
Alternative Pathways in Family Child Care Quality Rating and Improvement Systems

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Abstract

As research continues to underscore the positive impact high-quality early childhood programs have on young children, numerous states have implemented quality rating and improvement systems (QRIS) to measure and improve the services young children receive across a wide range of early learning settings. These state systems range from two to five levels with five levels being most common. While the overarching goal of all QRIS is to increase the quality of early learning and development services provided to children, state systems vary greatly in their design. At the time of this study, Illinois Quality Counts-QRS was a four-star system in which licensed family child care programs could follow one of two pathways to achieve a three-star level. One pathway involved achieving an average score of 4.25 on both the *Family Child Care Environment Rating Scale-Revised* (FCCERS-R) and the *Business Administration Scale for Family Child Care* (BAS). The second pathway required programs to achieve National Association for Family Child Care (NAFCC) accreditation status. This study, conducted in the fall of 2011, looked at the FCCERS-R and BAS scores of 31 NAFCC-accredited family child care programs participating in Illinois QRS at the three-star level and the likelihood of each program to qualify for a three-star level based on FCCERS-R and BAS scores without NAFCC accreditation. Data analysis revealed that only one program would have qualified for a three-star rating based on both FCCERS-R and BAS scores. The findings of this study suggest that the NAFCC accreditation pathway to a three-star level is not an exact proxy of program quality as measured by validated assessment tools such as the FCCERS-R and BAS.

Introduction

Numerous studies have linked high-quality child care programs with positive developmental outcomes for children, including better cognitive, language, and social functioning (Currie & Thomas, 1995; National Association of Child Care Resource and Referral Agencies, 2010; Peisner-Feinberg et al., 1999; Vandell & Wolfe, 2000). Unfortunately, the research has also found that many children, especially low-income children, receive low-quality care (Espinosa, 2002; Helburn & Howes, 1996; Karoly, Ghosh-Dastidar, Zellman, Perlman, & Fernyhough, 2008; Peisner-Feinberg et al., 1999).

The focus on the quality of child care over the past two decades has led researchers, practitioners, and policymakers across the United States to design and implement statewide quality rating and improvement systems (QRIS). A state QRIS is a systematic approach to assessing, improving, and communicating the level of quality across various early care and education settings (Mitchell, 2005). A determination of program quality is based on a combination of structural and process measures including the learning environment, interactions, ratio and group size, program administration, and staff qualifications. Twenty-eight states currently have a QRIS, and a number of others are in the process of piloting their QRIS. While this suggests a national trend in recognizing the importance of assessing and improving quality in early childhood programs, states differ greatly in the design of their systems.

This study focused on licensed family child care, that is, regulated child care that is offered in a home setting. Of the 24 state QRIS that have standards for family child care, 19 include

accreditation status from the National Association for Family Child Care (NAFCC) in their system, 21 include the *Family Child Care Environment Rating Scale–Revised* (FCCERS–R), and 8 include the *Business Administration Scale for Family Child Care* (BAS).

States use these measures in a variety of ways. Some states conduct formal assessments using the FCCERS–R and/or the BAS with a threshold score (minimum) required at varying quality rating levels, while other states require only self-assessments. Some states use a combination of FCCERS–R and BAS scores along with NAFCC accreditation status; other states use accreditation status as an alternative pathway or proxy to achieving a threshold score on one or both of the assessment tools.

At the time this study was conducted, in the fall of 2011, Illinois administered a voluntary quality rating system, Illinois Quality Counts–QRS, composed of four star levels.¹ Star-rating levels for licensed family child care included measures of quality addressing the learning environment, program administration, provider qualifications, and professional development. Each star level within the system built on the requirements of the star level before it with the exception of the three-star level, where current NAFCC accreditation served as an alternative pathway to achieving the three-star rating (Illinois Network of Child Care Resource and Referral Agencies, n.d.-c). For licensed family child care programs in Illinois, a three-star rating could be reached in two ways: 1) the program received a rating of 4.25 on both the FCCERS–R and the BAS, or 2) the program demonstrated current accreditation in good standing through the NAFCC (Illinois Network of Child Care Resource and Referral Agencies, n.d.-c).

Limited research has examined state QRIS models for family child care programs (Barnard, Smith, Fiene, & Swanson, 2006; Norris & Dunn, 2004; Zellman & Perlman, 2008). Some research (e.g., Barnard et al., 2006; Norris & Dunn, 2004) was conducted concerning the validity of state systems that used measures of classroom quality as well as accreditation status to determine ratings. These studies, however, used the *Family Day Care Environment Rating Scale* (FDCERS), published in 1989, which was substantially revised in 2007 and replaced with the current *Family Child Care Environment Rating Scale–Revised* (Harms, Cryer, & Clifford, 2007).

In commenting on the ways in which quality components are weighted in QRIS, Zellman and Perlman (2008) state, “Some states simply decide to assign equal points to each component, because there is no empirical basis for differentiation. Once points are assigned, some system designers come up with ‘best guesses’ concerning where to cut scores in assigning the rating” (p. 40). Research is needed that looks specifically at the alignment of NAFCC accreditation, the FCCERS–R, and the BAS within state QRIS. Doing so will provide states with empirical evidence to support the weight given to accreditation status in QRIS and to help define valid threshold scores for FCCERS–R and BAS assessments.

The purpose of this study was to determine if Illinois family child care assessment and accreditation pathways to the three-star level represented empirically equal measures of quality in Illinois Quality Counts–QRS and, further, to examine the relationships between the three measures used to determine quality in licensed family child care programs participating in the Illinois QRS model: FCCERS–R, BAS, and NAFCC accreditation.

Issues Related to Quality in Early Care and Education

The Case for Measuring Quality

Research suggests that the level of quality in early care and education settings varies greatly. Unfortunately, much of that research also suggests that the majority of children are in settings

considered to be less than adequate in quality (Espinosa, 2002; Helburn & Howes, 1996; Peisner-Feinberg et al., 1999). To date, numerous studies have demonstrated both the short- and long-term benefits of high-quality early childhood education. Positive educational outcomes have been found in multiple studies (Peisner-Feinberg et al., 1999; Vandell et al., 2010) in which participation in high-quality early care and education programs has been associated with better performance on intelligence, language, and school achievement tests; less grade retention; decreased high school dropout rates; and decreased use of special education services. Longitudinal studies that have followed participants into adulthood have found significant links between attending high-quality early education programs and more stable living arrangements, higher income, reduced use of drugs, and less criminal activity over the participant's life span (Reynolds, Temple, Robertson, & Mann, 2002; Schweinhart, 2005; Yoshikawa, 1995). Both the short- and long-term benefits associated with high-quality early childhood programs make a strong case for supporting programs to increase their quality.

QRIS Standards and Accountability Measures for Family Child Care

In many states, QRIS is the primary vehicle for measuring and improving the quality of care and education that young children receive. All QRIS consist of at least five common elements: program standards, accountability measures, program and practitioner support, financial incentives, and parent and consumer education (Mitchell, 2005). Program standards and accountability measures in family child care are examined more closely below.

Standards in quality rating and improvement systems differ to some degree from state to state but generally include commonly accepted or research-based indicators of program quality that have been linked to positive outcomes for children (Satkowski, 2009). Most states regulate child care through standards identified in their licensing systems. Although specific licensing standards differ from state to state, federal law requires every state to have standards that protect the health and safety of children in three areas: the prevention and control of infectious diseases, building and physical premise safety, and health and safety appropriate to the program setting (National Association of Child Care Resource and Referral Agencies, n.d.). Licensed status typically allows a program to meet the quality standards at the first level of a QRIS, with standards at the higher levels representing incremental increases in quality (National Association of Child Care Resource and Referral Agencies, 2010). In addition to licensing compliance, the majority of state QRIS that include family child care also include standards related to the child care environment, staff qualifications, family partnerships, accreditation, and administration and management (Tout et al., 2010).

Accountability measures, the ways in which quality standards are measured in family child care programs, differ from state to state. However, most states incorporate accreditation from the National Association for Family Child Care (NAFCC) and the *Family Child Care Environment Rating Scale-Revised* (FCCERS-R) as part of their state QRIS. States have also begun to include the *Business Administration Scale for Family Child Care* (BAS) into their systems to measure business and professional practices.

National Association for Family Child Care Accreditation. Attaining national accreditation is a voluntary process in which programs achieve accredited status by demonstrating evidence of meeting various standards of quality. In the United States, the National Association for Family Child Care (NAFCC) is the accrediting body for family child care programs. NAFCC accreditation includes 289 standards organized into five content areas: relationships, environment, developmental learning activities, safety and health, and professional and business practices (National Association for Family Child Care, n.d.-d). NAFCC accreditation is a four-step process consisting of application, self-study, observation, and decision phases. During the self-study

phase, providers implement the quality improvements needed to meet NAFCC's standards. At the observation stage, a trained validator observes the program and verifies documentation. NAFCC requires providers to pass all of the required standards as well as a predetermined percentage of the remaining standards (National Association for Family Child Care, n.d.-a). In 2013, the fee for NAFCC accreditation ranged between \$800 and \$1,125 (National Association for Family Child Care, n.d.-b).

NAFCC accreditation is also used in several ways in state QRIS models. For the majority of states, achieving accredited status is a component at the highest or second-highest level (National Association for Family Child Care, n.d.-c; Tout et al., 2010). Accredited status may be presented as the only requirement for a certain level or as one of multiple components needed to reach a specific QRIS level. In some states, application for or participation in the self-study stage of accreditation is included at lower rating levels and achieving accreditation status is recognized as the top level. Some states use accreditation status as an alternative pathway or proxy to achieve a specific quality level.

Family Child Care Environment Rating Scale–Revised (FCCERS–R). The FCCERS–R was designed to measure the quality of the learning environment in a family child care program. The tool includes 38 items that are rated during an observation in the family child care home. The 38 items are divided into seven subscales: space and furnishings, personal care routines, listening and talking, activities, interaction, program structure, and parents and provider (Harms et al., 2007). Each item is scored on a seven-point scale with a score of 1 considered *inadequate*, 3 considered *minimal*, 5 considered *good*, and 7 considered *excellent*. Item scores are aggregated to determine an overall quality score for a program (Harms et al., 2007). The FCCERS–R is used in state QRIS in a variety of ways. Many states require programs to reach a certain average score for a specific quality rating while others include both an average score and a “no score below” rule. A “no score below” rule requires that whatever the overall average, certain subscales or items should not fall below an identified score (Tout et al., 2010).

Business Administration Scale for Family Child Care (BAS). The BAS was designed to measure the quality of business and professional practices in family child care programs. The BAS consists of 10 items: qualifications and professional development, income and benefits, work environment, fiscal management, recordkeeping, risk management, provider-parent communication, community resources, marketing and public relations, and provider as employer (Talan & Bloom, 2009). Each item consists of three to five indicator strands that are rated during an interview with the provider. If the provider is not an employer as defined in the BAS, then item 10 (provider as employer) is considered nonapplicable. Following the interview, the quality ratings are verified through a review of the program's documentation. Like the FCCERS–R, items are scored on a seven-point scale with a score of 1 considered *inadequate*, 3 considered *minimal*, 5 considered *good*, and 7 considered *excellent*. Item scores are aggregated to determine an overall score for the family child care program (Talan & Bloom, 2009).

According to McKelvey et al. (2010), “Strong leadership and well-informed administrative practices contribute to the global quality of the program, which supports child development” (p. 11). In some states, global quality is beginning to be viewed through this widened lens, with the result that administrative practices in family child care are measured by incorporating the BAS into QRIS (McCormick Center for Early Childhood Leadership, 2012a). The BAS is used in a variety of ways in QRIS, including formal assessments with threshold scores and self-assessments and as part of state administrator credentialing initiatives embedded in QRIS models (McCormick Center for Early Childhood Leadership, 2012b).

Illinois Quality Counts–QRS for Licensed Family Child Care Programs

Illinois introduced its quality rating system in July 2007 as a voluntary QRS funded by the Illinois Department of Human Services (IDHS) that included center-based programs as well as licensed and licensed-exempt home-based programs. Licensed child care centers and licensed family child care homes were eligible to receive up to four stars. Illinois Quality Counts–QRS also included licensed-exempt family child care; however, licensed-exempt providers were eligible to achieve one of three-tiered levels based solely on participation in prescribed professional development training leading to the Level 1 ECE credential on the state’s early childhood career lattice (Illinois Network of Child Care Resource and Referral Agencies, n.d.-a).

The standard measures for licensed family child care included NAFCC accreditation status, the FCCERS–R, and the BAS. Licensed family child care programs were eligible to earn a three-star rating either by demonstrating NAFCC accreditation or by achieving an average FCCERS–R score of 4.25 and an average BAS score of 4.25 (Illinois Network of Child Care Resource and Referral Agencies, n.d.-c).

Prior to applying for Illinois QRS, all family child care providers were required to attend orientation training. This training introduced providers to the QRS and described the specific requirements involved at each star level and the available supports to help programs prepare for and earn stars (Illinois Network of Child Care Resource and Referral Agencies, n.d.-b). After completing the QRS orientation training, providers were required to attend training on the FCCERS–R. Providers applying for star level 3 or 4 were also required to attend training on the BAS.

Methods

This study examined the relationship between the three common accountability measures used in QRIS to assess quality in family child care homes: the FCCERS–R, BAS, and NAFCC accreditation.

Sample

The sample for this study consisted of 31 three-star rated family child care programs in Illinois QRS. The data for the programs came from two datasets. One data set included 18 programs. These programs had achieved a three-star rating and had made application to advance to level 4. The other data set consisted of 13 accredited three-star family child care programs that volunteered to be a part of the study. These programs were contacted from a public list of 35 three-star family child care programs participating in Quality Counts–QRS based on their accredited status.

Instrumentation

This study involved conducting a FCCERS–R assessment and a BAS assessment in each family child care program. NAFCC accreditation was already established for all of the family child care programs included in this study.

The FCCERS–R is a valid and reliable observation tool used to measure the quality of the learning environment of family child care programs. Illinois Quality Counts–QRS did not include the FCCERS–R “Parents and Provider” subscale because providers’ professional practices are more thoroughly measured by the BAS. The BAS is a valid and reliable tool used to measure business and professional practices in family child care programs. Individual item scores are averaged to calculate a total BAS score.

Procedures

After a provider agreed to participate in the study, appointments were scheduled to complete BAS and FCCERS–R assessments. BAS assessments involved a one- to two-hour interview of the provider followed by a review of documentation to verify the assessment ratings. All BAS assessors were trained to reliability by the BAS national anchors and maintained inter-rater reliability of 85% or above throughout the study. BAS interviews were completed over the phone or in person depending on the preference of the provider. The review of documentation took place at the family child care program where the assessor verified the ratings obtained during the interview through a review of current documents (e.g., written policies, family handbook, parent-provider contract, and promotional materials) or observation of program practices measured in the BAS.

The FCCERS–R assessments were conducted by members of the Quality Counts–QRS assessment team. FCCERS–R assessments involved a three-hour observation followed by a 30-minute interview of the provider. Both the observation and interview took place at the family child care program when children were present. All FCCERS–R assessors were trained by the authors of the tool and maintained inter-rater reliability of 85% or above throughout the study.

Data Analysis

Data from the participating programs and the Quality Counts–QRS database were combined and descriptive statistics were used to examine average BAS and FCCERS–R scores for each program as well as variances between programs. Descriptive statistics were also used to determine the percentage of family child care programs that received scores of 4.25 or higher on both the FCCERS–R and the BAS, the percentage of programs that received a score of 4.25 on the FCCERS–R but not the BAS, and the percentage of programs that received a score of 4.25 on the BAS but not the FCCERS–R.

Programs were then categorized into star levels based on both the combination of their FCCERS–R and BAS scores as well as by FCCERS–R and BAS scores individually. This allowed for a descriptive analysis of the number of programs that would qualify for star levels 1 through 4 based on both tools individually or combined.

Additionally, a correlational analysis was conducted to discern the strength of the relationship between average FCCERS–R and BAS scores. NAFCC does not report a program score, and this study did not include a control group of nonaccredited programs, so data analysis was limited in respect to inferential statistics.

Findings

Although there was a wide range in program scores for both the FCCERS–R and BAS, the average scores on both tools fell below the 4.25 thresholds required for three-star nonaccredited programs. As Table 1 demonstrates, the mean FCCERS–R score was 3.29 and the mean BAS score was 3.81.

Table 1
Mean FCCERS–R and BAS Scores for Accredited Programs

Assessment	<i>M</i>	<i>SD</i>	Range
FCCERS–R	3.29	.61	1.67 – 4.47
BAS	3.81	1.03	2.30 – 5.89

Table 2 shows the FCCERS–R and BAS threshold scores that were required to achieve all four of the star level ratings within Illinois Quality Counts–QRS. A threshold BAS score was required only at star levels 3 and 4, so star ratings for levels 1 and 2 are determined solely by a program's FCCERS–R score.

Table 2

FCCERS–R and BAS Threshold Scores Required for Each Star-Level

Star Rating	FCCERS–R Score	BAS Score
1	3.00	N/A
2	3.50	N/A
3	4.25	4.25
4	5.00	5.00

Table 3 shows the number of programs that would have qualified for the various star-level ratings based on their combined FCCERS–R and BAS scores (representing the assessment pathway) as well as FCCERS–R score alone and BAS score alone. As noted in this table, the data revealed that if these programs were awarded a star-level based on FCCERS–R and BAS scores, only 1 program would have qualified for a three-star rating; 13 programs would have qualified for a two-star rating; 11 programs would have qualified for a one-star rating; and 6 programs would not have qualified for any star rating. None of the programs in the sample would have qualified for a four-star rating based on composite scores for both tools.

Table 3

Frequency of Star-Level Ratings Based on Assessment Scores

QRIS Star	Combined Scores	FCCERS–R Score Alone	BAS Score Alone
No Star	6	6	20
1 Star	11	11	0
2 Star	13	12	0
3 Star	1	2	8
4 Star	0	0	3

Note: Because Illinois only requires a BAS score at the three- and four-star levels, programs that did not achieve a BAS score of 4.25 or higher were categorized based solely on their FCCERS–R score.

A correlational analysis was conducted between FCCERS–R scores and BAS scores. The value of the Pearson r was .35 ($p < .05$), indicating a moderate but significant relationship between the two program assessment tools.

Discussion

As the early childhood field moves forward in implementing and refining quality rating and improvement systems, research is needed to evaluate the validity of various system components. Without research examining the relationship between instrument scores and accreditation status, no empirical evidence exists to guide policymakers in the design and refinement of the criteria that define a state's differentiated levels of program quality.

The purpose of this study was to determine if the family child care assessment and accreditation pathways to the three-star level of quality in the Illinois QRS model represented empirically equal measures of quality. While the FCCERS–R, BAS, and NAFCC accreditation are all well-known measures of quality, the results of this study indicate that the assessment and accreditation pathways were not empirically equal. Specifically, if the accredited family child care programs in this study had been required to achieve their three-star rating through the assessment pathway, only one program would have qualified.

These findings underscore the importance of a clear rationale for the use of alternative pathways to achieving a quality rating in QRIS. Policymakers should be clear if alternative pathways stand as

distinct yet aligned measures of quality or whether being accredited is in fact a proxy for threshold scores.

This study does not suggest that any one pathway represents a superior measure of quality. Each measure of quality examined in this study is associated with advantages and disadvantages. Despite the fact that only one of the accredited family child care programs in this study met the 4.25 threshold score needed to achieve a three-star level through the assessment pathway, all of the programs in the sample demonstrated commitment to continuous quality improvement. It is common practice, and may also be good policy, for states to recognize accreditation status in lieu of achieving threshold scores on quality assessment tools. This approach acknowledges there are multiple pathways to improving program quality, recognizes the substantial investments made by programs to improve their quality through self-study and on-site verification, and saves states the expense of conducting reliable assessments in accredited programs.

Limitations and Suggestions for Future Research

Caution should be used when generalizing the results of this study. The study was conducted on a small sample of licensed family child care programs in Illinois that met specific criteria. Only programs that had attained a three-star rating in the Illinois Quality Counts-QRS through NAFCC accreditation were included, and as a requirement of their participation in the QRS, all had completed training on the FCCERS-R and the BAS. Additional research is needed looking at accountability measures used to improve the quality of family child care programs through QRIS. Specifically, studies are needed in other states examining the relationship between assessment thresholds and alternative pathways to quality in QRIS. Lastly, qualitative research looking at family child care providers' perceptions of the QRIS and their motivations for participation, particularly through accreditation, might provide policymakers with information regarding ways to increase QRIS participation and better support quality improvement.

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Note

1 The Illinois Quality Counts-Quality Rating System was launched in 2007. Effective July 2013, Quality Counts-QRS became ExceleRate Illinois QRIS. This change reflects an increased emphasis on program improvement (the "I" in QRIS) to enhance the learning and developmental outcomes for young children. The new cross-sector system includes early childhood programs in schools and centers. Programs in licensed family child care homes will be included in the new system in 2015.

References

- Barnard, Wendy; Smith, Wendy Etheridge; Fiene, Richard; & Swanson, Kelly. (2006, December). *Evaluation of Pennsylvania's Keystone STARS quality rating system in child care settings*. Pittsburg, PA: University of Pittsburg Office of Child Development, Pennsylvania State University Prevention Research Center.
- Currie, Janet, & Thomas, Duncan. (1995). Does Head Start make a difference? *American Economic Review*, 85,341-364.
- Espinosa, Linda M. (2002, November). *High-quality preschool: Why we need it and what it looks like*. *Preschool Policy Matters* (NIEER Policy Brief, Issue 1). New Brunswick, NJ: National Institute for Early Education Research.
- Harms, Thelma; Cryer, Debby; & Clifford, Richard M. (2007). *Family child care environment rating*

scale (Rev. ed.). New York: Teachers College Press.

Helburn, Suzanne W., & Howes, Carollee. (1996). Child care cost and quality. *Future of Children*, 6(2), 62–82.

Illinois Network of Child Care Resource and Referral Agencies. (n.d.-a). *License-exempt family homes*. Bloomington: Illinois Department of Human Services.

Illinois Network of Child Care Resource and Referral Agencies. (n.d.-b). *Licensed family group homes*. Bloomington: Illinois Department of Human Services.

Illinois Network of Child Care Resource and Referral Agencies. (n.d.-c). *Quality rating system – star levels: licensed family/group home child care providers*. Bloomington: Illinois Department of Human Services.

Karoly, Lynn A.; Ghosh-Dastidar, Bonnie; Zellman, Gail L.; Perlman, Michal; & Fernyhough, Lynda. (2008). *Prepared to learn: The nature and quality of early care and education for preschool-age children in California*. Santa Monica, CA: Rand Corporation.

McCormick Center for Early Childhood Leadership. (2012a). *Leadership matters*. Wheeling, IL: National Louis University.

McCormick Center for Early Childhood Leadership. (2012b). *Projects using the PAS and the BAS*. Wheeling, IL: National Louis University.

McKelvey, Lorraine; Chapin-Critz, Melanie; Johnson, Betsy; Bokony, Patti; Conners-Burrow, Nikki; & Whiteside-Mansell, Leanne. (2010, October). *Evaluating Arkansas' path to better child outcomes*. Little Rock: University of Arkansas for Medical Sciences, Partners for Inclusive Communities.

Mitchell, Anne W. (2005, July). *Stair steps to quality: A guide for states and communities developing quality rating systems for early care and education*. Alexandria, VA: United Way Success by 6.

National Association of Child Care Resource and Referral Agencies. (n.d.). *State child care licensing*. Arlington, VA: Author.

National Association of Child Care Resource and Referral Agencies. (2010). *Leaving children to chance: NACCRRRA's ranking of state standards and oversight of small family child care home*. Arlington, VA: Author.

National Association for Family Child Care. (n.d.-a). *NAFCC accreditation decision*. Salt Lake City, UT: Author.

National Association for Family Child Care. (n.d.-b). *NAFCC accreditation fees*. Salt Lake City, UT: Author.

National Association for Family Child Care. (n.d.-c). *National Association for Family Child Care accreditation*. Salt Lake City, UT: Author.

National Association for Family Child Care. (n.d.-d). *The quality standards for NAFCC accreditation*. Salt Lake City, UT: Author.

Norris, Deborah, & Dunn, Loraine. (2004, August). *"Reaching for the Stars" family child care home validation study*. Stillwater: Early Childhood Collaborative of Oklahoma.

Peisner-Feinberg, Ellen S.; Burchinal, Margaret R.; Clifford, Richard M.; Yazejian, Noreen; Culkin, Mary L.; Zelazo, Janice; . . . Rustici, Jean. (1999, October). *The children of the cost, quality, and outcomes study go to school: Technical report*. Chapel Hill: University of North Carolina at Chapel Hill.

Reynolds, Arthur J.; Temple, Judy A.; Robertson, Dylan L.; & Mann, Emily A. (2002). Age 21 cost-benefits analysis of the Title I Chicago Child-Parent Centers. *Educational Evaluation and Policy Analysis, 24*, 267–303. doi:10.3102/01623737024004267

Satkowski, Christina. (2009, April). *A stimulus for second-generation QRIS* (Issue Brief). Washington, DC: New American Foundation.

Schweinhart, Lawrence J. (2005). *The High/Scope Perry Preschool study through age 40: Summary, conclusion, and frequently asked questions*. Ypsilanti, MI: High/Scope Press.

Talan, Teri N., & Bloom, Paula. J. (2009). *Business administration scale for family child care*. New York: Teachers College Press.

Tout, Kathryn; Starr, Rebecca; Soli, Margaret; Moodie, Shannon; Kirby, Gretchen; & Boller, Kimberly. (2010, April). *Compendium of quality rating systems and evaluations*. Washington, DC: Office of Planning, Research and Evaluation, U.S. Department of Health and Human Services.

Vandell, Deborah Lowe; Belsky, Jay; Burchinal, Margaret; Steinberg, Laurence; Vandergrift, Nathan; & NICHD Early Child Care Research Network. (2010). Do the effects of early child care extend to age 15 years? Results from the NICHD study of early child care and youth development. *Child Development, 81*, 737–756. doi:10.1111/j.1467-8624.2010.01431.x.

Vandell, Deborah Lowe, & Wolfe, Barbara. (2000, November). *Child care quality: Does it matter and does it need to be improved?* (Special Report No. 7). Madison, WI: Institute for Research on Poverty.

Yoshikawa, Hirokazu. (1995). Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children, 5*(3), 51–75.

Zellman, Gail L., & Perlman, Michal. (2008). *Child care quality rating and improvement systems in five pioneer states: Implementation issues and lessons learned*. Santa Monica, CA: Rand Corporation.

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