network/association

□1 Yes, currently belongs to a network or association, list name here _____

□2 No → **GO TO S2**

□3 No, used to belong but dropped out

S1A. When did you drop out?

GO TO S2.

A. For how long?
Since ____ / ____ **OR**
Month Year

B. How many ____/ _____
Months Years

[INTERVIEWER: IF LESS THAN SIX MONTHS, THANK R AND SAY: "I'm sorry, right now we are only interviewing providers who have belonged to their network/association for at least 6 months**. Would it be OK for us to possibly contact you in a few months to see if you would qualify then?"**

IF MORE THAN 6 MONTHS –

GO TO S2.

S2. Do you belong to any (other) network(s)/association(s)?

□1 Yes → → → How many? _____ → →
Name(s) of other networks of association(s)
_____
_____

IF MORE THAN ONE…
"SORRY"… Thanks for your time but you don't qualify.

□2 No, doesn't belong to any (other) network/association(s) → **CONTINUE**

SCREENER

ASSOCIATION MEMBERS GO TO S3
NETWORK MEMBERS GO TO S4
MEMBER OF NOTHING GO TO S3

S3. Have you **EVER** been affiliated with a family daycare network?

□1 Yes ——→

□2 No→ **ASSOCIATION MEMBERS GO TO S5**
MEMBER OF NOTHING GO TO S4

A. Name (s) of network(s)

_____

_____

B. Are you still with that daycare network?
|1 Yes → **[SAY,** "I'm sorry, right now we are only interviewing association members who don't also belong to networks. Thank you for your time."]
|2 No→ **[ASK C]**

C. When did you leave?
Since ____ / ____ **OR**
Month Year

How many _____/ _____ ago
months years

IF MORE THAN A YEAR AGO, GO TO S5

S4. Have you **EVER** been affiliated with an association of Home Childcare Providers?

□1 Yes ——→

□2 No→ **GO TO S5**

A. Name(s) of network(s)

_____

_____

B. Are you currently still with that daycare network?
|1 Yes → **[SAY,** "I'm sorry, right now we are only interviewing association members who don't also belong to networks. Thank you for your time."]
|2 No→ **[ASK C]**

C. When did you leave?
Since ____ / ____ **OR**
Month Year
How many _____/ _____ ago
months years

IF MORE THAN A YEAR AGO, GO TO S5

S5. INTERVIEWER PLEASE VERIFY

☐1 R belongs to **ONE** and **ONLY ONE** association or network
☐2 R has belonged to that **ONE** association or network for at least **6 months**
☐3 R belongs to **NEITHER** an association **NOR** a network
☐4 If R ever belonged to a network or association, s/he left at least 1 year ago

IF BOXES 1 AND 2 ARE TRUE → GO TO PINK SHEET
IF BOXES 3 AND 4 ARE TRUE → GO TO YELLOW SHEET
IF THERE IS NOT A COMBINATION OF BOXES 1 & 2 OR 3 &4, REVIEW ELIGIBILITY CRITERIA ON THE HELP SHEET. IF NOT ELIGIBLE SAY,

"I'm sorry, but you don't fall into one of our eligible categories. Thank you for your time."

[PINK SHEET]
MATCHED CONTROL QUESTIONS FOR AFFILIATED M6-M10

M6. **How long have you been an in-home daycare provider?** →

Month and year began
_____ / _____ **OR**
Month Year

Started _____ / _____ Ago
Months Years

INTERVIEWER, VERIFY
M6A. So you have been an in-home provider for ____ (years/months), is that right?

Now I need to ask about your education**....**
M7. Do you have a high school degree, a GED or neither?
□1 A high school degree
□2 GED
□3 Neither → M7A. Are you working toward a GED? □1 Yes→**SKIP TO M9**
□2 No
M8. What is the highest level of education you have completed?
□ High School Diploma or GED
□ Some college classes in Early Chdhd Educ/Child Development, no degree
□ Approved Community College Early Childhood Certificate
□ Associates degree
○ When did you receive your degree? _____
○ Is your AA in Child Development or another field? □1 Child Development
□2 Oth field→ specify: _____
○ Did you belong to[net/assoc name] when you got your degree?
□1 Yes
□2 No
□ Bachelors degree
○ When did you receive your degree? _____
○ Is your BA in Child Development or another field? □1 Child Development
□2 Oth field→ specify: _____
○ Did you belong to[net/assoc name] when you got your degree?
□1 Yes
□2 No
□ Masters degree or higher
○ When did you receive your degree? _____
○ Is your MA in Child Development or another field? □1 Child Development
□2 Oth field→ specify: _____
○ Did you belong to[net/assoc name] when you got your degree?
□1 Yes
□2 No
□3 Other: (specify): _____

M9. Do you consider yourself to be Hispanic or Latino?

□1 Yes
□2 No

M10. What is your race?

□1 Black or African-American
□2 White or Caucasian
□3 Asian
□4 Native American or American Indian
□5 Something else (Please specify) _____

You do qualify for the study and we would really like to have your cooperation.

As I said before, this study consists of two parts – a phone interview and an in-home visit- and we will offer you $45 for participating in each part, $90 total. Once again I want to tell you that anything you say and anything that is observed in your home is strictly confidential and will not be linked to your name or your business.

The **phone interview** will last approximately 40 minutes and we will ask you about your experiences as a childcare provider and a member of [association/network].

For the in-home observation**, a trained female observer will come to your home for three hours on a day that is convenient for you when you are providing regular care for children. During the time she is there, she will simply observe and familiarize herself with your arrangements and record these on a standard form – how many children you care for, their ages, their routines, etc. She will also ask you a few questions but will not interact with the children at all.**

INTRO-SCHED – Now I just need some information about your business before we make our visit. It will only take a few more minutes:

SCHED1. How many children do you care for? _____
SCHED1A. How many children are you licensed to serve? _____

SCHED2. When did you get your home licensed? →

_____ / _____ **OR**
month year

_____/ _____ Ago
months years

SCHED3. Do you have an assistant?

□1 Yes → How many ***full time*** assistants? _____
How many ***part-time*** assistants? _____
□2 No

SCHED4. A. What time does the FIRST child arrive? _____
B. What time does the LAST child arrive? _____

SCHED5. A. What time does the FIRST child leave? _____
B. What time does the LAST child leave? _____

SCHED6. Is there a scheduled naptime?
□1 Yes → When is that? _____
□2 No

SCHED7. Is there a scheduled snack or meal time (or, about what times are breakfast/lunch served)?
□1 Yes → When is that? _____
□2 No

SCHED8. **Do any of the children in your care have special needs (handicaps, learning disabilities, other)?**
□1 **Yes → A. How many have special needs? _____**
B. What types of special needs? _____
□2 **No**

INTERVIEWER: Use the information above to schedule a time/day for the IN-HOME OBSERVATION. Ask if R would complete the phone interview now. If not, schedule a later time for it.

SCHEDULED PHONE INTERVIEW

_____ / _____ 2003 Time _____:_____am/pm
month day

SCHEDULED IN-HOME VISIT

_____ / _____ 2003 Time _____:_____am/pm
month day

COMMENTS:

_____
_____
_____
_____
_____
_____
_____

Time End: ____:____am/pm

[YELLOW SHEET]
MATCHED CONTROL QUESTIONS FOR UNAFFILIATED M6-M10

CASEID_____

M6. **How long have you been an in-home daycare provider? _____ Yrs**
Months

Month and year began
_____ / _____ **OR**
Month Year

Started _____ / _____ Ago
Months Years

INTERVIEWER, VERIFY
M6A. So you have been an in-home provider for ____ (years/months), is that right?

Now I need to ask about your education**....**
M7. Do you have a high school degree, a GED or neither?
□1 A high school degree
□2 GED
□3 Neither → M7A. Are you working toward a GED? □1 Yes→**SKIP TO M9**
□2 No
M8. What is the highest level of education you have completed?
□1High School Diploma or GED
□2Some college classes in Early Chdhd Educ/Child Development, no degree
□3Approved Community College Early Childhood Certificate
□4Associates degree
- When did you receive your degree? _____
- Is your AA in Child Development or another field? □1 Child Development
□2 Other field _____

□5Bachelors degree
- When did you receive your degree? _____
- Is your BA in Child Development or another field? □1 Child Development
□2 Other field _____

□6Masters degree or higher
- When did you receive your degree? _____
- Is this degree in Child Development or another field? □1 Child Development
□2 Other field_____

M9. Do you consider yourself to be Hispanic or Latino?
□1 Yes
□2 No
M10. What is your race?
□1 Black or African-American
□2 White or Caucasian
□3 Asian
□4 Native American or American Indian
□5 Something else (Please specify) _____
M11. When were you born? _____

We are trying to recruit providers across a number of specific categories such as age and years of experience. We will call you back to let you know if we still need providers in your category. We appreciate your willingness to be considered for this study.

IF R NOT NEEDED CALL BACK AND SAY:
We called you earlier regarding your possible participation in a study of in-home child care providers. Unfortunately, we do not need more people in your category at the moment. We appreciate your help and thank you for your interest.

IF R QUALIFIES CALL BACK AND SAY:
I am calling about your participation in a study of in-home child care providers – we spoke to you before and asked some questions to see if you would qualify. You do qualify and I would like to tell you about participation.

As I said before, this study consists of two parts – a phone interview and an in-home visit- and we will offer you $45 for participating in each part, $90 total. Once again I want to tell you that anything you say and anything that is observed in your home is strictly confidential and will not be linked to your name or your business.

The **phone interview** will last approximately 40 minutes and we will ask you about your experiences as a childcare provider.

For the in-home observation**, a trained female observer will come to your home for three hours on a day that is convenient for you when you are providing regular care for children. During the time she is there, she will simply observe and familiarize herself with your arrangements and record these on a standard form – how many children you care for, their ages, their routines, etc. She will also ask you a few questions but will not interact with the children at all.**

INTRO-SCHED – Now I just need some information about your business before we make our visit. It will only take a few more minutes:

SCHED1. How many children do you care for? _____
SCHED1A. How many children are you licensed to serve? _____

SCHED2. When did you get your home licensed? →

_____ / _____ **OR**
month year

_____/ _____ Ago
months years

SCHED3. Do you have an assistant?
- ☐1 Yes → How many ***full time*** assistants? _____
  How many ***part-time*** assistants? _____
- ☐2 No

SCHED4. A. What time does the FIRST child arrive? _____
B. What time does the LAST child arrive? _____

SCHED5. A. What time does the FIRST child leave? _____

B. What time does the LAST child leave? _____

SCHED6. Is there a scheduled naptime?

□1 Yes → When is that? _____

□2 No

SCHED7. Is there a scheduled snack or meal time (or, about what times are breakfast/lunch served)?

□1 Yes → When is that? _____

□2 No

SCHED8. **Do any of the children in your care have special needs (handicaps, learning disabilities, other)?**

□1 **Yes → A. How many have special needs? _____**

B. What types of special needs? _____

□2 **No**

INTERVIEWER: Use the information above to schedule a time/day for the IN-HOME OBSERVATION. Ask if R would complete the phone interview now. If not, schedule a later time for it.

SCHEDULED PHONE INTERVIEW

_____ / _____ 2003 Time _____:_____am/pm
month day

SCHEDULED IN-HOME VISIT

_____ / _____ 2003 Time _____:_____am/pm
month day

COMMENTS:

_____
_____
_____
_____
_____
_____
_____

Time End: ____:____am/pm

Appendix E

Provider Phone Questionnaire

Appendix E—Provider Phone Questionnaire

HOME DAYCARE PROVIDER MAIN QUESTIONNAIRE
CASEID _____

A. Today's Date: ___/___/____ B. Time Begin: ____:____am/pm
[INTERVIEWER: SUBSTITUTE THE NAME OF THE PROVIDER'S NETWORK OR ASSOCIATION WHENEVER [NET/ASSOC] or [NETWORK] or [ASSOC] APPEARS IN THE QUESTION TEXT]

First, I'd like to ask you about the kinds of childcare slots you have and how many of each you have.
1. How are your slots paid for? Are any of your slots paid through…
[INTERVIEWER: Code all that apply and make sure that R knows that you mean SLOTS, not KIDS when answering this question]
□1 A. Day Care Action Council "certificates", also known as "vouchers" → A1.How many ____
□2 B. Private payments by parents (no certificate or voucher involved) →B1. How many____
□3 C. Early Head start slots – only through [NETWORK] → C1. How many ____
□4 D. Regular Head Start slots – only through [NETWORK] → D1. How many ____
□5 E. "Child Care" slots through [NETWORK] (ICCF) → E1. How many ____
1F. Do you have any open slots for Early Head Start?
□ Yes → 1F.1 How many? ____
□ No
1G. Do you have any open slots for Head Start?
□ Yes → 1G.1 How many? ____
□ No
1I. How many of your own children (or grandchildren) do you normally care for during regular daycare hours? (This means UNPAID YOUNG children, not older, assisting children.) _____

INTERVIEWER: SUM A-G AND ASK: So you have a license for ____ total children, at the moment you care for ____ children, and you have a total of ____open slots for Early Head Start and Head Start, is this correct? [FIX IF NOT]

2. I'm going to read a set of statements. Please tell me which one best describes how you view your job as a family daycare provider. Do you see family daycare as ….
□1 Your chosen occupation
□2 A stepping stone to work in another field related to childcare
□3 Not your chosen occupation, but good while your own children are young
□4 Temporary employment (until a better job is available)
□5 Other, please specify _____

INTERVIEWER READ: Most of the following questions are about your affiliation with the network/association that you belong to. You are a member of **[state the name network/association R belongs to]**, correct?

YES NO
□1 □2 Have you completed the CDA (IF YES, THEN N/A FOR NEXT ITME)
□N/A □1 □2 Are you working towards completion of the CDA?; Q5.1 So far, how many hours have you been given credit for toward your CDA? _____
□1 □2 Have you completed one or more college classes related to child care but, which are not going toward the completion of the CDA
□1 □2 Have you taken any classes sponsored by [NET/ASSOC]
□1 □2 Have you done an internship sponsored by [NET/ASSOC]
□1 □2 Have you taken any adult education classes (*not* college level and *not* through [NET/ASSOC])
□1 □2 Do you have any other credential or accreditation? (Please specify)
_____

5A. Are you in the food program?

□1 Yes

□2 No

[INTERVIEWER - The following questions ONLY APPLY to AFFILIATED PROVIDERS, make sure to read off the appropriate organization type, either network or association]

6. Did [NET/ASSOC] recruit you, or did you actively pursue [NET/ASSOC]

□1 [NET/ASSOC] recruited R

□2 R actively pursued [NET/ASSOC]

6A. Did you already run an in-home childcare business before you came to [NET/ASSOC], or did [NET/ASSOC] train you to become an in-home provider?

□1 R already a provider before joining or being recruited [GO TO 6C]

□2 R was trained as for the first time by [NET/ASSOC] [GO TO 6B1]

□3 R was recruited by network but trained by other]

6B.1 How long was the training? _____

6B.2 Did the training include an internship

□1 Yes [SKIP TO Q7]

□2 No [SKIP TO Q7]

6C. Did [NET/ASSOC] require additional training before you could join?

□1 Yes → 6C.1 How long was the training? _____

6C.2 Did the training include an internship

□1 Yes]

□2 No

□2 No [SKIP TO Q8]

7. Was the time spent in training:

□1 Too much

□2 Too little

□3 Just right

8. How many of the children you currently care for were sent to you by the [NET/ASSOC]? _____

9. Does [NET/ASSOC] help you with licensing?

□1 Yes

□2 No

10. Once you were licensed and affiliated with the organization, did they provide education and training and/or programs/workshops

□1 Yes → 10A. Can you give me one example of subject matter covered at a **program** or **workshop**? _____

□2 No

11. Does the organization provide any of the following services to you? INTERVIEWER READ EACH

	YES	NO	Ended LT 1 mo ago	Ended 1-2 mo ago	Ended 2+ mo ago	DK	Offered by Org. but not accessed by Provider
A. Referrals to education and training opportunities provided by other organizations	□1	□2	□3	□4	□5	□-2	□6
B. Tuition reimbursement for education and training opportunities provided by other organizations IF YES ASK C C. Does this include tuition reimbursement for college classes? □1Yes □2No	□1	□2	□3	□4	□5	□-2	□6
D. Discounts on educational or other business supplies	□1	□2	□3	□4	□5	□-2	□6
E. Lending library of toys	□1	□2	□3	□4	□5	□-2	□6
F. Lending library of books	□1	□2	□3	□4	□5	□-2	□6
G. Enrichment programs (art, music, story-telling, etc.) for children, sponsored by [NET/ASSOC], that you take them to, outside your home. How often? _____	□1	□2	□3	□4	□5	□-2	□6
H. Enrichment Programs for children at your family day care home How often? _____	□1	□2	□3	□4	□5	□-2	□6
I. Developmental screening and referrals for special-needs children How often?_____	□1	□2	□3	□4	□5	□-2	□6
J. A knowledgeable person for you to call with questions	□1	□2	□3	□4	□5	□-2	□6
K. Help collecting fees from parents	□1	□2	□3	□4	□5	□-2	□6
L. Help preparing taxes and other financial aspects of running a business	□1	□2	□3	□4	□5	□-2	□6
M. Recruitment of families who need care for their children	□1	□2	□3	□4	□5	□-2	□6
N. Screening of families who need care for their children	□1	□2	□3	□4	□5	□-2	□6
O. Help with accessing certificates (vouchers) from the DCAC for non-network children	□1	□2	□3	□4	□5	□-2	□6
P. Help with landlord issues or state, county or city agencies (zoning, for example)	□1	□2	□3	□4	□5	□-2	□6
Q. Regular meetings with other providers and staff from [NET/ASSOC] QA. How often? _____ QB. Typical purpose of the **meetings**? _____ QC. Do you attend regularly? □Yes □No	□1	□2	□3	□4	□5	□-2	□6
R. Introduction to a more experienced provider/'mentor' you can turn to for advice	□1	□2	□3	□4	□5	□-2	□6
S. Opportunity for you to be a mentor yourself	□1	□2	3□	□4	□5	□-2	□6

11.a) [INTERVIEWER: Please add comments that best describe the relationship between the provider and the agency insofar as services and resources are concerned. E.g. is the provider's need for services met, does the provider seek out services, does the organization fail to meet the needs of the provider when it comes to services?].

12. Are there other services not yet discussed that [NET/ASSOC] provides (provided) for you?

□1 Yes → specify _____

IF PROVIDED IN PAST, BUT NOT CURRENTLY, CHECK ONE:

□3 Provided less than 1 month ago
□4 Provided up to 1-2 months ago
□5 Provided more than 2 months ago

□2 No

13. How long ago was the last home visit to you by a staff person/ association officer or member from [NET/ASSOC]?

_____ □1 Never
□2 Days ago
□3 Weeks ago
□4 Months ago

[IF MORE THAN 6 MONTHS AGO OR NEVER SKIP TO Q15]

14. How many times in the last six months did a staff person from [NET/ASSOC] visit your home during the hours you provide care? _____

15. Do you think the amount of home visiting is:

□1 Too little
□2 Too much
□3 Just right

INTERVIEWER: IF AT LEAST TWO VISITS OCCURRED WITHIN THE LAST 6 MONTHS ASK 16A. IF ONE OR NO VISIT OCCURRED IN THE LAST 6 MONTHS ASK 16B. IF NO VISITS EVER, SKIP TO Q19

16A. How long did the last two home visits last?

Duration of most recent visit _____
Duration of second most recent visit_____

16B. How long did the last home visit last?

Duration of most recent visit _____

17. Do you think the length of each home visit is:

□1 Too long
□2 Too short
□3 Just right

INTERVIEWER: IF YOU ASKED 16A, ASK Q18 ABOUT EITHER OF THE LAST TWO HOME VISITS. IF YOU ASKED 16B, ASK Q18 ABOUT JUST THE LAST VISIT

18. At (either of the last two/ the last) home visit(s) did you, (READ EACH and check all that apply)?

□1 Talk about a child
□2 Talk about a parent
□3 Work directly with a child (a staff from [NET/ASSOC] demonstrated a strategy)
□4 Meet with a parent
□5 Discuss safety related issues
□6 Discuss menu/food issues
□7 Discuss record/keeping and business-related issues
□8 Receive supplies and materials from the visitor
□9 Receive a check from the visitor
□10 Did the visitor check for licensing violations
□11 Was there some other purpose for this visit? Please specify_____

19. How many times in the last two months did you meet with a staff person from [NET/ASSOC] at the [NETWORK: NAME OF AGENCY/ ASSOCIATION: home of the leader or a member] ? This includes times you go to the agency or attend network/association sponsored events, and meetings the group may hold that you attend. _____

20. How long ago was the last time you went to [the center/ an association meeting]?

□1_____Days ago
□2_____Weeks ago
□3_____Months

20A. During programs sponsored by [NET/ASSOC] that you attend, is (was) childcare for either the children you care for or your own children…

□1 Always provided
□ 2 Sometimes provided
□3 Never provided

21. Do you think the amount of [meetings/programs at the center OR association meetings and events] is:

□1 Too little
□2 Too much
□3Just right

22. How often do you talk by phone, by e-mail or by FAX with a staff person / association officer or member from [NET/ASSOC] about issues related to childcare or your business?

□1 Several times a day
□2 Every day
□3 Two to Four times a week
□4 Once a week
□5 About once every two to three weeks
□6 About once a month
□7 Less than once a month, but more than once every 6 months
□8 Less than once every 6 months

23. Does [NET/ASSOC] ever give you feed back on how you're doing as a provider?

□1 Yes → 23A. How often, □1 ____ times a week
□2 ____ times per month
□3 ____times per year
□2 No **[GO TO Q25]**

24. Do they ever give you feedback in writing?

□1 Yes → How often, _____a □1 Week
□2 Month
□3 Year
□2 No

25. Has the quality of care you are able to provide to children improved because of your membership in [NET/ASSOC]?

□2 No **[IF R ANSWERS NO, PROMPT R W/ ITEMS BELOW]**
□1 Yes _____25A. What kinds of things has [NET/ASSOC] done for you to improve the quality of care you offer?

Write Verbatim, then **CODE ALL THAT APPLY**

_____

□1 Has the quality of care you provide improved b/c through your membership in [NET/ASSOC] you have learned more about how children develop and what they need?
□2 Has the quality of care you provide improved b/c [NET/ASSOC] provides you with people who come and do special activities for your kids like story-telling, art or music?
□3 Has the quality of care you provide improved b/c [NET/ASSOC] gives you access to more or better supplies?

□4 Has the quality of care you provide improved b/c through your membership in [NET/ASSOC] you've acquired knowledge about healthier food?
□5 Has the quality of care you provide improved b/c your membership in [NET/ASSOC] provides you with ideas for things to do with children?
□6 Has the quality of care you provide improved b/c your membership in [NET/ASSOC] provides you with ideas for guidance and discipline of children?
□7 Has the quality of care you provide improved b/c through your membership in [NET/ASSOC] you feel less isolated (by having other adults to talk to)?
□8 Has the quality of care you provide improved b/c through your membership in [NET/ASSOC] you have access to education to further your career?
□9 Has the quality of care you provide improved b/c through your membership in [NET/ASSOC] you have learned how to screen your kids for special needs?
□10 Has the quality of care you provide improved b/c through your membership in [NET/ASSOC] you have access to someone who screens your kids for special needs?
□11 Are there other ways that the quality of care you provide has improved because of your membership in [NET/ASSOC]? (please specify)_____

26. Has any aspect of your membership in [NET/ASSOC] made it *harder* for you to provide quality care?
□2 No [GO TO Q27]
□1 Yes → 26A. How so?
Write verbatim, then code all that apply
_____

□1 You spend too much time in meetings
□2 You spend too much time with home visitors
□3 You spend too much time filling out paper work
□4 Some of the requirements of [NET/ASSOC] seem excessive to you. What requirements are these? _____
□5 Time wasted at meetings and courses going over material already learned
□6 Some other way(s) [NET/ASSOC] makes it harder to provide good care (please specify)_____

27. Has your <u>business</u> benefited directly from your participation in [NET/ASSOC]?

[INTERVIEWER: FIRST WRITE VERBATIM AND THEN ASK ITEMS BELOW AND CODE ALL THAT APPLY]

_____
Write Verbatim
□1 Helps you get supplies cheaper or free
□2 Helps you with business skills like accounting, filing taxes, making budgets, etc.
□3 Helps you keep slots filled
□4 Helps you learn how to depreciate things like your house, furniture and equipment
□5 By providing higher quality care, I can charge more for my services.
□6 Learned to Apply for grants, never did before
□7 Learned to develop professional Handbook and/or contract
□8 Impresses parents
□9 Helps you in other ways (please specify) _____

Finally, we have some questions about you that will help us understand the data.

28. What year were you born? 19__ __
29. How many of your own children currently live in your home?
Enter Number _____
29A. How many are under the age of five (are not yet in school)? _____
□-4 Does not apply, R does not have children
30. Do you own or rent your home?

□1 Owns home
□2 Rents home

31. How much do you think you earn every month through your day care business (BEFORE taxes)?
$ _____ per month

32. What was your approximate <u>total</u> household income last year, that is GROSS household income from all people and all sources (BEFORE taxes)?
□1 Less than $15,000
□2 $15,001 to $25,000
□3 $25,001 to $35,000
□4 $35,001 to $45,000
□5 $45,001 to $55,000
□6 More than $55,000

Thank you!

INTERVIEWER: CONFIRM CORRECT ADDRESS FOR MAILING CHECK IF VISIT HAS ALREADY OCCURRED OR FOR VISIT [HAND DELIVERY OF CHECK] IF VISIT IS YET TO HAPPEN.

Time End: ___:_____

[INTERVIEWER: PLEASE CHOOSE ONE THAT BEST DESCRIBES THE CURRENT SITUATION OF THE NETWORK]

□1 The network/association is running with **full** services
□2 The network/association is running with **partial** services
□3 The network/association is running with **no** services
□4 The network/association is **defunct**

Appendix F

Construction of Quality Measures

Appendix F—Construction of Quality Measures

This appendix presents detailed information documented by the University of Chicago Survey Lab. As noted in the body of the report, we used two primary measures of quality in this study:

The Harms-Clifford Family Day Care Rating Scale (FDCRS)
The Arnett Caregiver Interaction Scale (CIS)

FDCRS

Thelma Harms and Richard M. Clifford developed the FDCRS scale in 1989 (it was revised in 2007). It is composed of 28-35 items (depending on applicability) scored on a 1- to 7-point scale and organized into six subsections as shown in Table F.1.

Some items apply only if there are infants in care, while others apply only to toddlers. Providers with both infants and toddlers in care were scored on all items. The total number of items on which providers in this study were scored ranges from 27 to 34. We omitted item 32 "Opportunities for professional growth" because our main independent variable was the affiliation status of the provider. By definition, providers in networks and associations achieved one of the indicators for this item while, again by definition, control providers did not. To avoid including the same measure as part of both the independent and dependent variables we omitted this item from our calculations.

The FDCRS scoring system requires formal training for observers, including a classroom portion with a training tape, discussion and exercises and a field portion. University of Chicago Survey Lab staff was fortunate to be trained by Dr. Deborah Cryer. Dr. Cryer is a researcher at University of North Carolina, Chapel Hill, who has been involved for many years in developing and revising measures of child care quality.

FDCRS indicators for each item are scored in a cumulative fashion. A list of indicators is specified for levels 1 (Inadequate), 3 (Minimal), 5 (Good), and 7 (Excellent) of each of the areas designated in table Table F.1. The lowest score of 1 is assigned to an area whenever one of the strongly negative characteristics at this level is observed to be true. Beyond a score of 1, providers move up the scale only when the observer finds all the positive indicators at each level to be true. Thus, to obtain a rating of 3, a provider must display none of the negative factors described at level 1, and must display all of the positive factors described at level 3. Midway points are assigned when a provider meets at least half but not all of the indicators for the level above. Thus, if a provider meets all the positive criteria for level 3 and at least half but not all of the positive criteria for level 5, then the provider would receive a rating of 4. If any of the negative indicators at level 1 is observed, a rating of 1 is given even if some of the positive indicators at the higher levels are met. Similarly, if a provider demonstrates some of the criteria at level 7 but misses one at level 5, the rating must be 4.

The actual FDCRS instrument includes detailed descriptions of what must be observed for each scoring level for each item on the FDCRS scale.

Most of the indicators used to score an item are observables such as the layout and use of the space in which children are cared for, the numbers of various materials accessible to the children, or the interactive behavior of the provider with the children. Some indicators, such as those related to the provider's last health check-up or the provider's reporting policy with respect to abuse require direct questions to the provider.

Table F.1
Items in Family Day Care Rating Scale (FDCRS)

Section A: Space and furnishing for care and learning	
1 furnishings for routine care and learning	**5** active physical play
2 furnishings for relaxation and comfort	**6a** space to be alone (infants/toddlers)
3 child related display	**6b** space to be alone (2 years & older)
4 indoor space arrangement	
Section B: Basic care	
7 arriving/leaving	**11** personal grooming
8 meals/snacks	**12** health
9 nap/rest	**13** safety
10 diapering/toileting	
Section C: Language and reasoning	
14a informal use of language (infants/toddlers)	**15b** helping children 2 yrs understand language
14b informal use of language (2 years & older)	**16** helping children use language
15a helping infants/toddlers understand language	**17** helping children reason (using concepts)
Section D: Learning activities	
18 eye-hand coordination	**23** blocks
19 art	**24** use of television
20 music and movement	**25** schedule of daily activities
21 sand and water play	**26** supervision of play (indoors and outdoors)
22 dramatic play	
Section E: Social development	
27 tone	**29** cultural awareness
28 discipline	
Section F: Adult needs	
30 relationship with parents	
31 balancing personal & caregiver responsibilities	
32 opportunities for professional growth [OMITTED IN SCORES USED IN THIS STUDY][1]	

[1] Because this included affiliation with a support group, a key independent variable in our research, we omitted this item from the quality score calculations.

It is only natural that providers will try to create a good impression for researchers during the time they carry out their in-home rating. There are several ways in which the scoring process works to overcome this effect:

- Observations go on for an extended period—in this case three hours. With young children in the house it is difficult to maintain an atmosphere that is completely different from the usual case over a three hour period.
- Observers are trained to pay close attention to the children's response to providers. When providers are doing things they do not normally do, children generally make this clear. So, for example, we heard many children ask their provider why they were not being allowed to watch their normal television programs. It is generally obvious whether or not activities conducted during the observation are novel or ones with which the children are familiar. Raters used all clues available to estimate accurate scores.
- When they are being observed, providers naturally tend to exaggerate those elements of their style and activities they believe reflect good care. This makes it clear to the observer whether or not the

provider is aware of which approaches to child care are actually associated with better outcomes for children and which approaches are not. Providers may be more or less good at engaging children in creative learning activities, but even a demonstration that a provider is aware of the kinds of activities that help children develop and learn is an indicator of potential quality that is absent when providers affirmatively highlight activities that are detrimental to learning and development.

The FDCRS sheets had to be completely scored prior to leaving the provider's home. We endeavored to schedule all visits in the morning to have a good comparison across cases. It was necessary to schedule a time when we could observe some children arriving and some snack or mealtime. Sometimes this required staying a little beyond the normal three-hour observation period.

The total items scored were averaged to produce a final overall quality score. Each provider's scores were averaged according to the number of items that were rated for that child care home. Additional detail about scoring the FDCRS (as well as detailed lists of indicators for each level of scoring for each item) can be found in the training materials that come with the scale.

Arnett CIS

The Arnett Caregiver Interaction Scale (CIS) is a simple score sheet that asks an observer to rate thirty items on a four point scale. The points are labeled, Not at all (1 point), Somewhat (2 points), Quite a bit (3 points) and Very much (4 points). Negative items are reverse scored.

Observers scored the Arnett scale immediately after leaving the provider's home at the end of the three-hour FDCRS observation and rating period.

Item number 27, "Does self-help tasks for children" proved problematic in the field. It seemed in practice to function as a positive for infants but a negative for older children, thus making the direction of scoring uncertain. Indeed when we conducted a factor analysis on the thirty items, this item alone among the thirty failed to load on any of the factors. Dropping the item from the factor analysis had no appreciable effect on the outcome. For this reason, we dropped this item from the final score.

To compute an Arnett CIS score we averaged the 29 items after reverse scoring the negative items. This results in a measure that ranges from 1 to 4 with 4 being the best score and 1 the worst score. This is the summary measure we used in regression analysis as the dependent variable. We also used factor analysis to reduce the list of items to a smaller number of dimensions.

Table F.2

*Items in the Arnett Caregiver Interaction Scale**

1. Speaks warmly to the children. (e.g., positive tone of voice, body language.)
2. Seems critical of the children. (e.g., puts children down, uses sarcasm.)
3. Listens attentively when children speak to her. (e.g., looks at children, nods, rephrases their comments, engages in conversations.)
4. Places high value on obedience. (e.g., expects children to follow adult agenda, fails to respond to daily events in a flexible way.)
5. Seems distant or detached from the children. (e.g., sits apart, does not touch children, does not greet children.)
6. Seems to enjoy the children. (e.g., conveys warmth by smiling, touching taking children's conversations seriously.)
7. When children misbehave, explains the reason for the rule they are breaking. (e.g., discusses consequences, redirects behavior, discusses what to do instead.)
8. Encourages the children to try new experiences. (e.g., suggests friends do it together, helps children start, introduces new materials.)
9. Exercises a great deal of control over the children. (e.g., doesn't take child input, rigid adherence to rules and schedules.)
10. Speaks with irritation or hostility to the children. (e.g., sharp tone, raises voices)
11. Seems enthusiastic about the children's activities and efforts. (e.g., congratulates children, states appreciation for their efforts.)
12. Threatens children in trying to control them. (e.g., uses bribes, rewards, and threats of punishment.)
13. Spends considerable time in activity not involving interaction with the children. (e.g., does adult tasks during child activity periods.)
14. Pays positive attention to the children as individuals. (e.g., speaks to individual children, uses their names, calls attention to prosocial behaviors, comments on their strengths.)
15. Reprimands children when they misbehave. (e.g., is punitive, fails to acknowledge difficulties of learning self-control, fails to redirect behavior.)
16. Talks to the children on a level they can understand. (e.g., uses terms familiar to children, checks for clarity.)
17. Punishes the children without explanation. (e.g. does not discuss infraction.)
18. Exercises firmness when necessary. (e.g., clear and direct directions, checks for understanding.)
19. Encourages children to exhibit prosocial behavior. (e.g., sharing, cooperating, pairs socially skillful children with those that need practice.)
20. Finds fault easily with the children. (e.g., negative tone, critical.)
21. Fails to show interest in the children's activities. (e.g., removes self from children's activities, doesn't talk to children or extend their conversation.)
22. Seems to prohibit many of the things the children want to do. (e.g., adheres to rigid schedule or adult outcomes and agendas.)
23. Fails to supervise the children very closely. (e.g., withdraws during activities, fails to foresee and forestall mishaps.)
24. Expects the children to exercise self-control. (e.g., to be undisruptive for short group, teacher-led activities, to be able to stand in line calmly; reminds children of expectations; and asks for cooperation in supportive ways.)
25. When talking to children, kneels, bends or sits at their level to establish better eye contact. (e.g., ensures connection when having a conversation.)
26. Seems unnecessarily harsh when scolding or prohibiting children. (e.g., angry tone, shakes children, uses physical punishment, uses "time out" without explanation.)
27. Does self-help tasks for children. (e.g., dresses them, blows their nose, selects materials for choice times.) ***(This indicator is omitted from our measure because it does not differentiate between best practice for very young infants, toddlers and preschoolers.)***
28. Does routine maintenance without child assistance. (e.g., water plants, animal care, put away toys, clean tables.)
29. Promotes leadership skills. (e.g., uses jobs to help routines like line leaders, clean-up inspector, talks about children's contributions to the group.)
30. Assists children in making productive choices. (e.g., uses a planning process or discussion to outline choices during activity periods, narrows choices when children have difficulty.)

* Negative items that are reverse-scored are in italics

Arnett CIS Factor Analysis

Factor analysis is an exploratory and/or data reduction technique that can help researchers uncover underlying dimensions of a construct they may be trying to measure. We performed factor analysis on the items from the Arnett CIS to see what aspects of provider behavior clustered together in this sample. We did not reverse score items for the factor analysis – each item retains its original positive or negative meaning.

Table 5.3 shows the results for the initial analysis using all 30 items from the Arnett CIS. We used a varimax rotation (this provides an orthogonal solution, so the factors were not correlated with each other) and we used an eigenvalue of 1 as a cut point for selecting factors. The results showed a four-factor solution. Item 27 is highlighted to show that it did not load even weakly (0.20 and above) on any of the four factors and had the highest uniqueness score of all the items. Essentially, this item did not scale with the rest.

After dropping item 27, we conducted another factor analysis. First we generated 16 principal factors. Among them, the first four factors had an eigenvalue larger than one (see Table F.4 below). An eigenvalue is the variance of the factor. In the initial factor solution, the first factor will account for the most variance, the second will account for the next highest amount of variance, and so on. Using the standard eigenvalue cut-off of one, we chose the first four factors as our targeted principal factors and moved on to the next step.

Next we did a varimax rotation with a Horst modification for the first four factors and obtained the rotated factor loadings shown in Table F.5. The factor loadings for the varimax orthogonal rotation represent how the variables are weighted for each factor and show the correlation between the variables and the factor. A varimax rotation attempts to maximize the squared loadings of the columns. The Horst modification standardizes the initial factor loadings for each variable to have length 1 before applying the varimax optimizations.

Table F.3

Rotated Factor Loadings for Arnett CIS with All 30 Items Included

(varimax rotation)

Rotated Factor Loadings

Variable	1	2	3	4	Uniqueness
item 1	0.64553	-0.42459	-0.17314	0.02869	0.24057
item 2	-0.29287	0.63298	0.21855	-0.04084	0.33828
item 3	0.71249	-0.28030	-0.08070	0.02806	0.28156
item 4	-0.07908	0.30120	0.75487	0.08873	0.24557
item 5	-0.58638	0.08445	0.13614	0.04056	0.48659
item 6	0.74680	-0.25388	-0.14365	-0.00857	0.21466
item 7	0.44632	-0.05013	-0.16843	-0.54809	0.30449
item 8	0.68260	-0.10113	-0.12802	-0.11125	0.36028
item 9	-0.13589	0.35243	0.74765	0.13610	0.20934
item 10	-0.18885	0.68394	0.20835	-0.16001	0.33378
item 11	0.70634	-0.19614	-0.03741	-0.19502	0.27361
item 12	0.03355	0.56100	0.17321	0.25210	0.44104
item 13	-0.49452	-0.08395	0.06282	0.03039	0.52903
item 14	0.72898	-0.32584	-0.04081	-0.05921	0.22879
item 15	-0.30092	0.69100	0.13977	0.25726	0.28889
item 16	0.61997	-0.23065	0.07189	-0.03048	0.43255
item 17	-0.00774	0.17988	0.11838	0.61367	0.46086
item 18	0.44310	-0.00962	0.45658	-0.31703	0.34225
item 19	0.46246	-0.23545	0.07845	-0.27079	0.48822
item 20	-0.20250	0.83036	0.14544	0.05888	0.19654
item 21	-0.73789	0.04809	0.05464	0.02008	0.30756
item 22	-0.18943	0.32559	0.74242	0.08161	0.23691
item 23	-0.08626	0.13051	-0.16787	0.29467	0.64719
item 24	0.01920	-0.12440	0.45483	-0.08117	0.57239
item 25	0.56024	-0.44544	0.17026	0.20414	0.34459
item 26	-0.10656	0.71661	0.13189	0.13794	0.32980
item 27	**-0.01430**	**-0.17714**	**-0.00753**	**0.17081**	**0.77083**
item 28	-0.26040	-0.07880	-0.02253	0.31554	0.55490
item 29	0.60053	0.04186	0.06243	-0.15342	0.40940
item 30	0.67501	-0.08281	-0.09916	-0.28153	0.28677

Table F.4

Principal Factors Constructed from Arnett CIS Variables

(principal factors; 16 factors retained)

Factor	Eigenvalue	Difference	Proportion	Cumulative
1	8.82488	5.68153	0.5261	0.5261
2	3.14336	1.64234	0.1874	0.7135
3	1.50102	0.30714	0.0895	0.8029
4	1.19388	0.40473	0.0712	0.8741

Table F.5
Factor Loadings from Varimax Rotation

	(varimax rotation) Rotated Factor Loadings				
Variable	1	2	3	4	Uniqueness
item 1	0.641	-0.436	-0.170	0.032	0.241
item 2	-0.285	0.637	0.217	-0.031	0.338
item 3	0.710	-0.290	-0.079	0.030	0.284
item 4	-0.077	0.303	0.751	0.101	0.253
item 5	-0.585	0.087	0.136	0.052	0.490
item 6	0.744	-0.265	-0.141	-0.005	0.214
item 7	0.446	-0.048	-0.162	-0.563	0.304
item 8	0.682	-0.107	-0.126	-0.115	0.360
item 9	-0.133	0.365	0.741	0.129	0.216
item 10	-0.180	0.691	0.207	-0.158	0.340
item 11	0.705	-0.204	-0.033	-0.193	0.273
item 12	0.038	0.548	0.172	0.274	0.460
item 13	-0.495	-0.086	0.065	0.048	0.531
item 14	0.726	-0.335	-0.037	-0.057	0.228
item 15	-0.293	0.693	0.134	0.263	0.290
item 16	0.617	-0.239	0.075	-0.029	0.433
item 17	-0.007	0.176	0.110	0.619	0.460
item 18	0.442	-0.014	0.463	-0.307	0.344
item 19	0.461	-0.242	0.085	-0.261	0.488
item 20	-0.193	0.831	0.142	0.069	0.197
item 21	-0.738	0.052	0.055	0.029	0.307
item 22	-0.187	0.337	0.736	0.078	0.245
item 23	-0.086	0.136	-0.173	0.274	0.661
item 24	0.018	-0.132	0.460	-0.054	0.574
item 25	0.555	-0.453	0.170	0.209	0.345
item 26	-0.099	0.710	0.130	0.157	0.341
item 28	-0.262	-0.071	-0.028	0.299	0.562
item 29	0.601	0.038	0.064	-0.157	0.407
item 30	0.673	-0.090	-0.094	-0.284	0.296

In Table F.5 we list the factors and show the loadings for the items that loaded on each one at .4 or above. Based on item content and valence of the association, we labeled these factors as follows:

1. Positive Interaction with Children,
2. Critical and Harsh
3. Controlling
4. Arbitrary

Table F.5

Strong Factor Loadings[1] by Item for Arnett CIS Factor Analysis

	Factor 1	Factor 2	Factor 3	Factor4
6. Seems to enjoy the children.	0.744			
21. Fails to show interest in the children's activities.[2]	-0.738			
14. Pays positive attention to the children as individuals.	0.726			
3. Listens attentively when children speak to her.	0.710			
11. Seems enthusiastic about the children's activities and efforts.	0.705			
8. Encourages the children to try new experiences.	0.682			
30. Assists children in making productive choices.	0.673			
1. Speaks warmly to the children.	0.641	-0.436		
16. Talks to the children on a level they can understand.	0.617			
29. Promotes leadership skills.	0.601			
5. Seems distant or detached from the children.	-0.585			
25. When talking to children, kneels, bends or sits at their level to establish better eye contact.	0.555	-0.453		
13. Spends considerable time in activity not involving interaction with the children.	-0.495			
19. Encourages children to exhibit prosocial behavior.	0.461			
18. Exercises firmness when necessary.	0.442		0.463	
7. When children misbehave, explains the reason for the rule they are breaking.	0.446			-0.563
12. Threatens children in trying to control them.		0.548		
2. Seems critical of the children.		0.637		
10. Speaks with irritation or hostility to the children.		0.691		
15. Reprimands children when they misbehave.		0.693		
26. Seems unnecessarily harsh when scolding or prohibiting children.		0.710		
20. Finds fault easily with the children.		0.831		
4. Places high value on obedience.			0.751	
22. Seems to prohibit many of the things the children want to do.			0.736	
9. Exercises a great deal of control over the children.			0.741	
24. Expects the children to exercise self-control.			0.460	
17. Punishes the children without explanation.				0.619
23. Fails to supervise the children very closely.[2]				(0.274)
28. Does routine maintenance without child assistance.[3]	(-0.262)			(0.299)

[1] Strong loadings are defined as those at .4 and above. Weak loadings (those from .2 to .39) are noted in parentheses.

[2] Negative items are in italics.

Arnett CIS Factor Analysis Subscores

Building on the factor analysis described above, we created subscores for the Arnett CIS in order to compare the ratings of providers with different types of affiliation. In Tables F.6 and F.7, mean scores were calculated by reverse scoring all negative items for factor 1 (positive interaction with children) and reverse scoring all positive items for factors 2 (critical and harsh), 3 (controlling) and 4 (arbitrary). This had the effect of keeping a uniform interpretation of "high" and "low" scores: low corresponds to unfavorable ratings and high to favorable ratings regardless of whether the factor itself is positive or negative. We show two alternatives for factors 1 and 4 as each of these included both strong- and weak-loading items. Inclusion or exclusion had no appreciable effect on either the mean scores or the significance levels of the differences in mean scores

between providers of different affiliation types. The scores from this table range from 1 to 4, with 1 as the lowest possible score and 4 as the highest possible score.

We also calculated the weighted average scores using the factor loadings as weights. However, the interpretation of the means is difficult using weights because the scores no longer range from 1 to 4. Further, although the levels of significance rose, the same three items remained significant in the same direction in both formulations. Thus, we elected to use the unweighted means for comparison. We found that matched control providers had significantly higher "critical and harsh" scores than network-affiliated providers and had elevated levels of being "controlling" relative to network-affiliated providers with a score difference that approaches significance ($p < .10$). Providers in associations were also significantly more likely to show "controlling" behavior relative to providers affiliated with networks.

Table F.6
Mean Arnett CIS Subscores[1] for Providers by Affiliation: Network and Un-Affiliated Matched-Control Comparison

Mean Score Across Items	Network		Control		
(negative items reversed scored for factor 1 and positive items reversed scored for factors 2-4)	Mean	Std. Dev.	Mean	Std. Dev.	Significance
Positive Interaction FACTOR 1A[2] items: 1, 3, 5 , 6 , 7, 8, 11, 13, 14, 16, 18, 19, 21, 25, 29, 30	2.95	0.47	2.87	0.54	p = 0.382
Positive Interaction FACTOR 1B[2] items: 1, 3, 5 , 6 , 7, 8, 11, 13, 14, 16, 18, 19, 21, 25, 28, 29, 30	2.93	0.46	2.84	0.52	p = 0.372
Critical and Harsh FACTOR 2 items: 1, 2, 10, 12, 15, 20, 25, 26	1.34	0.38	1.55	0.46	p = 0.010*
Controlling FACTOR 3 items: 4, 9, 18, 22, 24	1.92	0.38	2.05	0.44	p = 0.094+
Arbitrary FACTOR 4A[2] items: 7, 17	1.86	0.58	1.86	0.59	p = 0.956
Arbitrary FACTOR 4B[2] items: 7, 17, 23, 28	1.88	0.44	1.88	0.46	p = 0.981

+ Difference is significant at p ≤ .10
** Difference is significant at p ≤ .01
[1]Subscores are based on items that load on 4 factors derived from factor analysis
[2] For factors that included loadings below .4 (or above -.4), Factor A shows the mean excluding these weak-loading items while Factor B shows the mean including both strong and weak-loading items.

Table F.7
Mean Arnett CIS Subscores[1] for Providers by Affiliation: Network and Association Comparison

Mean Score Across Items	Network		Association		
(negative items reverse scored except where association is negative)	Mean	Std. Dev.	Mean	Std. Dev.	Significance
Positive Interaction FACTOR 1A[2] items: 1, 3, 5 , 6 , 7, 8, 11, 13, 14, 16, 18, 19, 21, 25, 29, 30	2.95	0.47	2.91	0.56	p =0.698
Positive Interaction FACTOR 1B[2] items: 1, 3, 5 , 6 , 7, 8, 11, 13, 14, 16, 18, 19, 21, 25, 28, 29, 30	2.93	0.46	2.89	0.55	p =0.728
Critical and Harsh FACTOR 2 items: 1, 2, 10, 12, 15, 20, 25, 26	1.34	0.38	1.47	0.51	p =0.153
Controlling FACTOR 3 items: 4, 9, 18, 22, 24	1.92	0.38	2.11	0.51	p =0.039*
Arbitrary FACTOR 4A[2] items: 7, 17	1.86	0.58	2.02	0.70	p =0.226
Arbitrary FACTOR 4B[2] items: 7, 17, 23, 28	1.88	0.44	1.92	0.46	p =0.695

*Difference is significant at p ≤ .05
[1]Subscores are based on items that load on 4 factors derived from factor analysis
[2] For factors that included loadings below .4 (or above -.4), Factor A shows the mean excluding these weak-loading items while Factor B shows the mean including both strong and weak-loading items.

Intercorrelations of Quality Measures

The FDCRS and the Arnett CIS do not measure the same things. FDCRS score components include a broad range of items encompassing resources, programming for learning, health and safety factors as well as provider/child interaction while the Arnett CIS focuses exclusively on the quality of the provider/child relationship. However, the measures are both aspects of quality of care and are correlated with each other. Table F.8 shows the bivariate correlation between the summary FDCRS and Arnett CIS measures. In this sample, the measures are correlated at about .6 for network cases and closer to .7 for all cases. The correlation is, as expected, highly significant.

Table F.8
Inter-correlation of Quality Measures – FDCRS and Arnett Scores

Quality Measures		Network Cases		All Cases	
		FDCRS	Arnett	FDCRS	Arnett
FDCRS	Pearson Correlation	1.000	.612***	1.000	.679***
	Significance (2-tailed)		.000		.000
	N of cases	80	80	150	150
Arnett	Pearson Correlation	.612***	1.000	.679***	1.000
	Significance (2-tailed)	.000		.000	
	N of cases	80	80	150	150

*** Significant at p < .001

Table F.9 shows the bivariate correlations between the summary FDCRS/Arnett measures and the component FDCRS subscales for all cases and for just the network cases. All subscale averages are correlated with both FDCRS and Arnett, some more strongly than others. The overall FDCRS score is less strongly driven by the Basic Care or Adult Needs dimensions than by the other subscore dimensions.

Table F.9
Inter-correlation of Quality Measures – FDCRS and Arnett CIS Scores vs. FDCRS Subscores

Mean FDCRS Subscores		Network Cases		All Cases	
		FDCRS	Arnett	FDCRS	Arnett
Space & furnishings	Pearson Correlation	.835***	.456***	.835***	.523***
	Significance (2-tailed)	.000	.000	.000	.000
	N of cases	80	80	150	150
Basic care	Pearson Correlation	.448***	.213+	.511***	.258***
	Significance (2-tailed)	.000	.058	.000	.001
	N of cases	80	80	150	150
Language & reasoning	Pearson Correlation	.781***	.606***	.841***	.641***
	Significance (2-tailed)	.000	.000	.000	.000
	N of cases	80	80	150	150
Learning activities	Pearson Correlation	.853***	.500***	.890***	.605***
	Significance (2-tailed)	.000	.000	.000	.000
	N of cases	80	80	150	150
Social development	Pearson Correlation	.545***	.577***	.621***	.642***
	Significance (2-tailed)	.000	.000	.000	.000
	N of cases	80	80	150	150
Adult needs	Pearson Correlation	.445***	.262*	.533***	.289***

	Significance (2-tailed)	.000	.019	.000	.000
	N of cases	80	80	150	150

+ Significant at p < .10
* Significant at p < .05
*** Significant at p < .001

These same two dimensions—basic needs and adult needs—are also only correlated with Arnett CIS at a low level, whereas the other dimensions are more strongly related.

Finally, Table F.10 shows the correlations between the summary FDCRS and Arnett CIS scores and the mean scores for the Arnett CIS items that load on the four factors identified in the factor analysis of the Arnett CIS.

Table F.10
Inter-correlation of Quality Measures—FDCRS and Arnett CIS Scores vs. Mean Arnett CIS Scores on Factor Items

Mean Arnett Scores on Factor Items		Network Cases		All Cases	
		FDCRS	Arnett	FDCRS	Arnett
Positive interaction with children	Pearson Correlation	.540***	.909***	.556***	.906***
	Significance (2-tailed)	.000	.000	.000	.000
	N of cases	80	80	150	150
Critical and harsh	Pearson Correlation	-.395***	-.781***	-.502***	-.799***
	Significance (2-tailed)	.000	.000	.000	.000
	N of cases	80	80	150	150
Controlling	Pearson Correlation	-.254*	-.206+	-.234**	-.293***
	Significance (2-tailed)	.023	.067	.004	.000
	N of cases	80	80	150	150
Arbitrary	Pearson Correlation	-.280*	-.563***	-.321***	-.533***
	Significance (2-tailed)	.012	.000	.000	.000
	N of cases	80	80	150	150

+ Significant at p < .10
* Significant at p < .05
** Significant at p < .01
*** Significant at p < .001

Limitations of Quality Measures for Assessing Value of Network Programs

It is necessary to have valid and reliable indicators of quality of care in order to measure its correlates or evaluate interventions designed to improve quality. However, a limitation we found with both measures is the fact they are geared to care provided by a single individual. In family child care homes with multiple providers (e.g. husband and wife teams) and with assistants, it is difficult to provide a good measure of the global quality of the care in the home while focusing only on one provider. We were directed in our training to observe the care of all children in care and give the lowest score that reflected the quality of care being provided to any one of the children. However, this may be misleading when comparing homes where a principal provider does the bulk of the care with minor assistance from helpers and homes in which assistants do the bulk of the care with some oversight from a primary provider. In the former case, poor choices by a young and untrained assistant do not reflect the overall care children most often experienced, while in the latter case they do.

Future studies of family child care providers might include some measure that gets at the distribution of care activities among a primary provider and various assistants including spouses, teenagers, or other adults. This would include the number of hours per day and days per week that assistants aid the provider as well as the division of labor between the provider and the assistant when both are present.

Appendix G

Neighborhood Type

Appendix G—Neighborhood Type

Christopher Winters, bibliographer for anthropology, geography, and maps at the University of Chicago Library, developed the "neighborhood type" variable that we used for matching by neighborhood in this study. Most of the text for this appendix was taken from the University of Chicago Website: http://www.lib.uchicago.edu/e/su/maps/chi2000.html.

Please note that while Mr. Winters developed 10 types to cover all tracts in Cook County, providers affiliated with staffed networks in our sample resided in only 8 of those types. We preserve his numbering system and no network-affiliated providers were found in neighborhoods of type 7 or 10 in our sample. Thus, we pulled no unaffiliated cases from type 7 or 10 neighborhoods for the matched control group. Christopher Winters derived his codes from the 2000 Census data in the following manner:

1. First, the *TRYSYS*[1] program was used to factor 34 important tract-level Census variables by the Tryon "key-cluster analysis" method. He identified four oblique dimensions.

The four oblique key-cluster dimensions are shown here as A, B, C and D with the factor loadings of the most salient dimension definers. Note that the names are a little arbitrary; some of these dimensions are quite complex in character:

A. Suburban vs. Urban [Su vs. Ur]. The seven definers are:

- [+.92] Percent in owner-occupied dwelling
- [-*.90*] Percent with no car
- [+.90] Percent in single-family housing unit
- [+.88] Percent in married-couple household
- [-*.79*] Percent using public transportation to get to work
- [+.73] Percent non-Hispanic white
- [-*.68*] Population density

Note that "Suburban" here is not confined to areas physically in the suburbs. Rather, "urban" and "suburban" form the poles of a continuum that varies by the characteristics above: density of population, style of housing (single family vs. multi-unit), car ownership and public transit usage, and family structure (married couple vs. other). Some "more suburban" tracts are inside the city of Chicago.

B. Wealthy/High Professional Status vs. Impoverished/Low Professional Status [We vs. Po]. The six definers are:

- [+.94] Percent with college degree
- [+.93] Mean per capita income
- [+.89] Percent with managerial/professional occupation
- [+.86] Median household income
- [+.83] Median value of owner-occupied housing units
- [+.80] Median monthly rent

[1] *TRYSYS* is a descendent of the *BCTRY* program, which was developed by Robert C. Tryon at Berkeley during the 1960s. See *Cluster Analysis* by Robert C. Tryon and Daniel E. Bailey (New York : McGraw-Hill, 1970). There are many other techniques available for performing dimension reduction, most of which lean heavily on orthogonal factor analysis. Tryon key-cluster factoring has the advantage of not forcing dimensions to be orthogonal, i.e., it allows a significant degree of correlation among dimensions (for example, in the case of the present analysis, between the "suburban" dimension and the "wealth" dimension). It is arguable that this capability allows its dimensions to approximate those of everyday experience--but perhaps not everyone would agree.

C. Linguistically Isolated/Hispanic vs. English-Speaking/ Native-Born [Is vs. Na]. The three definers are:

- [+.95] Percent linguistically isolated
- [+.90] Percent foreign-born
- [+.87] Percent Hispanic

D. "Non-Family" Households with Numerous Younger Adults vs. Female-Headed Families with Numerous Children [No vs. Fe][2] The four definers are:

- [+.79] Percent "non-family" households (the Census Bureau defines a "family" as two or more legally related people living together; "non-family" households include households with only one person and all multi-person households whose inhabitants are not legally related)
- [-*.72*] Percent 0 to 18
- [-*.62*] Percent in family with female head-of-household
- [+.60] Percent 19 to 29

The four dimensions are intercorrelated as follows:

	1	2	3	4
1	+1.00	--	--	--
2	+.37	+1.00	--	--
3	-.22	-.24	+1.00	--
4	-.05	+.43	+.19	+1.00

2. Second, each tract was scored on the four dimensions (using a simple sum of standardized scores), and tracts were cluster-analyzed using *TRYSYS*'s iterative partitioning method.

Cluster analysis of the four dimensions underlying the 34 variables yielded ten neighborhood types. For each neighborhood type, the following list includes:

- the neighborhood-type number;
- a short name derived mechanically from the scores on the four dimensions; a two-letter code (e.g., Ur for non-suburban) indicates a standard deviation from the mean of .5 to 1; a two-letter code preceded by V (e.g., VWe for very well-off) indicates a standard deviation from the mean of greater than 1 and less than 2.5; a double VV (e.g., VVWe) means a standard deviation of greater than 2.5. Note that "Suburban" areas within the city refer to tracts that exhibit predominantly less-dense, single-family housing stock.

Labels and descriptions of these types are below. The descriptions in the report have been revised for clarity since it is not obvious what things like "urban" or "suburban" mean without the detail of this appendix. The numbers below correspond to the numbers in Table 13 in the body of the report.

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[2] Dimension 4 is somewhat difficult to interpret. It seems to be a measure of the extent to which two types of non-traditional household occur. On the one hand, there are areas with many "non-family" households and numerous young adults (coupled with high income, substantial levels of education, and high population density). On the other hand there are areas with many female-headed families and numerous children (these tend to be much poorer). Nothing quite like dimension 4 appeared in the analysis for 1990. But note that dimension 4 is the least significant of the four dimensions and has a somewhat high correlation with dimension 2.

1. VUrPoNaVFe. Very urban, impoverished, English speaking, with many female headed families and numerous children. The core impoverished African-American neighborhoods of the South and West Sides. More than 1.5 standard deviations above the mean on "urban" (dimension 1).

2. PoNaFe. Somewhat impoverished, mostly English-speaking, with a fair number of female-headed families with many children. Mostly African-American neighborhoods on the edge of type-1 neighborhoods.

3. UrIs. Somewhat urban and somewhat linguistically-isolated. Mostly blue-collar, often somewhat "ethnic" neighborhoods in the outer city and inner suburbs.

4. UrVWeVNo. Very well-off neighborhoods with many non-family households. Most of the North Side Lakefront, plus the area around the Loop, with outliers in Hyde Park, Evanston, Oak Park, and a few suburban tracts with apartment building clusters.

5. UrPoVVIs. Urban, impoverished, and very linguistically-isolated/Hispanic (more than 2.5 standard deviations above the mean on the latter). Inner-city Hispanic neighborhoods, mostly in Chicago, also in central Joliet, Aurora, Elgin, and Waukegan.

6. VUrVIsNo. Very urban and very linguistically-isolated/Hispanic, with non-family households. The complicated, often only partly Hispanic, neighborhoods on the inner Northwest and Far North Sides.

7. UrVWeVVNo. Urban, very well-off, with a great many non-family households (nearly 4 standard deviations above the mean on the latter). Neighborhoods with numerous young, unmarried adults and hardly any children.

8. Su. Suburban. Not especially wealthy. The outermost suburbs, the inner southwest suburbs, and much of Northwest Indiana.

9. SuWe. Suburban, well-off. More prosperous suburbia. Concentrated especially in the western and northwestern suburbs.

10.VSuVVWeNa. Very suburban, very wealthy, mostly English-speaking. Highly prosperous suburbia; more than 2.5 standard deviations from the mean on wealth. Mostly in northern Cook and southern Lake Counties, with some outliers in DuPage County.

Appendix H

Construction of Network Service Variables

Appendix H—Construction of Network Service Variables

This appendix presents detailed information documented by the University of Chicago Survey Lab. In the report, we rely primarily on provider-reported data about home visitor services because these questions were asked in a uniform and close-coded fashion during a phone interview. However, some organizational-level variables could only be measured based on information collected from agency staff. Use of formal assessment tools by home visitors and level of coordinator education and training were variables captured only in agency staff interviews. Other network service variables are drawn from provider report to fixed question prompts and response categories.

Table H.1 shows the percentage of staffed networks for which staff respondents reported offering various services to their member providers. Little variation exists in the services delivered which had the most direct influence on quality of care, such as education, training and visits to FCC homes. A high percentage of organizations said that they screen providers and offer direct education and training, links to education and training opportunities, and in-home monitoring (these services are required by Head Start). Fewer staffed networks reported providing access to lending libraries or group discounts for supplies or toys. Only about 30% provided any enrichment programs such as a visiting music teacher or story teller for the children.

Table H.1
Services Offered by Networks According to Network Staff Report

Network Service Offered	Percent Offering (Base N = 35)
Screening providers	100.0
In-home monitoring (regular visits)	97.1
Links to education and training opportunities	97.1
Direct education and training	94.3
Developmental screenings (to screen children for developmental delays)	94.3
Provider telephone help-line	94.3
Regular provider meetings	85.7
Agency/association collects parent fees	77.1
Advertising and recruitment of clients	77.1
Discounts on supplies	57.1
Lending library for toys or books	57.1
Interventions on behalf of providers	40.0
Enrichment programs (persons sent to homes to conduct periodic music, art, or other special activity)	28.6
Child care during provider meetings	20.0

When we asked the *providers* to indicate which of these same services they had received from their networks, we found notable discrepancies between their reports and those of the network staff. Table H.2 represents the number of staffed networks who reported that they provide a specific service and then the proportion of providers affiliated with the network who agreed or disagreed that the network provided this service. Recall that some staffed networks had no providers who met our eligibility criteria. The organizational-level report of services offered shown in Table H.1 for 35 networks is re-calculated in Table H.2 for the 26 cases that have provider reports with which to compare answers. We show the proportion of providers affiliated with staffed networks whose responses concerning network services matches the answer given by network staff.

Table H.2
Discrepancies in Reports of Network Services Offered

Service Type	Network Staff Report		Providers who agree with Network staff report of service offerings		
			All agree	Some agree	None agree
	N[1]	Percent	Percent	Percent	Percent
Screening providers	26	100	100	0	0
In-home monitoring	26	100	100	0	0
Direct education and training	26	100	85	15	0
Links to education and training opportunities	25	96	78	22	0
Developmental screenings	25	96	46	46	8
Provider telephone help-line	25	96	85	12	4
Regular provider meetings	23	88	62	27	12
Advertising and recruitment	20	77	62	19	19
Collection of parent fees	19	73	46	42	12
Discounts on supplies	15	58	15	50	35
Lending library	14	54	31	50	19
Interventions on behalf of providers	10	38	42	35	23
Enrichment programs	7	27	58	31	12
Child care during provider meetings	7	27	100	0	0

[1] We had providers in our sample from only 26 of the 35 networks due to ineligibility and refusals.

Some of the discrepancy between the network and provider reports undoubtedly arises from cases in which some but not all of the network's providers knew about or took advantage of a particular service. For example, providers might have received information about an upcoming child care conference, but did not think of this when asked if their network offered links to education and training opportunities. Or a network might have carried out a developmental screening only in those homes where someone had a concern about a particular child. Or providers might not know the network's advertising efforts to recruit the families referred to the providers.
We decided to rely mostly on provider reports of services. We believe this is the more accurate measure for several reasons. First, there is less social desirability bias in provider than network staff reports of services offered. Second, provider reports are a more reliable measure of services actually received. Finally, even if networks offered services about which providers were not aware and therefore did not report, the provider's lack of knowledge about such services is itself an indicator of poor communication between the network staff and the member providers.

Identifying service types

We first grouped services into logical categories based on knowledge of the services offered and face validity of indicators for each type of service. These categories of service included:

- Visits to FCC homes
- Education and training
- Supportive professional relationships
- Material resources
- Business services

We then performed factor analysis on groups of indicators for services that fell into each category to confirm whether or not these formed a single dimension. Where services might logically fit in

several categories, we tested within each. Through an iterative process we derived a set of indicators for each service dimension. Following are factor analysis results that show the sets of items that form single factors.

Visits to FCC homes:

- Frequency of home visits
- Whether or not one of the most recent two home visits included discussion between the coordinator and provider about a particular child in care
- Whether or not one of the most recent two home visits included the coordinator working directly with a child in care
- Whether or not one of the most recent two home visits included discussion between the coordinator and the provider about a child's parent

Total Variance Explained—Visits to FCC Homes Service Indicators

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.945	48.628	48.628	1.945	48.628	48.628
2	.901	22.523	71.152			
3	.633	15.830	86.982			
4	.521	13.018	100.000			

Note. Extraction Method: Principal Component Analysis

Component Matrix—Visits to FCC Homes Service Indicators[a]

	Component 1
Visits to FCC homes at least 10 times in past 6 months	.587
On either of last 2 visits did home visitor talk about a parent	.648
On either of last 2 visits did home visitor work with a child	.756
On either of last 2 visits did home visitor talk about a child	.780

[a]1 components extracted

Education and training services:

- Whether or not the network offers tuition reimbursement for training courses member providers take
- Whether or not the network offers direct training opportunities to providers
- Whether or not the network offers referrals to outside training opportunities to providers
- Whether or not the provider actually got training directly from the network
- Whether or not the provider actually got training through a network referral

Total Variance Explained—Education Service Indicators

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.150	42.992	42.992	2.150	42.992	42.992
2	.950	18.994	61.987			
3	.782	15.642	77.629			
4	.668	13.355	90.983			
5	.451	9.017	100.000			

Note. Extraction Method: Principal Component Analysis

Component Matrix—Education Service Indicators[a]

	Component 1
Network offers any tuition reimbursement for educational programs	.492
Provider got training/education last year through network referral	.636
Provider got direct education/training from network last year	.742
Network offers referrals to education and training opportunities	.684
Network offers direct education or training to members	.697

[a]1 components extracted

Supportive Professional Relationships:

- Formal opportunities for providers to give feedback to network
- Access to advice by phone
- Regular provider meetings

Total Variance Explained—Supportive Professional Relationship Indicators

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.550	51.662	51.662	1.550	51.662	51.662
2	.933	31.094	82.755			
3	.517	17.245	100.000			

Note. Extraction Method: Principal Component Analysis.

Component Matrix – Supportive Professional Relationship Indicators [a]

	Component 1
Network has a regular/formal way to get feedback from their providers	.442
Network has knowledgeable person provider may call with questions	.801
Network has regular meetings for providers	.844
Extraction Method: Principal Component Analysis.	

[a]1 components extracted.

Material Resources

- Network offers a book or toy lending library to providers
- Coordinator has supplied provider with free materials on some visits
- Network offers discounts on supplies to providers

Total Variance Explained – Material Resource Indicators

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.446	48.197	48.197	1.446	48.197	48.197
2	.856	28.528	76.725			
3	.698	23.275	100.000			

Note. Extraction Method: Principal Component Analysis.

Component Matrix – Material Resource Indicators [a]

	Component 1
Network lends books or toys to providers	.669
Provider got supplies or materials from network	.644
Network offers discounts on educational or business supplies	.764
Extraction Method: Principal Component Analysis	

Note. [a]1 components extracted.

Business Services

- Recruitment of parents to provider's business
- Collection of parent fees
- Assistance with tax preparation and business finances
- Assistance with licensing

Total Variance Explained—Business Services Indicators

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.476	36.909	36.909	1.476	36.909	36.909
2	.992	24.809	61.718			
3	.845	21.113	82.831			
4	.687	17.169	100.000			

Note. Extraction Method: Principal Component Analysis

Component Matrix – Business Services Indicators[a]

	Component 1
Recruit families with children who need care	.688
Collect parent fees	.626
Help preparing taxes and business finances	.552
Org provides R help with licensing or renewal	.552

Note. Extraction Method: Principal Component Analysis

[a]1 components extracted

Indicators that did not load in a single dimension with others include:

- Opportunities to mentor other providers or be a mentor to other providers
- Network intervention with authorities such as landlords

It is unclear why mentorship variables did not load with other supportive professional relationship variables. It could be that this variable was simply too imprecise an indicator. The time frame for the indicator is unclear since the questions were phrased in generic ways to follow a question about whether or not the organization provided the provider with "any of the following service":

- Introduction to a more experienced provider or "mentor" you can turn to for advice
- Opportunity to be a mentor yourself

Since providers were most likely to be looking for mentors early in their work life, different providers may have been referring to different past time periods when responding to having been introduced to a mentor. Providing somebody with the "opportunity to be a mentor" may have been answered by some in the abstract (they knew such opportunities were available through the network) and by others concretely (the provider actually became a mentor or did not).

We suspect that "network intervention with authorities" did not load with other service variables because it was not so much an indicator of a particular type of service as it was a measure of the coordinator's familiarity with provider issues and responsiveness to those issues. Indeed, this

variable loads moderately with other indicators of the degree to which coordinators were familiar and involved with their providers – caseload of coordinators, level of coordinator motivation and enthusiasm for interacting with providers (subjectively rated by interviewers), and coordinator experience of a year or more in the position.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.328	58.204	58.204	2.328	58.204	58.204
2	.914	22.858	81.062			
3	.548	13.698	94.761			
4	.210	5.239	100.000			

Note. Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component 1
Help with landlord or government agency issues	.376
Is coordinator motivated?	.825
Providers per Coordinator	-.923
Has Coordinator Been in Position for at least 1 year?	.810

Note. Extraction Method: Principal Component Analysis.
[a]1 components extracted

Appendix I

Sample Syllabus from Infant Studies Certificate Program

Appendix I—Sample Syllabus from Infant Studies Certificate Program

Note: This syllabus is only from one course out of several other courses that were offered as part of the infant studies certificate program.

Erikson Institute
A Graduate School in Child Development

From knowledge to reflective practice in educating young children

Networks of Support:
Quality Family Child Care for Infants, Toddlers and Their Families

Syllabus

Course Description

This course is designed to look at the elements of quality in family childcare for infants, toddlers and their families from theoretical and best practice perspectives. Participants will examine the roles and responsibilities of both the network coordinator and the family child care provider in relationship-based, developmentally appropriate care for infants, toddlers and their families. Topics addressed include: the physical environment; relationships in care: provider, parent, child; diversity in child care (culture and community); health and safety issues; appropriate curricula for infants and toddlers, reflective supervision, and program evaluation. Special emphasis will be placed on the provision of Early Head Start and other developmental services through family child care including coordination of social, health, and educational services; strategies for facilitating language, cognitive and social development; and inclusion of children with special needs.

Course Objectives:

1. To examine philosophy and key components of quality infant toddler family child care homes.
2. To understand how the policies and programs we design impact children, families and staff.
3. To develop an understanding of the ***why's*** behind the design of infant and toddler family child care programs.
4. To understand the importance of the collaboration between family child care homes and community services.
5. To examine the roles and competencies of the network coordinator and child care provider and to identify ways in which they can best work together to provide quality family child care.
6. To critically examine curriculum options to support the development of infants and toddlers in family child care homes.
7. To design a program philosophy and implementation strategies that best meets the needs of the children and families in the *contexts* in which they are served.

Reading and Written Requirements

A. Reading Requirements: Participants are expected to read all assigned reading.

B. Written Assignments**:**

a. Weekly Reflection Papers: All students will be asked to write a one-page reflection paper on the topic of each week's readings. Participants will be asked to share the key ideas from their papers and the implications of these ideas for their program in class. Papers will be graded and returned the following week with comments and questions. Participants can use the weekly reflections as the foundation for their final project: the comprehensive Network Coordinator's Guide.

b. **Final Project: The Network Coordinator's Guide.** This project will be due on April 11, 2000. This project will consists of the participant's written program philosophy and written related implementation strategies for each of the 10 areas of quality services that are identified as the following weekly topic areas:

Topics Scheduled

Introduction: Review of Development, Family Child Care, and Early Head Start Standards
The Role of the Network Coordinator as Supervisor and Consultant
Relationships in Care: providers, parents, child
The Physical Environment for Learning
Diversity in Care: Culture & Community
Inclusion
Curricula for infants and toddlers
Coordination of services
Program evaluation
Putting it all together: Creating a Network of Care

The finished project should provide a comprehensive paper that can serve as a Network Coordinator's Guide to quality family child care for infants, toddlers and their families.

Required Texts

Baker, A., & Manfredi/Petitt, L. (1998). Circle of love: Relationships between parents, providers, and family child care. St. Paul, MN: Redleaf Press.

Cohen, D., Stern, V., & Balaban, N. (1997). Observing and recording the behavior of young children. NY: Teacher's College Press.

Dombro, A., Colker, L. & Dodge, D.T. (1999). The creative curriculum for infants & toddlers. Washington, D.C.: Teaching Strategies.

Klass, C. (1999). The child care provider: Promoting young children's development. (Chapter 1) Baltimore, MD: Paul H. Brookes.

Lieberman, A. (1993). The emotional life of the toddler. NY: The Free Press.

O'Brien, M. (1997). Inclusive child care for infants and toddlers: Meeting individual and special needs. Baltimore, MD: Paul H. Brooks.

Osborn, H. (1994). Room for loving room for learning: Finding the space you need in your family child care home. St. Paul, MN: Readleaf Press.

Suggested Texts

Dunst, C., Trivette, C., & Deal, A. (Eds.). (1995). Supporting and strengthening families: Methods, strategies and practices. Cambridge: Brookline Books.

Fisher, R., Ury, W., & Patton, B. (1991). Getting to yes: Negotiating agreement without giving in. US: Penguin Books.

Jeppson, E., & Thomas, J. (1995). Essential allies: Families as advisors. Bethesda: Institute for Family Centered Care.

Grading Policy

30% weekly reflection assignment
30% class attendance and participation
40% final project

Weekly Topics and Reading Assignments

Introduction

An overview of the course and a brief review of the commonly held beliefs about infant and toddler development and the importance of development in child care. Examination of the history and philosophy of Family Child Care, the elements of quality care, and how to facilitate quality care within the parameters of community programs (e.g. Early Head Start) will be the main topic of this session. Supporting infants and toddler in their development, through all domains, in a child care setting will be woven throughout each class.

The standards for the First Erikson Institute Recognition of Quality Award for Family Child Care Homes will be discussed. This award will be given to the Family Child Care Homes in the Network that demonstrate quality child care determined by the criteria recommended by the students in this class.

The Unique Role of the Network Coordinator as Supervisor and Consultant
We will examine the role and competencies of the Family Child Care Network Coordinators. Students will practice approaches to develop successful methods of implementing supervision, sharing information, and creating support systems and learning opportunities for Network Coordinators, FCCH providers, and the families in their care. Challenges of the job will also be explored.

Readings for *The Unique Role of the Network Coordinator:*
Bertacchi, J., & Norman-Murch, T. (1999). Implementing reflective supervision in non-clinical settings: Challenges to practice. Zero to Three, 20 (1), 18 – 23.
Copa, A., Lucinski, L., Olsen, E., & Wollenburg, K. (1999). Promoting professional and organizational development: A reflective practice model. Zero to Three. 29, (1). 3-9.
Norman-Murch, T., & Ward, G. (1999). First steps in establishing reflective practice and supervision: Organizational issues and strategies. Zero to Three, 20(1), 10 –14.
Wilkes, D., Lambert, R., & VandeWiele, L. (1998). Technical assistance as part of routine inspections of family child care homes. Early Childhood Research Quarterly, 13 (2), 355-372.

Relationships in Care: Family Child Care Collaborations
The relationships that are developed for infants and toddlers in family child care situations are more than just the friendships that the children have and their relationship with the caregiver. This session will address the development of relationships between providers and families, between families and their co-workers (assistants), and finally, between providers and community support services including Early Head Start.

Readings for *Relationships in Care: Family Child Care Collaborations*:
Baker, A., & Manfredi/Petitt, L. (1998). Circle of love: Relationships between parents, providers, and family child care.
Belsky, J. (1986). Infant day care: A cause for concern. Zero to Three, 6 (5), 1-7.
Klass, C. (1999). The child care provider: Promoting young children's development. (Chapter 1) Baltimore, MD: Paul H. Brookes.
Kontos, S. (1992). Family day care: out of the shadows and into the limelight. Washington, D.C. NAEYC. (Chapters 2, 7,8)

The Physical Environment for Learning
Creating and maintaining a safe and healthy environment is one key component of a quality family child care home. This session will address how the environment affects how children behave, learn and feel cared for. Different developmental, cultural and physical needs will be addressed for infants, toddlers and their families.

Readings for *The Physical Environment: Motivating, Meaning and Guiding Behavior:*
Leavitt, R. (1995) The emotional culture of infant-toddler day care. In J. Haten (Ed.). Qualitative research in early childhood settings. Connecticut: Praeger.
Olds, A. (1987). Designing settings for infants and toddlers. In C. Weinstien & T. David (Eds.) Spaces for children: The built environment and child development. New York: Plenum Press.
Osborn, H. (1994). Room for loving room for learning: Finding the space you need in your family child care home. St. Paul, MN: Readleaf Press.
Torelli, L. (1989). The developmentally designed group care setting: A supportive environment for infants, toddlers and caregivers. Zero to Three.

Diversity in Care: Culture and Community
The many meanings of "family" will be explored. Issues of confidentiality, collaboration and involvement, "family centeredness," and fostering resiliency in the infant and family "at risk" will be discussed. Activities will allow participants opportunities to experience issues of diversity.

Readings for *Diversity in Care: Culture and Community (Multilayered Approach)*:

Bromer, J. (1999). Cultural variations in child care: Values and actions. Young Children. 72-78.
Carter, M., & Curtis, D. "Specific Training on Anti-Bias Practices," in Training teachers: A harvest of theory and practice. pp. 123-140.
Hanson, M., & Lynch, E. (1992). Family diversity: Implications for policy and practice. Topics in Early Childhood Special Education, Austin, TX: pro-ed p 283-306.
Letourneau, N. (1997). Fostering resiliency in infants and young children through parent-infant interaction. Infants and Young Children, 9(3) 36-45.
McWilliam, P. (1993). Real world challenges to achieving quality. In P. McWilliam& D. Bailey, Jr. (Eds.) Working together with children and families: Case studies in early intervention. Maryland: Paul H. Brooks.
Miller, L., & Hanft, B. (1998). Building positive alliances: Partnerships with families as the cornerstone of developmental assessment. Infants and Young Children, 11(9) 49-60.

Recommended Reading:

Klass, C. (1999). The child care provider: Promoting young children's development. Baltimore: Brookes Publishing.

Inclusion: Caring for Children with Special Needs

An overview of ADA/IDEA will be presented. We'll consider what successful inclusive FCCHs look like and how to support providers in this sometimes challenging child care. Some practical techniques and resources for providers will be shared.

Readings for *Inclusion: Caring for Children with Special Needs*:

Bruder, M. (1998). A collaborative model to increase the capacity of childcare providers to include young children with disabilities. Journal of Early Intervention, 21 (2), 177-186.
O'Brien, M. (1997). Inclusive child care for infants and toddlers: Meeting individual and special needs. Chapter 2.Baltimore: Paul H. Brooks.
Golbeck S., & Harlan, S. (1997). Family child care. In S. Thurman, & J. Cornwell (Ed.), Contexts of early intervention. Baltimore: Paul Brookes Publishing Co.
Harrison, P., Lynch, E., Rosander, K., & Borton, W. (1990). Determining success in interagency collaboration: An evaluation of processes and behaviors. In J. Blackman (Ed.), Innovations in practices in early intervention. Maryland: Aspen Publishers.
Trainer, M. (1991). "Eye of the beholder." Differences in common. Maryland: Woodbine House. pp 77-78.

We will view the video: *Yes! You can do it!* Washington D.C: National Child Care Advocacy Project, The Children's Foundation.

Curricula for infants and toddlers

There is no one curriculum that would be best for all children in all child care homes. Finding the right guide for the language, cognition, social/emotional and physical development of children in care in family child care homes will be discussed.

Readings for *Curricula for infants and toddlers*:

Cohen, D., Stern, V., & Balaban, N. (1997). Observing and recording the behavior of young children. NY: Teacher's College Press. (Chapters 1, 11).
Dombro, A., Colker, L. & Dodge, D.T. (1999). The creative curriculum for infants & toddlers. Washington, D.C.: Teaching Strategies.
Klass, C. (1999). The child care provider: Promoting young children's development. Baltimore: Paul Brookes. (Chapters 4, 5).
Lieberman, A. (1993). The emotional life of the toddler. NY: The Free Press.
Emotional Beginnings. (2000). Denver, CO: How To Read Your Baby.

Coordination of Services
Early Head Start requires the provision of services to families of infants and toddlers. The process of acquiring the social, health and educational services necessary will be discussed in the context of the Early Head Start procedures and performance standards.

Readings for *Coordination of Services*:

- Find resources that are available in your program/community and create a list for your area (developmental screening, Child and Family Connections, Early Intervention, etc.).
- Read the materials available on the World Wide Web at the following addresses (remember you can go to your local library or the Erikson Institute library to access the internet):

http://home.sprintmail.com/~peggyriehl/ (then go to the Family Child Care)
http://zerotothree.org/brainworks/
http://www.nafcc.org/
http://www.nncc.org/
http://www.nncc.org/Choose.Quality.Care/qual.checklist.fcc.html
http://www.urbanext.uiuc.edu/baby/index.html
http://www.providerappreciation.org/
http://www.coloradochildcare.com/

Program Evaluation
Experienced programs, as well as struggling programs, for infants and toddlers need a way of identifying the strengths and weaknesses. Evaluation is a way of identifying strengths and weaknesses, challenges and opportunities for the services to families, for the children in care, and our own ability to create a network of support to make it all happen. This session will focus on the variety of opportunities and strategies for evaluating infant toddler child care.

Readings for *Program Evaluation*:
Dombro, A., & Bryan, P., (1991). Sharing the caring. Part II, p 47-80 and Chap. 11, 122-150.
Fenichel, E., Lurie-Hurvitz, E., & Griffin, A. (1999). Seizing the moment to build momentum for quality infant/toddler child care. Zero to Three, 19 (6), 3-17.
Klass, C., Griffin, A., Caverly, K., Doyle, M., Kulczycki, J., & Wilson, E. (1999). Building good beginnings in infant/toddler child care: Scenes from a work in progress. Zero to Three, 19 (6), 36 – 46).
Towards better care for babies: Initiatives to improve the quality of infant/toddler child care. Zero to Three, 19 (6), 3-17.

Putting It All Together: Creative Networking
Creating a "Network Extraordinaire" takes extraordinary people, resources and supports. Putting all our thoughts together will be the topic for the week, and we will summarize the spirit of caring through a network of family child care homes, and the final project.

Readings for *Putting It All Together: Creative Networking*:
Connelly, S. (1996, March/April). Work spirit. The Family Therapy Networker, 20, (2), 36-43.
Voight, J., Hans, S. and Bernstein, V. (1996). Support networks of adolescent mothers: effects on parenting experience and behavior. Infant Mental Health Journal, 17, (1), 58-73.
Sexton, L and McRae, B. (1996). A dream is a work in progress: Providing integrated services to parents and children in rural North Carolina. Zero to Three, 17 (2), 31-37.
Carter, M. (1998). Revisiting quality, rekindling dreams. Child Care Information Exchange. (7/98), 81-83.
Harvey, J.S. (1994). Family daycare professionals: resources and support. University of Maine Cooperative Extension

Appendix J

Correlation Tables

Appendix J—Correlation Tables

Correlations Table 1
***C**orresponds to regression analysis with all 80 network and 40 control providers*
See Tables 21 and 22 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Household Income of Provider
Staffed Network Affiliation	Correlation	.358***	.143	.019	-.042	.154+
	Significance	.000	.120	.833	.650	.093
	N of Cases	120	120	120	120	120

\+ p ≤ .10
* p ≤ .05
** p ≤ .01
*** p ≤ .001

Correlations Table 2

Corresponds to regression analysis with 80 network providers—professional and supportive relationships

See Table 28 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Head Start
Access to telephone help from network coordinator	Correlation	.096	-.029	.068	-.003	.299**
	Significance	.396	.801	.547	.982	.007
	N of Cases	80	80	80	80	80
Regular meetings for providers	Correlation	.167	.077	.162	.000	.313***
	Significance	.140	.497	.151	1.0	.001
	N of Cases	80	80	80	80	80
Opportunities to give formal feedback to the network.	Correlation	.422***	.143	.131	-.048	.179
	Significance	.000	.207	.245	.669	.112
	N of Cases	80	80	80	80	80
All 3 professional development opportunities (telephone help; regular meetings; and way to give formal feedback)	Correlation	.455***	.184+	.174	-.069	.240*
	Significance	.000	.103	.123	.545	.032
	N of Cases	80	80	80	80	80
Network intervenes with authorities such as landlords or contractors if these become an issue for the daycare provider's business	Correlation	.218*	.187+	-.092	.052	.202+
	Significance	.052	.097	.419	.648	.072
	N of Cases	80	80	80	80	80

\+ $p \leq .10$
* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

Correlations Table 3

Corresponds to regression analysis with 80 network providers—home visiting services

See Table 29 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Head Start
Uses formal quality assessment tool	Correlation	.252*	.085	.230*	-.120	.274**
	Significance	.024	.451	.040	.289	.014
	N of Cases	80	80	80	80	80
Visits at least 10 times/ 6 months	Correlation	.256*	.245*	.121	.218*	.106
	Significance	.022	.029	.283	.052	.347
	N of Cases	80	80	80	80	80
Talks with provider about child and/or works with child	Correlation	-.027	-.007	-.136	.224*	.155
	Significance	.814	.949	.230	.046	.170
	N of Cases	80	80	80	80	80
Talks with provider about and/or works with child AND visits 10 times/ 6 months	Correlation	.256*	.245*	.121	.218*	.106
	Significance	.022	.029	.283	.052	.347
	N of Cases	80	80	80	80	80
Talks with provider about a parent	Correlation	-.060	-.044	-.136	.224*	.155
	Significance	.596	.698	.230	.046	.170
	N of Cases	80	80	80	80	80
Talks with provider about a parent AND visits 10 times/ 6 months	Correlation	.167	.258*	.149	.275**	.072
	Significance	.138	.021	.187	.014	.525
	N of Cases	80	80	80	80	80

\+ p ≤ .10
* p ≤ .05
** p ≤ .01
*** p ≤ .001

Correlations Table 4

Corresponds to regression analysis with 80 network providers—education and training services

See Table 31 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Head Start
Helps new providers get training for first time	Correlation	.184+	.077	-.044	.001	.089
	Significance	.103	.500	.699	.995	.434
	N of Cases	80	80	80	80	80
Providers received direct education and/or training at the staffed network	Correlation	.239*	.278**	.071	.083	.199+
	Significance	.033	.013	.529	.462	.077
	N of Cases	80	80	80	80	80

\+ p ≤ .10
* p ≤ .05
** p ≤ .01
*** p ≤ .001

Correlations Table 5

Corresponds to regression analysis with 80 network providers—peer mentoring services

See Table 33 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Head Start
Link to a provider mentor	Correlation	-.033	-.104	.172	.010	.061
	Significance	.772	.360	.128	.931	.589
	N of Cases	80	80	80	80	80
Opportunity to be a mentor	Correlation	-.176	-.057	.036	.112	.112
	Significance	.118	.615	.749	.321	.321
	N of Cases	80	80	80	80	80

\+ p ≤ .10
* p ≤ .05
** p ≤ .01
*** p ≤ .001

Correlations Table 6

Corresponds to regression analysis with 80 network providers—coordinator experience, education and training

See Table 35 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Head Start
Coordinator experience as a family child care provider	Correlation	.085	.018	-.070	-.028	.117
	Significance	.452	.871	.539	.805	.300
	N of Cases	77[1]	77	77	77	77
Coordinator experience as a center-based teacher	Correlation	.121	.138	-.023	-.070	.148
	Significance	.283	.223	.839	.537	.191
	N of Cases	77	77	77	77	77
Coordinator experience working with children either as a family child care provider or as a center-based teacher	Correlation	.147	.097	-.076	-.066	.191+
	Significance	.192	.392	.504	.561	.089
	N of Cases	77	77	77	77	77
Coordinator has a master's degree or higher	Correlation	-.024	.045	.116	.138	.001
	Significance	.830	.694	.304	.221	.990
	N of Cases	77	77	77	77	77
Coordinator has some child development education or special training	Correlation	.146	.015	.157	-.047	-.129
	Significance	.206	.894	.173	.686	.265
	N of Cases	77	77	77	77	77
Attended specialized certificate program in infant studies with focus on family child care networks	Correlation	.294**	.132	.141	.124	.066
	Significance	.008	.241	.213	.272	.562
	N of Cases	77	77	77	77	77

[1] One network with three members in the study was without a coordinator for the duration of the field period.

\+ $p \leq .10$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Correlations Table 8

Corresponds to regression analysis with 80 network providers—specialized training and service variable combinations

See Table 37 in report

Independent Variables		Dependent Variables		Control Variables		
		FDCRS	Arnett	Relevant Education of Provider	Age of Youngest Child in Care	Head Start
Independent Variables						
Network coordinator attended specialized training course AND providers received direct training at the network	Correlation	-.346**	-.189+	-.175	-.097	-.100
	Significance	.002	.093	.121	.391	.377
	N of Cases	80	80	80	80	80
Network coordinator attended specialized training course AND coordinator worked with a child or talked about a child	Correlation	.327**	.135	.048	.192+	.136
	Significance	.003	.234	.671	.089	.228
	N of Cases	80	80	80	80	80
Network coordinator attended specialized training course AND coordinator talked with provider about a parent	Correlation	.380***	.231*	.099	.084	.307**
	Significance	.001	.039	.382	.460	.006
	N of Cases	80	80	80	80	80
Network coordinator attended specialized training course AND network offered providers opportunity to give feedback, held regular meetings, and offered regular telephone help	Correlation	.395***	.234*	.111	.009	.067
	Significance	.000	.037	.325	.935	.556
	N of Cases	80	80	80	80	80
All of the above	Correlation	.385***	.212+	.043	.073	.117
	Significance	.000	.059	.707	.520	.300
	N of Cases	80	80	80	80	80

\+ $p \leq .10$
* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

Correlations Table 9

Coordinator Quality Indicator Correlations with Specialized Coordinator Training

Other Characteristics Potentially Explaining Coordinator Effectiveness		Participated in a graduate-level certificate program in infant studies
Coordinator ever teach pre-school, kindergarten or grade school?	Correlation	-.063
	Significance	.578
	N of Cases	80
Coordinator ever a family child care provider?	Correlation	-.053
	Significance	.642
	N of Cases	80
Coordinator ever a family child care provider or teach nursery school or kindergarten?	Correlation	-.084
	Significance	.458
	N of Cases	80
Coordinator's highest education	Correlation	.388***
	Significance	.000
	N of Cases	77
Coordinator has some child development education or special training	Correlation	.170
	Significance	.140
	N of Cases	77
Years of experience in the field for coordinators	Correlation	-.093
	Significance	.429
	N of Cases	74
Provider have any Head Start or Early Head Start slots	Correlation	.066
	Significance	.562
	N of Cases	80
Providers per Coordinator	Correlation	-.295**
	Significance	.008
	N of Cases	79

+ p ≤ .10; * p ≤ .05; **p ≤ .01; ***p ≤ .001

Correlations Table 10

Home Visiting Service Correlations with Specialized Coordinator Training

Home Visiting Services		Participated in a graduate-level certificate program in infant studies specifically targeting network coordinators
Uses formal quality assessment tool	Correlation Significance N of Cases	.306** .006 80
Visits at least 10 times/ 6 months	Correlation Significance N of Cases	.210+ .061 80
Talks with provider about child and/or works with child	Correlation Significance N of Cases	.078 .489 80
Talks with provider about and/or works with child AND visits 10 times/ 6 months	Correlation Significance N of Cases	.210+ .061 80
Talks with provider about a parent	Correlation Significance N of Cases	.114 .313 80
Talks with provider about a parent AND visits 10 times/ 6 months	Correlation Significance N of Cases	.220* .050 80

\+ $p \leq .10$
* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

Correlations Table 11

Education Service Correlations with Specialized Coordinator Training

Education and Training Services		Participated in a graduate-level certificate program in infant studies specifically targeting network coordinators
Helps new providers get training for first time	Correlation	.089
	Significance	.435
	N of Cases	80
Providers received direct education and/or training at the staffed network	Correlation	.251*
	Significance	.024
	N of Cases	80

\+ p ≤ .10
* p ≤ .05
** p ≤ .01
*** p ≤ .001

Correlations Table 12

Professional and Supportive Service Correlations with Specialized Coordinator Training

Professional and Supportive Services		Participated in a graduate-level certificate program in infant studies specifically targeting network coordinators
Access to telephone help from network coordinator	Correlation Significance N of Cases	.148 .190 80
Regular meetings for providers	Correlation Significance N of Cases	-.064 .575 80
Opportunities to give formal feedback to the network.	Correlation Significance N of Cases	.227* .043 80
All 3 professional development opportunities (telephone help; regular meetings; and way to give formal feedback)	Correlation Significance N of Cases	.193+ .086 80
Network intervenes with authorities such as landlords or contractors if these become an issue for the daycare provider's business	Correlation Significance N of Cases	-.018 .877 80
Link to a provider mentor	Correlation Significance N of Cases	-.112 .321 80
Opportunity to be a mentor	Correlation Significance N of Cases	-.050 .660 80

\+ $p \leq .10$
* $p \leq .05$
** $p \leq .01$
*** $p \leq .00$

Appendix K

Regression Output

Appendix K – Regression Models for Tables in Report

This appendix shows the full regression results for multivariate models with two dependent variables (FDCRS and Arnett Scores). Each model is titled to link it to the similarly numbered table in the body of the report. Each single regression-summary table in the body of the report draws from multiple regression models; thus, the table numbers in this appendix are repeated across all the output tables that relate to a single table in the main report. Labels of the output tables will help the reader link the full regression results here to the relevant line in a table in the body of the report. When an output table is labeled as a "base model" this means variables were entered into the regression as a single block. When an output table is labeled as a "reduced model" this means an initial set of variables was entered into the equation then reduced with backwards, stepwise deletion using a $p \leq .20$ criterion for variable removal at each step. Definitions of the variables in the equations are provided below.

VARIABLE DEFINITIONS:

Dependent Variables

FDCRS: This is the score from the Harms – Clifford Family Daycare Rating Scale omitting item 32 (See appendix F for more detail). The score varies from 1 to 7.

Arnett: This is the mean score from the Arnett Caregiver Interaction Scale with negative items reverse scored. It ranges from 1 to 4. (See appendix F for more detail).

Control Variables

Network affiliation: Coded 1 if the provider is affiliated with a staffed network, 0 otherwise.

Provider relevant education: A numeric variable measuring the years of post-secondary education in the fields of early childhood education, child development or infant studies. Degrees in these fields counted as follows:

Post High School coursework in child care (no degree) = 0.5
CDA alone = 1 if have certificate, 0.8 if completed coursework but did not yet take the test and receive the certificate; any hours toward CDA counted as a percent of total hours needed (120) multiplied by 0.8.
AA alone = 2
BA alone = 4
MA alone = 5
CDA with another relevant degree = value of degree plus 50% of CDA score (because it is possible and even likely that some of the credit for their degrees counted for the CDA training).
NAFCC Accreditation = +.5

Years of childcare experience: Provider report of total years as a family child care provider.

Age of youngest child in care: Numeric age of the youngest child in care on the observation day.

Four plus children on day of visit: Coded 1 if there were at least 4 children in care on the day of the visit, 0 otherwise.

Provider's household income: Annual income in dollars for the previous year as reported by the provider for the household as a whole.

Head Start or Early Head Start slots? Used exclusively in the Network-only models (80 cases); coded 1 if the provider has any Head Start or Early Head Start slots, 0 otherwise.

Neighborhood poverty rate – Rate of household poverty in the census tract based on 2000 census data (which uses reports of income from 1999)

Test Variables – Staff-Provider Supportive Relationships

Providers have access to telephone help from network coordinator: Coded 1 if provider reports that she can call the coordinator for advice, 0 otherwise (74 of 80 providers coded 1)

Network Coordinator holds regular meetings for providers: Coded 1 if provider reports the network holds regular meetings for providers, 0 otherwise (65 of 80 providers coded 1)

Network offers providers formal opportunities to give feedback to network: Coded 1 if the network staff reported that there were regular and formal means for providers to give feedback to the network, 0 otherwise (26 of 80 providers coded 1)

Network offers all 3 professional development opportunities: Coded 1 if all three of the above (phone help available, regular provider meetings, formal feedback means) were true, 0 otherwise (24 of 80 providers coded 1)

Intervenes with authority: Coded 1 if provider reports that network coordinator intervenes with authorities to such as landlords, zoning boards or contractors if the provider is having a problem with upgrades to space or designation of home for family child care, 0 otherwise (20 of 80 providers coded 1)

Test Variables – Network Staff Visits to FCC Homes

Uses formal Quality Assessment Tool: Coded 1 if the network staff visitor (usually the coordinator) uses a formal quality assessment tool with providers, 0 otherwise (53 of 80 providers coded 1)

Visited at least 10 times in last 6 months: Coded 1 if the network staff visitor (usually the coordinator) visited the provider at least 10 times over the past 6 months, 0 otherwise (23 of 80 providers coded 1)

Coordinator worked with child on one of last 2 visits: Coded 1 if the network staff visitor (usually the coordinator) worked directly with a child on one or both of the last two home visits, 0 otherwise (44 of 80 providers coded 1)

Talked with provider about child on one of last 2 visits: Coded 1 if the network staff visitor (usually the coordinator) talked with the provider about a child on one or both of the last two home visits, 0 otherwise (64 of 80 providers coded 1)

Talked with provider about child and/or worked with child: Coded 1 if the network staff visitor (usually the coordinator) talked with the provider about a child and/or worked directly with a child on one or both of the last two home visits, 0 otherwise (66 of 80 providers coded 1)

Talked with provider about parent: Coded 1 if the provider reports that the network staff visitor (usually the coordinator) talked with her about a parent on one or both of the last two home visits, 0 otherwise (43 of 80 providers coded 1)

Test Variables – Network Education and Training of Providers

Staffed network helps new providers get training for fist time: Coded 1 if provider reports that she was not a licensed provider prior to joining the network but that the network helped her become a licensed provider, 0 otherwise (31 of 80 providers coded 1)

Providers received direct education/training from network: Coded 1 if provider reports that she got direct education or training from the network in the past year, 0 otherwise (58 of 80 providers coded 1)

Test Variables – Peer Mentoring

Network offers providers a link to a provider mentor: Coded 1 if the network provides an opportunity for providers to link up with and get advice from a more experienced provider, 0 otherwise (32 of 80 providers coded 1 – but not the same 32 as mentoring opportunities variable)

Network offers providers opportunity to mentor other family child care providers: Coded 1 if the network provides an opportunity for providers to mentor other less-experienced providers, 0 otherwise (32 of 80 providers coded 1 – but not the same 32 as links to mentor variable)

Test Variables – Network Coordinator Training and Experience

Coordinator was FCC provider in the past: Coded 1 if the Network coordinator was herself a home daycare provider in the past, 0 otherwise (7 of 80 providers coded 1)

Coordinator was a center or school-based teacher of young children in the past: Coded 1 if the network coordinator was a pre-school, kindergarten or elementary school teacher in the past, 0 otherwise (13 of 80 providers coded 1)

Coordinator was either an FCC provider or a center or school-based teacher in the past: Coded 1 if the network coordinator was either a home daycare provider or a teacher in a pre-school, kindergarten or elementary grade level in the past, 0 otherwise (20 of 80 providers coded 1)

Coordinator has been in position for at least 1 year: Coded 1 if coordinator held the position for at least a year prior to our interview; 0 otherwise (52 of 80 providers coded 1)

Coordinator has MA or higher: Coded 1 if Coordinator has a master's degree or Ph.D., 0 otherwise (19 of 80 providers coded 1)

Coordinator has relevant education: Coded 1 if coordinator has specific training in infant studies or child development at any level (CDA, college, or graduate level), 0 otherwise (63 of 80 providers coded 1)

Coordinator attended specialized infant studies certificate program with FCC network focus: Coded 1 if the coordinator attended a post-baccalaureate certificate program in infant studies customized for family child care network coordinators at a local institution of higher education, 0 otherwise (17 of 80 providers coded 1)

Test Variables – New vs. More Experienced Providers

New provider: Coded 1 if provider got license 3 or fewer years ago, 0 otherwise (37 of 80 providers coded 1)

Experienced provider: Coded 1 if provider got license more than 3 years ago, 0 otherwise (43 of 80 providers coded 1)

New provider and quality assessment tool: Coded 1 if provider got license 3 or fewer years ago and the coordinator uses a formal assessment tool, 0 otherwise (21 of 80 providers coded 1)

Experienced provider and coordinator works with children: Coded 1 if provider got license more than 3 years ago and coordinator worked with a child on one of last two home visits (23 of 80 providers coded 1)

Test Variables – Other

Optimal Provider to Coordinator Ratio: Coded 1 if there are 12 or fewer providers per coordinator and 0 otherwise (41 of 80 providers coded 1)

Test Variables – Material Resources

Toy or book lending library: Coded 1 if network had a toy or book lending library for providers, 0 otherwise (52 of 80 providers coded 1)

Discounts: Coded 1 if network offered discounts on educational or business supplies, 0 otherwise (25 of 80 providers coded 1)

Free supplies: Coded 1 if provider reported getting free materials or supplies from their network, 0 otherwise (61 of 80 providers coded 1)

Test Variables – Business Services

Help with licensing: Coded 1 if network helps with licensing and license renewals, 0 otherwise (27 of 80 providers coded 1)

Collects parent fees: Coded 1 if network collects parent fees for provider, 0 otherwise (37 of 80 providers coded 1)

Recruits parents: Coded 1 if network recruits parents for provider's home day care, 0 otherwise (70 of 80 providers coded 1)

Helps provider with tax preparation: Coded 1 if network helps providers with preparation of taxes as small business owners, 0 otherwise (34 of 80 providers coded 1)

Helps providers access subsidy reimbursements: Coded 1 if network helps providers access state subsidy payments for families who qualify and have children in their care, 0 otherwise (19 of 80 providers coded 1)

Combination Variables

Interaction terms (Coded 1 if all elements are true, 0 otherwise)	**Cases Coded 1**
Talked with provider about child and/or worked with child AND visited at least 10 times in last 6 months	8
Talked with provider about parent AND visited at least 10 times in 6 months	6
Coordinator got specialized training AND the network offered regular provider meetings, telephone help and formal channels for provider feedback	8
Coordinator got specialized training AND network provided direct education	16
Coordinator got specialized training AND coordinator worked with/talked about a child on one of last two visits	15
Coordinator got specialized training AND talked about a parent on one of the last two visits	11
Coordinator got specialized training AND network provided direct education AND coordinator worked with/talked about a child on one of last two visits AND talked about a parent on one of the last two visits AND network offered regular provider meetings, telephone help and formal channels for provider feedback	6

OUTPUT DETAIL FOR REGRESSION RESULTS IN MAIN STUDY REPORT TABLES
Table numbers correspond to the numbered tables in the report that these results back up.

Table 21 & 22
Relationship between Network Membership and Child Care Quality Control Variables Alone

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.002	.224		13.432	.000
Provider relevant education**	.221	.074	.259	2.999	.003
Age of youngest child in care*	.263	.110	.205	2.387	.019
Provider household income+	.000	.000	.156	1.809	.073
Observations: 120 = 80 network affiliated cases and 40 matched control cases					
R-square: 0.146					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 21 & 22
Relationship between Network Membership and Child Care Quality Testing Network Affiliation—Base Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.704	.220		12.294	.000
Provider relevant education**	.221	.069	.259	3.210	.002
Age of youngest child in care**	.286	.103	.222	2.769	.007
Provider household income	6.60E-005	.000	.102	1.252	.213
Network affiliation***	.589	.138	.346	4.269	.000
Observations: 120 = 80 network affiliated cases and 40 matched control cases					
R-square: 0.263					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 21 & 22
Relationship between Network Membership and Child Care Quality Testing Network Affiliation—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.889	.164		17.653	.000
Provider relevant education**	.231	.068	.271	3.370	.001
Age of youngest child in care**	.293	.103	.228	2.839	.005
Network affiliation***	.616	.137	.362	4.507	.000
Observations: 120 = 80 network affiliated cases and 40 matched control cases					
R-square: 0.253					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 21 & 22

Relationship between Network Membership and Child Care Quality Control Variables Alone

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.935	.104		28.332	.000
Provider relevant education*	.081	.034	.213	2.372	.019
Age of youngest child in care+	.092	.051	.161	1.804	.074
Provider household income	2.05E-005	.000	.071	.792	.430
Observations: 120 = 80 network affiliated cases and 40 matched control cases					
R-square: 0.081					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 21 & 22

Relationship Between Network Membership and Child Care Quality Testing Network Affiliation – Base Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.882	.109		26.534	.000
Provider relevant education*	.081	.034	.213	2.385	.019
Age of youngest child in care+	.096	.051	.168	1.890	.061
Provider household income	1.43E-005	.000	.050	.548	.585
Network affiliation	.105	.068	.138	1.537	.127
Observations: 120 = 80 network affiliated cases and 40 matched control cases					
R-square: 0.099					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 21 & 22

Relationship between Network Membership and Child Care Quality Testing Network Affiliation—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.922	.080		36.358	.000
Provider relevant education*	.083	.034	.218	2.473	.015
Age of youngest child in care+	.098	.051	.171	1.931	.056
Network affiliation+	.111	.067	.145	1.647	.102
Observations: 120 = 80 network affiliated cases and 40 matched control cases					
R-square: 0.097					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 24
Relationship between Membership in a Network with a Specially-Trained Coordinator and Quality—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.913	.446		6.528	.000
Provider relevant education*	.210	.105	.219	1.987	.053
Age of youngest child in care	.227	.157	.163	1.445	.155
Years of childcare experience	-.039	.024	-.183	-1.599	.116
Neighborhood poverty rate	-1.208	.923	-.145	-1.308	.197
Provider's household income	8.54E-005	.000	.111	.978	.333
Four plus children on day of visit	.381	.278	.158	1.370	.177
Specially trained coordinator**	.740	.236	.369	3.134	.003
Observations: 57 = 17 cases in networks with specially-trained coordinators and 40 control cases					
R-square: 0.426					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 24
Relationship between Membership in a Network with a Specially-Trained Coordinator and Quality—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.157	.283		11.166	.000
Provider relevant education+	.205	.106	.214	1.931	.059
Age of youngest child in care	.254	.157	.182	1.622	.111
Years of childcare experience	-.035	.024	-.164	-1.441	.156
Specially trained coordinator***	.875	.224	.436	3.911	.000
Observations: 57 = 17 cases in networks with specially-trained coordinators and 40 control cases					
R-square: 0.380					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 24
Relationship between Membership in a Network with a Specially-Trained Coordinator and Quality – Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.083	.209		14.754	.000
Provider relevant education+	.083	.049	.213	1.683	.099
Age of youngest child in care	.022	.074	.040	.306	.761
Years of childcare experience+	-.019	.011	-.224	-1.699	.096
Neighborhood poverty rate*	-.863	.432	-.255	-1.996	.052
Provider's household income	4.66E-005	.000	.148	1.139	.260
Four plus children on day of visit	.076	.131	.077	.579	.565
Specially trained coordinator	.098	.111	.121	.889	.378
Observations: 57 = 17 cases in networks with specially-trained coordinators and 40 control cases					
R-square: 0.238					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 24
Relationship between Membership in a Network with a Specially-Trained Coordinator and Quality—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.161	.178		17.775	.000
Provider relevant education+	.088	.048	.225	1.816	.075
Years of childcare experience*	-.021	.011	-.247	-1.968	.054
Neighborhood poverty rate*	-.837	.420	-.248	-1.991	.052
Provider's household income	5.85E-005	.000	.186	1.495	.141
Observations: 57 = 17 cases in networks with specially-trained coordinators and 40 control cases					
R-square: 0.212					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

The following series of tables (25A) corresponds to text in the report and is based on comparison of means in Table 25.

Table 25A.1
Relationship between Network and Association Membership and Child Care Quality Testing Network Affiliation—Base Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.263	.244		13.354	.000
Provider relevant education*	.188	.078	.230	2.414	.018
Age of youngest child in care*	.260	.111	.216	2.344	.021
Provider household income	7.44E-005	.000	.122	1.316	.191
Network affiliation	.056	.152	.035	.368	.713
Observations: 110 = 80 network affiliated cases and 30 association cases					
R-square: 0.342					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 25A.2
Relationship between Network and Association Membership and Child Care Quality Testing Network Affiliation—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.290	.232		14.166	.000
Provider relevant education**	.194	.075	.238	2.574	.011
Age of youngest child in care*	.263	.110	.218	2.378	.019
Provider household income	7.64E-005	.000	.126	1.362	.176
Observations: 110 = 80 network affiliated cases and 30 association cases					
R-square: 0.341					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 25A.3
Relationship Between Network and Association Membership and Child Care Quality Testing Network Affiliation—Base Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.005	.133		22.538	.000
Provider relevant education*	.055	.042	.128	1.289	.200
Age of youngest child in care*	.078	.061	.124	1.286	.201
Provider household income	3.18E-006	.000	.010	.103	.918
Network affiliation	.062	.083	.074	.745	.458
Observations: 110 = 80 network affiliated cases and 30 association cases					
R-square: 0.200					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 25A.4
Relationship between Network and Association Membership and Child Care QualityTesting Network Affiliation—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.052	.076		40.304	.000
Provider relevant education	.063	.041	.147	1.540	.127
Age of youngest child in care	.080	.060	.127	1.332	.186
Provider household income					
Observations: 110 = 80 network affiliated cases and 30 association cases					
R-square: 0.186					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 27
Relationship between Membership in a Network with a Specially-Trained Coordinator, Association Membership, and Quality—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.283	.409		8.036	.000
Specially trained coordinator	.450	.298	.283	1.510	.139
Provider relevant education	.062	.161	.065	.386	.701
Age of youngest child in care	.186	.189	.145	.983	.331
Years of childcare experience	.025	.026	.149	.972	.337
Neighborhood poverty rate	.329	.283	.182	1.164	.251
Provider's household income	-.244	1.052	-.036	-.232	.818
Four plus children on day of visit***	3.283	.409		8.036	.000
Observations: 47= 17 cases in networks with specially-trained coordinators & 30 association cases					
R-square: 0.206					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 27
Relationship between Membership in a Network with a Specially-Trained Coordinator, Association Membership, and Quality—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.818	.133		28.791	.000
Specially trained coordinator**	.578	.220	.364	2.620	.012
Observations: 47= 17 cases in networks with specially-trained coordinators & 30 association cases					
R-square: 0.132					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 27

Relationship between Membership in a Network with a Specially-Trained Coordinator, Association Membership, and Quality—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.926	.236		12.391	.000
Specially trained coordinator	.185	.172	.218	1.077	.288
Provider relevant education	.003	.093	.006	.034	.973
Age of youngest child in care	-.006	.109	-.009	-.054	.957
Years of childcare experience	.011	.015	.128	.774	.444
Neighborhood poverty rate	.048	.163	.049	.292	.772
Provider's household income	.410	.608	.112	.674	.504
Four plus children on day of visit***	3.110	.075		41.686	.000
Observations: 47= 17 cases in networks with specially-trained coordinators & 30 association cases					
R-square: 0.077					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 27

Relationship between Membership in a Network with a Specially-Trained Coordinator, Association Membership, and Quality—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.110	.075		41.686	.000
Specially trained coordinator	.178	.124	.209	1.432	.159
Observations: 47= 17 cases in networks with specially-trained coordinators & 30 association cases					
R-square: 0.044					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Providers have access to telephone help from network coordinator—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.352	.318		10.557	.000
Provider relevant education*	.198	.084	.258	2.352	.021
Age of youngest child in care*	.279	.136	.228	2.052	.044
Head Start or Early Head Start slots?	.212	.163	.149	1.297	.198
Providers have access to telephone help from network coordinator	.092	.306	.034	.302	.763
Observations: 80 = 80 network-affiliated cases					
R-square: 0.122					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Providers have access to telephone help from network coordinator—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Have any Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Providers have access to telephone help from network coordinator—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.083	.157		19.646	.000
Provider relevant education+	.077	.042	.211	1.858	.067
Age of youngest child in care	.104	.067	.177	1.542	.127
Head Start or Early Head Start slots?	.013	.081	.019	.162	.871
Providers have access to telephone help from network coordinator	-.062	.151	-.048	-.412	.682
Observations: 80 = 80 network-affiliated cases					
R-square: 0.064					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Providers have access to telephone help from network coordinator—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network Coordinator holds regular meetings for Providers—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.337	.234		14.245	.000
Provider relevant education*	.189	.085	.247	2.232	.029
Age of youngest child in care*	.274	.136	.223	2.016	.047
Head Start or Early Head Start slots?	.188	.163	.133	1.154	.252
Network Coordinator holds regular meetings for providers	.154	.209	.085	.737	.463
Observations: 80 = 80 network-affiliated cases					
R-square: 0.127					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network Coordinator holds regular meetings for Providers—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network Coordinator holds regular meetings for Providers—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.009	.116		25.909	.000
Provider relevant education+	.074	.042	.200	1.748	.085
Age of youngest child in care	.100	.067	.171	1.487	.141
Head Start or Early Head Start slots?	-.007	.081	-.010	-.088	.930
Network Coordinator holds regular meetings for providers	.042	.104	.048	.401	.690
Observations: 80 = 80 network-affiliated cases					
R-square: 0.064					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network Coordinator holds regular meetings for Providers—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers formal opportunities to give feedback to the network—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.316	.187		17.778	.000
Provider relevant education*	.164	.077	.213	2.112	.038
Age of youngest child in care*	.283	.124	.231	2.276	.026
Head Start or Early Head Start slots?	.132	.144	.093	.914	.364
Network offers providers formal opportunities to give feedback to network***	.587	.153	.388	3.829	.000
Observations: 80 = 80 network-affiliated cases					
R-square: 0.265					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers formal opportunities to give feedback to the network—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.392	.167		20.349	.000
Provider relevant education*	.165	.077	.215	2.129	.037
Age of youngest child in care*	.266	.123	.217	2.168	.033
Network offers providers formal opportunities to give feedback to network***	.611	.151	.404	4.049	.000
Observations: 80 = 80 network-affiliated cases					
R-square: 0.256					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers formal opportunities to give feedback to the network—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.016	.100		30.155	.000
Provider relevant education+	.071	.042	.192	1.698	.094
Age of youngest child in care	.102	.067	.174	1.536	.129
Head Start or Early Head Start slots?	-.012	.077	-.018	-.154	.878
Network offers providers formal opportunities to give feedback to network	.093	.082	.129	1.136	.260
Observations: 80 = 80 network-affiliated cases					
R-square: 0.078					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers formal opportunities to give feedback to the network—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers all 3 professional development opportunities (telephone help; regular meetings; and way to give formal feedback)—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.345	.183		18.289	.000
Provider relevant education+	.148	.077	.193	1.928	.058
Age of youngest child in care*	.286	.123	.233	2.330	.023
Head Start or Early Head Start slots?	.089	.144	.063	.617	.539
Network offers all 3 professional development opportunities ***	.652	.158	.422	4.134	.000
Observations: 80 = 80 network-affiliated cases					
R-square: 0.284					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers all 3 professional development opportunities (telephone help; regular meetings; and way to give formal feedback)—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.396	.163		20.820	.000
Provider relevant education+	.148	.077	.193	1.935	.057
Age of youngest child in care*	.275	.121	.224	2.274	.026
Network offers all 3 professional development opportunities***	.675	.153	.436	4.412	.000
Observations: 80 = 80 network-affiliated cases					
R-square: 0.280					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers all 3 professional development opportunities (telephone help; regular meetings; and way to give formal feedback)—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.018	.099		30.552	.000
Provider relevant education	.066	.041	.180	1.594	.115
Age of youngest child in care	.103	.066	.175	1.555	.124
Head Start or Early Head Start slots?	-.024	.078	-.035	-.306	.760
Network offers all 3 professional development opportunities	.128	.085	.173	1.503	.137
Observations: 80 = 80 network-affiliated cases					
R-square: 0.089					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers all 3 professional development opportunities (telephone help; regular meetings; and way to give formal feedback)—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.004	.088		34.177	.000
Provider relevant education	.066	.041	.180	1.605	.113
Age of youngest child in care	.106	.065	.180	1.625	.108
Network offers all 3 professional development opportunities	.122	.082	.165	1.481	.143
Observations: 80 = 80 network-affiliated cases					
R-square: 0.088					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network intervenes with authority if providers have a Problem—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.378	.198		17.036	.000
Provider relevant education	.214	.082	.280	2.603	.011
Age of youngest child in care	.263	.133	.215	1.978	.052
Head Start or Early Head Start slots?	.161	.156	.114	1.036	.303
Intervenes with authority	.343	.178	.210	1.926	.058
Observations: 80 = 80 network-affiliated cases					
R-square: 0.162					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28

Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network intervenes with authority if providers have a Problem—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.469	.178		19.506	.000
Provider relevant education	.219	.082	.286	2.664	.009
Age of youngest child in care	.241	.131	.197	1.835	.070
Intervenes with authority	.383	.174	.234	2.203	.031
Observations: 80 = 80 network-affiliated cases					
R-square: 0.150					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network intervenes with authority if providers have a Problem—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.011	.098		30.638	.000
Provider relevant education*	.083	.041	.227	2.041	.045
Age of youngest child in care	.093	.066	.159	1.418	.160
Head Start or Early Head Start slots?	-.028	.077	-.041	-.360	.720
Intervene with authority+	.163	.088	.208	1.843	.069
Observations: 80 = 80 network-affiliated cases					
R-square: 0.103					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 28
Professional and Supportive Relationships and Quality of Care in Network-Affiliated Family Child Care Homes: Network intervenes with authority if providers have a Problem—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.995	.088		34.194	.000
Provider relevant education*	.083	.041	.225	2.036	.045
Age of youngest child in care	.097	.065	.166	1.504	.137
Intervene with authority+	.156	.086	.199	1.819	.073
Observations: 80 = 80 network-affiliated cases					
R-square: 0.101					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Uses formal quality assessment tool—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.283	.213		15.387	.000
Provider relevant education*	.167	.084	.219	1.987	.051
Age of youngest child in care*	.293	.133	.239	2.200	.031
Head Start or Early Head Start slots?	.154	.158	.109	.976	.332
Uses formal quality assessment tool+	.301	.170	.201	1.775	.080
Observations: 80 = 80 network-affiliated cases					
R-square: 0.156					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Uses formal quality assessment tool—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.353	.201		16.692	.000
Provider relevant education*	.166	.084	.216	1.968	.053
Age of youngest child in care *	.276	.132	.225	2.092	.040
Uses formal quality assessment tool*	.344	.164	.230	2.099	.039
Observations: 80 = 80 network-affiliated cases					
R-square: 0.146					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Uses formal quality assessment tool—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.011	.107		28.014	.000
Provider relevant education+	.071	.042	.194	1.678	.097
Age of youngest child in care	.104	.067	.177	1.549	.126
Head Start or Early Head Start slots?	-.008	.080	-.012	-.103	.919
Uses formal quality assessment tool	.047	.086	.065	.547	.586
Observations: 80 = 80 network-affiliated cases					
R-square: 0.256					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Uses formal quality assessment tool—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.249					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Visited at least 10 times in last 6 months—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.438	.199		17.316	.000
Provider relevant education*	.179	.084	.234	2.136	.036
Age of youngest child in care	.225	.139	.184	1.627	.108
Head Start or Early Head Start slots?	.192	.155	.136	1.244	.217
Visited at least 10 times in last 6 months	.271	.175	.173	1.550	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.148					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Visited at least 10 times in last 6 months—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.558	.174		20.430	.000
Provider relevant education*	.180	.084	.235	2.146	.035
Age of youngest child in care	.195	.137	.159	1.423	.159
Visited at least 10 times in last 6 months +	.302	.174	.193	1.737	.086
Observations: 80 = 80 network-affiliated cases					
R-square: 0.131					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Visited at least 10 times in last 6 months—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.040	.098		31.079	.000
Provider relevant education	.065	.041	.177	1.574	.120
Age of youngest child in care	.071	.068	.122	1.045	.299
Head Start or Early Head Start slots?	-.016	.076	-.023	-.204	.839
Visited at least 10 times in last 6 months +	.149	.086	.199	1.730	.088
Observations: 80 = 80 network-affiliated cases					
R-square: 0.098					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Visited at least 10 times in last 6 months—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.101	.056		55.827	.000
Provider relevant education	.056	.040	.153	1.396	.167
Visited at least 10 times in last 6 months*	.169	.082	.226	2.055	.043
Observations: 80 = 80 network-affiliated cases					
R-square: 0.083					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about child and/or worked with child AND visited at least 10 times in last 6 months—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.438	.199		17.316	.000
Provider relevant education*	.179	.084	.234	2.136	.036
Age of youngest child in care	.225	.139	.184	1.627	.108
Head Start or Early Head Start slots?	.192	.155	.136	1.244	.217
Talked with provider about and/ or worked with child AND visited at least 10 times in last 6 months	.271	.175	.173	1.550	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.148					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about child and/or worked with child AND visited at least 10 times in last 6 months—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.558	.174		20.430	.000
Provider relevant education*	.180	.084	.235	2.146	.035
Age of youngest child in care	.195	.137	.159	1.423	.159
Talked with provider about and/ or worked with child AND visited at least 10 times in last 6 months+	.302	.174	.193	1.737	.086
Observations: 80 = 80 network-affiliated cases					
R-square: 0.131					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about child and/or worked with child AND visited at least 10 times in last 6 months—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.040	.098		31.079	.000
Provider relevant education	.065	.041	.177	1.574	.120
Age of youngest child in care	.071	.068	.122	1.045	.299
Head Start or Early Head Start slots?	-.016	.076	-.023	-0.204	.839
Talked with provider about and/or worked with child AND visited at least 10 times in last 6 months+	.149	.086	.199	1.730	.088
Observations: 80 = 80 network-affiliated cases					
R-square: 0.098					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about child and/or worked with child AND visited at least 10 times in last 6 months—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.101	.056		55.827	.000
Provider relevant education	.056	.040	.153	1.396	.167
Talked with provider about and/ or worked with child AND visited at least 10 times in last 6 months*	.169	.082	.226	2.055	.043
Observations: 80 = 80 network-affiliated cases					
R-square: 0.083					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about parent AND visited at least 10 times in 6 months—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.442	.203		16.935	.000
Provider relevant education*	.190	.086	.248	2.224	.029
Age of youngest child in care+	.257	.143	.210	1.796	.076
Head Start or Early Head Start slots?	.217	.156	.153	1.386	.170
Talked with provider about parent AND visited at least 10 times in 6 months	.112	.210	.062	.534	.595
Observations: 80 = 80 network-affiliated cases					
R-square: 0.124					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about parent AND visited at least 10 times in 6 months—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about parent AND visited at least 10 times in 6 months—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.058	.099		30.980	.000
Provider relevant education	.062	.042	.168	1.485	.142
Age of youngest child in care	.063	.069	.108	.913	.364
Head Start or Early Head Start slots?	-.012	.076	-.018	-.162	.872
Talked with provider about parent AND visited at least 10 times in 6 mo.+	.178	.102	.205	1.747	.085
Observations: 80 = 80 network-affiliated cases					
R-square: 0.099					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Talked with provider about parent AND visited at least 10 times in 6 months—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.114	.053		58.246	.000
Provider relevant education	.053	.040	.146	1.323	.190
Talked with provider about parent AND visited at least 10 times in 6 mo.+	.206	.096	.237	2.149	.035
Observations: 80 = 80 network-affiliated cases					
R-square: 0.087					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

The following series of tables (30A- 30B) correspond to text in the report regarding visits to FCC homes rather than to specific tables in the report.

Table 29A.1
Relationship between Good Coordinator to Provider Ratio and Child Care Quality—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.441	.203		16.963	.000
Provider relevant education*	.199	.084	.260	2.379	.020
Age of youngest child in care*	.296	.138	.241	2.142	.035
Head Start or Early Head Start slots?	.264	.169	.186	1.558	.123
Optimal provider – coordinator ratio	-.093	.168	-.066	-.554	.581
Observations: 80 = 80 network-affiliated cases					
R-square: 0.124					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29A.2
Relationship between Good Coordinator to Provider Ratio and Child Care Quality—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29A.3
Relationship between Good Coordinator to Provider Ratio and Child Care Quality—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.022	.100		30.220	.000
Provider relevant education+	.076	.041	.208	1.843	.069
Age of youngest child in care	.091	.068	.155	1.337	.185
Head Start or Early Head Start slots?	-.026	.084	-.039	-.314	.754
Optimal provider – coordinator ratio	.073	.083	.108	.880	.382
Observations: 80 = 80 network-affiliated cases					
R-square: 0.072					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29A.4
Relationship between Good Coordinator to Provider Ratio and Child Care Quality—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29B.1
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between New Provider Status and Use of Quality Assessment Tool—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.528	.275		12.845	.000
Provider relevant education*	.169	.085	.220	1.989	.050
Age of youngest child in care+	.264	.138	.215	1.913	.060
Head Start or Early Head Start slots?	.159	.158	.112	1.009	.317
Uses formal Quality Assessment Tool	-.344	.269	-.242	-1.282	.204
New Provider	.026	.254	.017	.101	.920
New provider and quality assessment tool	.483	.334	.295	1.448	.152
Observations: 80 = 80 network-affiliated cases					
R-square: 0.180					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29B.2
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between New Provider Status and Use of Quality Assessment Tool—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.654	.177		20.598	.000
Provider relevant education*	.171	.083	.223	2.051	.044
Age of youngest child in care+	.240	.134	.196	1.786	.078
New Provider*	-.392	.193	-.276	-2.032	.046
New provider and quality assessment tool*	.550	.224	.336	2.450	.017
Observations: 80 = 80 network-affiliated cases					
R-square: 0.168					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29B.3
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between New Provider Status and Use of Quality Assessment Tool—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.069	.140		21.923	.000
Provider relevant education+	.073	.043	.198	1.678	.098
Age of youngest child in care	.100	.070	.171	1.429	.157
Head Start or Early Head Start slots?	-.007	.080	-.010	-.085	.933
Uses formal Quality Assessment Tool	-.087	.137	-.128	-.638	.526
New Provider	-.015	.130	-.021	-.114	.910
New provider and quality assessment tool	.101	.170	.129	.593	.555
Observations: 80 = 80 network-affiliated cases					
R-square: 0.071					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29B.4
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes Interaction between New Provider Status and Use of Quality Assessment Tool—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29C.1

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between Experienced Provider Status and Coordinator who Works with Children on Home Visits—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.609	.258		13.963	.000
Provider relevant education+	.167	.087	.218	1.927	.058
Age of youngest child in care*	.314	.140	.256	2.237	.028
Head Start or Early Head Start slots?	.234	.154	.165	1.519	.133
Experienced provider	-.246	.235	-.173	-1.049	.297
Coordinator worked with child on one of last 2 visits+	-.421	.229	-.296	-1.843	.069
Experienced provider and coordinator works with children+	.612	.315	.391	1.941	.056
Observations: 80 = 80 network-affiliated cases					
R-square: 0.172					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29C.2

Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between Experienced Provider Status and Coordinator who Works with Children on Home Visits—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.439	.202		17.064	.000
Provider relevant education*	.189	.084	.247	2.246	.028
Age of youngest child in care*	.335	.139	.273	2.413	.018
Head Start or Early Head Start slots?	.230	.154	.162	1.489	.141
Coordinator worked with child on one of last 2 visits	-.292	.193	-.205	-1.515	.134
Experienced provider and coordinator works with children+	.364	.208	.232	1.745	.085
Observations: 80 = 80 network-affiliated cases					
R-square: 0.160					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29C.3
Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between Experienced Provider Status and Coordinator who Works with Children on Home Visits—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.086	.130		23.714	.000
Provider relevant education	.070	.044	.192	1.614	.111
Age of youngest child in care+	.119	.071	.203	1.686	.096
Head Start or Early Head Start slots?	.009	.078	.014	.121	.904
Experienced provider	-.060	.118	-.088	-.505	.615
Coordinator worked with child on one of last 2 visits	-.148	.115	-.217	-1.285	.203
Experienced provider and coordinator works with children	.163	.159	.218	1.028	.307
Observations: 80 = 80 network-affiliated cases					
R-square: 0.085					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 29C.4 Visits to FCC Homes and Quality of Care in Network-Affiliated Family Child Care Homes: Interaction between Experienced Provider Status and Coordinator who Works with Children on Home Visits—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Helps new providers get initial training—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.331	.205		16.222	.000
Provider relevant education*	.206	.083	.269	2.498	.015
Age of youngest child in care*	.280	.133	.228	2.098	.039
Head Start or Early Head Start slots?	.202	.153	.143	1.320	.191
Staffed network helps new providers get training for fist time+	.265	.155	.182	1.709	.092
Observations: 80 = 80 network-affiliated cases					
R-square: 0.154					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Helps new providers get initial training—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.331	.205		16.222	.000
Provider relevant education*	.206	.083	.269	2.498	.015
Age of youngest child in care*	.280	.133	.228	2.098	.039
Head Start or Early Head Start slots?	.202	.153	.143	1.320	.191
Staffed network helps new providers get training for first time+	.265	.155	.182	1.709	.092
Observations: 80 = 80 network-affiliated cases					
R-square: 0.154					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Helps new providers get initial training—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.012	.103		29.210	.000
Provider relevant education+	.078	.041	.212	1.876	.065
Age of youngest child in care	.102	.067	.173	1.520	.133
Head Start or Early Head Start slots?	-.002	.077	-.003	-.030	.976
Staffed network helps new providers get training for first time	.060	.078	.086	.769	.445
Observations: 80 = 80 network-affiliated cases					
R-square: 0.069					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Helps new providers get initial training—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Providers received direct education/training from network—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.285	.216		15.210	.000
Provider relevant education*	.189	.083	.246	2.277	.026
Age of youngest child in care+	.253	.135	.206	1.879	.064
Head Start or Early Head Start slots?	.172	.156	.121	1.097	.276
Providers received direct education/training from network+	.286	.174	.180	1.641	.105
Observations: 80 = 80 network-affiliated cases					
R-square: 0.151					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Providers received direct education/training from network—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.368	.203		16.626	.000
Provider relevant education*	.190	.083	.248	2.295	.024
Age of youngest child in care+	.228	.133	.186	1.714	.091
Providers received direct education/training from network+	.326	.170	.206	1.916	.059
Observations: 80 = 80 network-affiliated cases					
R-square: 0.138					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31
Education and Quality of Care in Network-Affiliated Family Child Care Homes: Providers received direct education/training from network—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.934	.105		27.983	.000
Provider relevant education+	.069	.040	.187	1.706	.092
Age of youngest child in care	.082	.065	.140	1.258	.212
Head Start or Early Head Start slots?	-.035	.076	-.052	-.463	.645
Providers received direct education/training from network*	.200	.084	.263	2.364	.021
Observations: 80 = 80 network-affiliated cases					
R-square: 0.127					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 31

Education and Quality of Care in Network-Affiliated Family Child Care Homes: Providers received direct education/training from network—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.917	.098		29.856	.000
Provider relevant education+	.068	.040	.186	1.707	.092
Age of youngest child in care	.087	.064	.149	1.364	.177
Providers received direct education/training from network*	.191	.082	.252	2.331	.022
Observations: 80 = 80 network-affiliated cases					
R-square: 0.125					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers a link to a provider mentor—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.459	.204		16.925	.000
Provider relevant education*	.212	.085	.277	2.495	.015
Age of youngest child in care*	.287	.135	.234	2.117	.038
Head Start or Early Head Start slots?	.234	.155	.165	1.509	.136
Network offers providers a link to a provider mentor	-.134	.159	-.093	-0.846	.400
Observations: 80 = 80 network-affiliated cases					
R-square: 0.129					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers a link to a provider mentor—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers a link to a provider mentor—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.059	.100		30.451	.000
Provider relevant education*	.086	.042	.233	2.052	.044
Age of youngest child in care	.106	.067	.181	1.595	.115
Head Start or Early Head Start slots?	.009	.076	.013	.116	.908
Network offers providers a link to a provider mentor	-.101	.078	-.146	-1.301	.197
Observations: 80 = 80 network-affiliated cases					
R-square: 0.083					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers a link to a provider mentor—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.064	.088		34.676	.000
Provider relevant education*	.086	.041	.234	2.069	.042
Age of youngest child in care	.105	.065	.179	1.606	.112
Network offers providers a link to a provider mentor	-.101	.077	-.146	-1.305	.196
Observations: 80 = 80 network-affiliated cases					
R-square: 0.083					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers an opportunity to mentor other family child care providers—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.493	.198		17.686	.000
Provider relevant education**	.209	.082	.272	2.559	.013
Age of youngest child in care*	.322	.133	.263	2.425	.018
Head Start or Early Head Start slots?+	.271	.152	.191	1.780	.079
Network offers providers opportunity to mentor other family child care providers*	-.343	.154	-.237	-2.224	.029
Observations: 80 = 80 network-affiliated cases					
R-square: 0.175					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers an opportunity to mentor other family child care providers—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.493	.198		17.686	.000
Provider relevant education**	.209	.082	.272	2.559	.013
Age of youngest child in care*	.322	.133	.263	2.425	.018
Head Start or Early Head Start slots?+	.271	.152	.191	1.780	.079
Network offers providers opportunity to mentor other family child care providers*	-.343	.154	-.237	-2.224	.029
Observations: 80 = 80 network-affiliated cases					
R-square: 0.175					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers an opportunity to mentor other family child care providers—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.045	.100		30.316	.000
Provider relevant education+	.078	.041	.212	1.878	.064
Age of youngest child in care	.109	.068	.186	1.618	.110
Head Start or Early Head Start slots?	.011	.077	.016	.141	.888
Network offers providers an opportunity to mentor other family child care providers	-.061	.078	-.088	-.773	.442
Observations: 80 = 80 network-affiliated cases					
R-square: 0.069					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 33

Peer Mentoring and Quality of Care in Network-Affiliated Family Child Care Homes: Network offers providers an opportunity to mentor other family child care providers—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a family child care provider—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.406	.202		16.872	.000
Provider relevant education*	.205	.084	.268	2.445	.017
Age of youngest child in care*	.284	.135	.232	2.099	.039
Head Start or Early Head Start slots?	.211	.156	.149	1.351	.181
Coordinator was FCC provider in the past	.233	.273	.093	.854	.396
Observations: 80 = 80 network-affiliated cases					
R-square: 0.129					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a family child care provider—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a family child care provider—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.030	.100		30.217	.000
Provider relevant education+	.077	.042	.211	1.856	.067
Age of youngest child in care	.103	.067	.175	1.528	.131
Head Start or Early Head Start slots?	.000	.077	.000	.000	1.000
Coordinator was FCC provider in the past	.046	.136	.038	.336	.738
Observations: 80 = 80 network-affiliated cases					
R-square: 0.063					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a family child care provider—Reduced Model - Arnett

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a center or school-based teacher—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.389	.202		16.743	.000
Provider relevant education*	.203	.083	.265	2.437	.017
Age of youngest child in care*	.289	.135	.236	2.146	.035
Head Start or Early Head Start slots?	.202	.156	.142	1.294	.200
Coordinator was a center or school-based teacher of young children in the past	.237	.209	.123	1.133	.261
Observations: 80 = 80 network-affiliated cases					
R-square: 0.136					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a center or school-based teacher—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a center or school-based teacher—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.011	.100		30.214	.000
Provider relevant education+	.079	.041	.214	1.913	.060
Age of youngest child in care	.107	.066	.183	1.614	.111
Head Start or Early Head Start slots?	-.012	.077	-.018	-.158	.875
Coordinator was a center or school-based teacher of young children in the past	.145	.103	.158	1.415	.161
Observations: 80 = 80 network-affiliated cases					
R-square: 0.086					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as a center or school-based teacher—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.004	.088		34.017	.000
Provider relevant education+	.078	.041	.213	1.921	.059
Age of youngest child in care+	.109	.065	.185	1.663	.101
Coordinator was a center or school-based teacher of young children in the past	.143	.101	.156	1.416	.161
Observations: 80 = 80 network-affiliated cases					
R-square: 0.086					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as either a family child care provider or a center or school-based teacher—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.359	.203		16.552	.000
Provider relevant education*	.211	.083	.275	2.538	.013
Age of youngest child in care*	.294	.134	.240	2.195	.031
Head Start or Early Head Start slots?	.179	.156	.126	1.143	.257
Coordinator was either an FCC provider or a center or school-based teacher in the past	.279	.179	.170	1.557	.124
Observations: 80 = 80 network-affiliated cases					
R-square: 0.138					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as either a family child care provider or a center or school-based teacher—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.458	.184		18.772	.000
Provider relevant education*	.216	.083	.282	2.597	.011
Age of youngest child in care*	.274	.133	.223	2.057	.043
Coordinator was either an FCC provider or a center or school-based teacher in the past+	.319	.176	.195	1.814	.074
Observations: 80 = 80 network-affiliated cases					
R-square: 0.134					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as either a family child care provider or a center or school-based teacher—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.003	.101		29.852	.000
Provider relevant education*	.081	.041	.222	1.979	.052
Age of youngest child in care	.108	.066	.184	1.626	.108
Head Start or Early Head Start slots?	-.019	.077	-.028	-.245	.807
Coordinator was either an FCC provider or a center or school-based teacher in the past	.128	.089	.164	1.448	.152
Observations: 80 = 80 network-affiliated cases					
R-square: 0.088					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has prior experience as either a family child care provider or a center or school-based teacher—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.992	.091		33.049	.000
Provider relevant education*	.081	.041	.220	1.981	.051
Age of youngest child in care+	.110	.065	.188	1.684	.096
Coordinator was either an FCC provider or a center or school-based teacher in the past	.124	.086	.158	1.436	.155
Observations: 80 = 80 network-affiliated cases					
R-square: 0.087					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has been in position for at least 1 year—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.408	.217		15.699	.000
Provider relevant education*	.200	.084	.261	2.382	.020
Age of youngest child in care*	.278	.137	.227	2.029	.046
Head Start or Early Head Start slots?	.221	.158	.156	1.401	.165
Coordinator was either an FCC provider or a center or school-based teacher in the past	.036	.164	.024	.218	.828
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has been in position for at least 1 year—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has been in position for at least 1 year—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	2.991	.107		28.057	.000
Provider relevant education+	.078	.041	.214	1.897	.062
Age of youngest child in care	.093	.067	.159	1.389	.169
Head Start or Early Head Start slots?	-.010	.077	-.015	-.133	.894
Coordinator was either an FCC provider or a center or school-based teacher in the past	.086	.081	.120	1.063	.291
Observations: 80 = 80 network-affiliated cases					
R-square: 0.076					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Network coordinator has been in position for at least 1 year—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has master's degree or higher—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.435	.201		17.096	.000
Provider relevant education*	.209	.085	.273	2.475	.016
Age of youngest child in care*	.299	.137	.244	2.185	.032
Head Start or Early Head Start slots?	.229	.155	.161	1.476	.144
Coordinator has MA or higher	-.150	.183	-.090	-.820	.415
Observations: 80 = 80 network-affiliated cases					
R-square: 0.129					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has master's degree or higher—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.121					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has master's degree or higher—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.034	.100		30.396	.000
Provider relevant education+	.076	.042	.208	1.820	.073
Age of youngest child in care	.102	.068	.175	1.506	.136
Head Start or Early Head Start slots?	.003	.077	.005	.041	.968
Coordinator has MA or higher	-.003	.091	-.004	-.033	.974
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 36
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has master's degree or higher—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has relevant education—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.206	.264		12.160	.000
Provider relevant education*	.183	.084	.238	2.168	.033
Age of youngest child in care*	.290	.135	.236	2.152	.035
Head Start or Early Head Start slots?	.251	.155	.177	1.619	.110
Coordinator has relevant education	.260	.204	.140	1.276	.206
Observations: 80 = 80 network-affiliated cases					
R-square: 0.140					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has relevant education—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.426	.200		17.113	.000
Provider relevant education*	.199	.083	.260	2.389	.019
Age of youngest child in care*	.281	.135	.230	2.085	.040
Head Start or Early Head Start slots?	.226	.155	.160	1.465	.147
Observations: 80 = 80 network-affiliated cases					
R-square: 0.140					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has relevant education—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.039	.132		23.058	.000
Provider relevant education+	.077	.042	.209	1.821	.073
Age of youngest child in care	.102	.067	.174	1.515	.134
Head Start or Early Head Start slots?	.002	.078	.004	.032	.975
Coordinator has relevant education	-.006	.102	-.007	-.064	.950
Observations: 80 = 80 network-affiliated cases					
R-square: 0.140					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator has relevant education—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.140					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator attended specialized certificate program in infant studies with FCC network focus—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.425	.196		17.501	.000
Provider relevant education*	.171	.083	.223	2.069	.042
Age of youngest child in care+	.236	.134	.192	1.764	.082
Head Start or Early Head Start slots?	.200	.152	.141	1.319	.191
Coordinator attended specialized infant studies certificate program with FCC network focus*	.398	.187	.230	2.133	.036
Observations: 80 = 80 network-affiliated cases					
R-square: 0.171					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35
Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator attended specialized certificate program in infant studies with FCC network focus—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.425	.196		17.501	.000
Provider relevant education*	.171	.083	.223	2.069	.042
Age of youngest child in care+	.236	.134	.192	1.764	.082
Head Start or Early Head Start slots?	.200	.152	.141	1.319	.191
Coordinator attended specialized infant studies certificate program with FCC network focus*	.398	.187	.230	2.133	.036
Observations: 80 = 80 network-affiliated cases					
R-square: 0.171					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator attended specialized certificate program in infant studies with FCC network focus—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.033	.099		30.545	.000
Provider relevant education+	.071	.042	.194	1.696	.094
Age of youngest child in care	.094	.068	.160	1.386	.170
Head Start or Early Head Start slots?	-.002	.077	-.002	-.021	.983
Coordinator attended specialized infant studies certificate program with FCC network focus	.071	.095	.085	.748	.457
Observations: 80 = 80 network-affiliated cases					
R-square: 0.069					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 35

Network Coordinator Qualifications and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator attended specialized certificate program in infant studies with FCC network focus—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and provider got direct education from network—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.434	.193		17.795	.000
Provider relevant education+	.159	.082	.207	1.936	.057
Age of youngest child in care+	.232	.131	.189	1.765	.082
Head Start or Early Head Start slots?	.182	.150	.129	1.217	.227
Coordinator got specialized training & provider got direct education from network**	.494	.189	.279	2.609	.011
Observations: 80 = 80 network-affiliated cases					
R-square: 0.194					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 38

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and provider got direct education from network—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.548	.169		20.950	.000
Provider relevant education+	.160	.082	.209	1.948	.055
Age of youngest child in care	.206	.130	.168	1.585	.117
Coordinator got specialized training & provider got direct education from network**	.520	.189	.293	2.755	.007
Observations: 80 = 80 network-affiliated cases					
R-square: 0.178					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and provider got direct education from network—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.099		30.771	.000
Provider relevant education	.066	.042	.180	1.579	.118
Age of youngest child in care	.090	.067	.153	1.339	.185
Head Start or Early Head Start slots?	-.008	.077	-.011	-.101	.920
Coordinator got specialized training & provider got direct education from network	.122	.097	.144	1.260	.212
Observations: 80 = 80 network-affiliated cases					
R-square: 0.081					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and provider got direct education from network—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a child or worked with a child on one of last two visits—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.453	.194		17.793	.000
Provider relevant education*	.184	.081	.241	2.275	.026
Age of youngest child in care	.206	.134	.168	1.538	.128
Head Start or Early Head Start slots?	.163	.152	.115	1.073	.287
Coordinator got specialized training & talked with provider about a child or worked with a child on one of last two visits*	.485	.196	.267	2.475	.016
Observations: 80 = 80 network-affiliated cases					
R-square: 0.187					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a child or worked with a child on one of last two visits—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.555	.170		20.958	.000
Provider relevant education*	.186	.081	.243	2.298	.024
Age of youngest child in care	.180	.132	.147	1.366	.176
Coordinator got specialized training & talked with provider about a child or worked with a child on one of last two visits**	.521	.193	.287	2.692	.009
Observations: 80 = 80 network-affiliated cases					
R-square: 0.175					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a child or worked with a child on one of last two visits—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.038	.099		30.577	.000
Provider relevant education+	.074	.041	.201	1.774	.080
Age of youngest child in care	.089	.069	.152	1.297	.199
Head Start or Early Head Start slots?	-.008	.078	-.012	-.103	.918
Coordinator got specialized training & talked with provider about a child or worked with a child on one of last two visits	.085	.100	.097	.844	.401
Observations: 80 = 80 network-affiliated cases					
R-square: 0.071					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a child or worked with a child on one of last two visits—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.035	.086		35.301	.000
Provider relevant education+	.076	.041	.208	1.861	.067
Age of youngest child in care	.102	.066	.173	1.551	.125
Observations: 80 = 80 network-affiliated cases					
R-square: 0.062					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a parent on one of last two visit—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.493	.192		18.201	.000
Provider relevant education*	.174	.080	.227	2.174	.033
Age of youngest child in care+	.221	.130	.181	1.703	.093
Head Start or Early Head Start slots?	.077	.156	.054	.493	.623
Coordinator got specialized training and talked with provider about a parent on one of last two visits**	.669	.225	.325	2.977	.004
Observations: 80 = 80 network-affiliated cases					
R-square: 0.214					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a parent on one of last two visit—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.540	.166		21.325	.000
Provider relevant education*	.174	.080	.227	2.184	.032
Age of youngest child in care+	.209	.127	.171	1.647	.104
Coordinator got specialized training and talked with provider about a parent on one of last two visits***	.705	.212	.343	3.331	.001
Observations: 80 = 80 network-affiliated cases					
R-square: 0.211					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a parent on one of last two visit—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.055	.098		31.170	.000
Provider relevant education+	.068	.041	.185	1.661	.101
Age of youngest child in care	.083	.066	.141	1.243	.218
Head Start or Early Head Start slots?	-.046	.079	-.067	-.577	.566
Coordinator got specialized training and talked with provider about a parent on one of last two visits+	.219	.115	.222	1.904	.061
Observations: 80 = 80 network-affiliated cases					
R-square: 0.105					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and talked with provider about a parent on one of last two visit—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.027	.085		35.686	.000
Provider relevant education+	.068	.041	.185	1.669	.099
Age of youngest child in care	.090	.065	.153	1.382	.171
Coordinator got specialized training and talked with provider about a parent on one of last two visits+	.197	.108	.200	1.823	.072
Observations: 80 = 80 network-affiliated cases					
R-square: 0.101					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered regular provider meetings, telephone help and formal channels for provider feedback—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.403	.186		18.247	.000
Provider relevant education*	.168	.078	.220	2.151	.035
Age of youngest child in care*	.265	.126	.216	2.108	.038
Head Start or Early Head Start slots?	.193	.144	.136	1.337	.185
Coordinator got specialized training AND the network offered regular provider meetings, telephone help and formal channels for provider feedback**	.850	.239	.360	3.563	.001
Observations: 80 = 80 network-affiliated cases					
R-square: 0.248					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered regular provider meetings, telephone help and formal channels for provider feedback—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.403	.186		18.247	.000
Provider relevant education*	.168	.078	.220	2.151	.035
Age of youngest child in care+	.265	.126	.216	2.108	.038
Head Start or Early Head Start slots?	.193	.144	.136	1.337	.185
Coordinator got specialized training AND the network offered regular provider meetings, telephone help and formal channels for provider feedback	.850	.239	.360	3.563	.001
Observations: 80 = 80 network-affiliated cases					
R-square: 0.248					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 38

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered regular provider meetings, telephone help and formal channels for provider feedback—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.027	.097		31.095	.000
Provider relevant education+	.067	.041	.184	1.651	.103
Age of youngest child in care	.097	.066	.166	1.486	.142
Head Start or Early Head Start slots?	-.006	.075	-.009	-.085	.933
Coordinator got specialized training AND the network offered regular provider meetings, telephone help and formal channels for provider feedback+	.240	.125	.213	1.931	.057
Observations: 80 = 80 network-affiliated cases					
R-square: 0.106					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered regular provider meetings, telephone help and formal channels for provider feedback—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.023	.085		35.679	.000
Provider relevant education+	.067	.041	.183	1.660	.101
Age of youngest child in care	.098	.064	.168	1.526	.131
Coordinator got specialized training AND the network offered regular provider meetings, telephone help and formal channels for provider feedback+	.240	.123	.212	1.942	.056
Observations: 80 = 80 network-affiliated cases					
R-square: 0.106					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered direct education to providers and coordinator worked with/talked about a child on visit to home and network offered regular provider meetings, telephone help and formal channels for provider feedback—Full Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.437	.188		18.314	.000
Provider relevant education*	.186	.078	.243	2.374	.020
Age of youngest child in care+	.238	.127	.194	1.875	.065
Head Start or Early Head Start slots?	.162	.146	.115	1.112	.270
Coordinator got specialized training AND network provided direct education AND coordinator worked with/talked about a child on one of last two visits AND talked about a parent on one of the last two visits AND network offered regular provider meetings, telephone help and formal channels for provider feedback***	.869	.256	.347	3.396	.001
Observations: 80 = 80 network-affiliated cases					
R-square: 0.238					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered direct education to providers and coordinator worked with/talked about a child on visit to home and network offered regular provider meetings, telephone help and formal channels for provider feedback—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= FDCRS	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.538	.164		21.506	.000
Provider relevant education*	.189	.078	.246	2.405	.019
Age of youngest child in care+	.216	.126	.176	1.718	.090
Coordinator got specialized training AND network provided direct education AND coordinator worked with/talked about a child on one of last two visits AND talked about a parent on one of the last two visits AND network offered regular provider meetings, telephone help and formal channels for provider feedback***	.906	.254	.361	3.563	.001
Observations: 80 = 80 network-affiliated cases					
R-square: 0.225					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered direct education to providers and coordinator worked with/talked about a child on visit to home and network offered regular provider meetings, telephone help and formal channels for provider feedback—Full Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.036	.098		31.075	.000
Provider relevant education+	.073	.041	.198	1.780	.079
Age of youngest child in care	.091	.066	.154	1.369	.175
Head Start or Early Head Start slots?	-.014	.076	-.021	-.185	.854
Coordinator got specialized training AND network provided direct education AND coordinator worked with/talked about a child on one of last two visits AND talked about a parent on one of the last two visits AND network offered regular provider meetings, telephone help and formal channels for provider feedback+	.233	.133	.194	1.752	.084
Observations: 80 = 80 network-affiliated cases					
R-square: 0.099					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Table 37

Network Coordinator Specialized Training and Network Services and Quality of Care in Network-Affiliated Family Child Care Homes: Coordinator got specialized training and the network offered direct education to providers and coordinator worked with/talked about a child on visit to home and network offered regular provider meetings, telephone help and formal channels for provider feedback—Reduced Model

	Unstandardized		Standardized		Significance
Dependent= Arnett	**B**	**Std Err**	**Beta**	**t**	**Std Error**
Constant***	3.027	.085		35.631	.000
Provider relevant education+	.072	.041	.197	1.787	.078
Age of youngest child in care	.093	.065	.158	1.425	.158
Coordinator got specialized training AND network provided direct education AND coordinator worked with/talked about a child on one of last two visits AND talked about a parent on one of the last two visits AND network offered regular provider meetings, telephone help and formal channels for provider feedback+	.230	.131	.192	1.754	.083
Observations: 80 = 80 network-affiliated cases					
R-square: 0.099					
+ significant at p ≤ .10 * significant at p ≤ .05 ** significant at p ≤ .01 *** significant at p≤ .001					

Additional Output for Results Reported in Text

For additional regression output for variables that were not significantly related to quality of care such as material resources and business services, please contact Juliet Bromer (jbromer@erikson.edu).

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