DOI: 10.1002/imhj.21779

ARTICLE

WILEY

Quality home visits: Activities to promote meaningful interactions

Kere Hughes-Belding[1] | Carla A. Peterson[1] | Melissa Clucas Walter[2] | Neil Rowe[3] | Liuran Fan[4] | Leslie J. Dooley[1] | Chloe Steffensmeier[1] | Wen Wang[1] | Juan Bao[1] | Krista Goodman[5]

[1]Department of Human Development and Family Studies, Iowa State University, Ames, Iowa

[2]Human Development and Family Sciences, College of Health and Human Sciences, Northern Illinois University, DeKalb, Illinois

[3]Center for Public Partnerships and Research, University of Kansas, Lawrence, Kansas

[4]School of Educational Science, Yangzhou University, Yangzhou, China

[5]Williamsburg Community Schools, Williamsburg, Iowa

Correspondence
Kere Hughes-Belding, Department of Human Development and Family Studies, 2330 Palmer Building, 2222 Osborn Drive, Iowa State University, Ames, IA 50011-1084.
Email: kereh@iastate.edu

Funding information
Health Resources and Services Administration Number: D89MC23537

ABSTRACT

Examination of and support for specific practices that promote high-quality home visiting are essential as family support programs continue to expand across the country. The current study used direct observation of 91 home visits across 41 home visitors to examine relations among interaction partners, content of the interactions, the home-visitors' activities, and quality of home-visitors' practices and family-members' engagement within programs funded by the Maternal, Infant, and Early Childhood Home Visiting program. More time spent in triadic interactions focused on child-related content, as measured by the Home Visit Rating Scale-Revised, was related to higher quality of family engagement in home visits, as measured with the Home Visit Observation Rating Scales. Time spent in adult-focused interactions and administrative tasks, however, was related to lower quality of home-visiting practices and family engagement. Implications for research and practice are discussed.

KEYWORDS

home-visit quality, intervention strategies, observational data collection, triadic interactions

RESUMEN

A medida que los programas de apoyo familiar continúan expandiéndose a lo largo del país, se hace esencial examinar y apoyar prácticas específicas que promueven la alta calidad de las visitas a casa. El presente estudio usó observaciones directas de 91 visitas a casa llevadas a cabo por 41 visitadores con el fin de examinar las relaciones entre la participación de todas las partes involucradas, el contenido de las interacciones, las actividades de los visitadores a casa, y la calidad tanto de las prácticas de los visitadores como de la participación de los miembros de la familia dentro de los programas subvencionados por MIECHV. Más tiempo empleado en interacciones tríadicas enfocadas en contenidos relacionados con el niño, tal como se midió por medio de las Escalas Revisadas de Evaluación de Visitas a Casa (HVOF-R; McBride y Peterson, 1996), estuvo relacionado con más alta calidad de la participación de la familia en las visitas a casa, tal como se midió por medio de las Escalas de Evaluación de la Observación de Visitas a Casa (HOVRS; Roggman et al., 2014). El tiempo empleado en interacciones enfocadas en los adultos y tareas administrativas, sin embargo, estuvo relacionado con más baja calidad de las prácticas de visita a casa y participación de la familia. Se discuten las implicaciones para la investigación y la práctica.

PALABRAS CLAVES

calidad de la visita a casa, interacciones tríadicas, estrategias de intervención, recolección de información de observaciones

RÉSUMÉ

L'examen et le soutien de pratiques spécifiques qui promeuvent la visite à domicile de qualité sont essentiels alors que les programmes de soutien à famille continuent de se développer aux Etats-Unis. Cette étude a utilisé une observation directe de 91 visites à domicile effectuées par 41 visiteurs afin d'examiner les relations entre les partenaires d'interaction, le contenu des interactions, les activités des visiteurs ou visiteuses à domicile, et la qualité des pratiques des visiteurs ou visiteuses à domicile ainsi que l'engagement des membres de la famille au sein des programmes américains de visite à domicile subventionnés par le programme américain *Maternal, Infant, and Early Childhood Home Visiting*. Plus de temps passé dans les interactions triadiques mettant l'accent sur le contenu lié à l'enfant tel qu'il est mesuré par la version révisée de l'*Echelle d'Evaluation de la Visite à Domicile* (HVOF-R; McBride & Peterson, 1996) a été lié à une plus grande qualité de l'engagement de la famille durant les visites à domicile telles qu'elles ont été mesurées au moyen des *Echelles d'Evaluation de l'Observation de la Visite à Domicile* (HOVRS; Roggman et al., 2014). Le temps passé en interactions avec les adultes et en tâches administratives étaient lié à des pratiques de visite à domicile et à un engagement familial de moindre qualité. Les implications pour les recherches et la pratique sont discutées.

MOTS CLÉS

Qualité de la visite à domicile, interactions triadiques, Stratégies d'intervention, Collecte de données d'observation

ZUSAMMENFASSUNG

Die Untersuchung und Unterstützung spezifischer Praktiken, die einen qualitativ hochwertigen Hausbesuch fördern, ist unerlässlich, da die Programme zur Unterstützung der Familien im ganzen Land weiter ausgebaut werden. Die aktuelle Studie nutzte die direkte Beobachtung von 91 Hausbesuchen bei 41 Hausbesuchern, um die Beziehungen zwischen den Interaktionspartnern, den Inhalt der Interaktionen, die Aktivitäten der Hausbesucher, die Qualität der Hausbesuchspraktiken und das Engagement der Familienmitglieder in „MIECHV"- finanzierten Programmen zu untersuchen. Wurde mehr Zeit in triadischen Interaktionen, die auf kindbezogene Inhalte fokussierten, verbracht – gemessen anhand der Home Visit Rating Scale-Revised (HVOF-R; McBride & Peterson, 1996), so zeigte sich eine höhere Qualität des familiären Engagements bei Hausbesuchen – gemessen anhand der Home Visit Observation Rating Scales (HOVRS; Roggman et al., 2014). Die Zeit, die mit erwachsenenorientierten Interaktionen und Verwaltungsaufgaben verbracht wurde, war jedoch mit einer geringeren Qualität der Hausbesuchspraktiken und einem geringeren familiären Engagement verbunden. Es werden Implikationen für Forschung und Praxis diskutiert.

STICHWÖRTER

Hausbesuchsqualität, triadische Interaktionen, Interventionsstrategien, Sammlung von Beobachtungsdaten

抄録

良質な家庭訪問を促進する特異的な実践を調べ支援することは、家族支援プログラムが国内に広がり続ける状況において不可欠である。今回の研究では、パートナーの相互作用、相互作用の内容、家庭訪問者の活動、家庭訪問者の実践の質、MIECHV資金によるプログラムへの家族メンバーの関わり合いとの間の関連について調査するために、41人の訪問者による91の家庭訪問の直接観察を用いた。家庭訪問評価スケール改訂編(HVOF-R; McBride と Peterson による, 1996年)によって評価された子どもに関連する内容に焦点をあてた三者の相互作用に、より多くの時間を費やすことは、家庭訪問観察スケール (HOVRS; Roggman らによる, 2014年)によって評価された家庭訪問において、より良質な家族への関わり合いをもたらすことに関連した。しかしなが

ら、成人に焦点をあてた相互作用と経営上の任務に時間を費やすことは、より低い質の家庭訪問実践と家族への関わり合いに関連した。調査と研究のための示唆が議論される。

キーワード
家庭訪問の質, 三者の相互作用, 介入方策, 観察データ収集

摘要
隨著家庭支援計劃繼續在全國擴展, 檢查和支持促進高質量家訪的具體做法至關重要。本研究使用41個家庭訪客直接觀察的91次家訪, 以檢查互動夥伴之間的關係、互動的內容、家庭訪客的活動、家庭訪客的實踐質量和家庭成員在MIECHV資助計劃中的參與。家庭訪問評定量表 - 修訂版 (HVOF-R; McBride和Peterson, 1996) 測量的關於兒童三元互動的時間與家庭訪問評定量表 (HOVRS; Roggman等, 2014) 的家庭參與質量有關。然而, 以成人為中心的互動和行政任務所花費的時間, 與較低的家庭訪問實踐和家庭參與質量有關。作者討論結果對研究和實踐的影響。

關鍵詞
家訪質量, 三元互動, 干預策略, 觀察數據收集

ملخص
مع توسع وامتداد برامج دعم الأسرة أصبح من الضروري النظر في الممارسات المحددة التي تشجع علي الزيارات المنزلية ذات الجودة العالية ودعمها. استخدمت الدراسة الحالية الملاحظة المباشرة على 91 زيارة منزلية عبر 41 زائر محلي لدراسة العلاقات بين شركاء التفاعل ، ومحتوي التفاعلات ، وأنشطه الزوار المنزليين ، وجودة ممارسات الزوار المنزليين وافراد أسرهم المشاركين ضمن البرامج الممولة التابعة للزيارات المنزلية للأمهات والرضع والطفولة المبكرة (MIECHV) . المزيد من الوقت المستغرق في التفاعلات الثلاثية كان يتركز علي المحتوي المتعلق بالأطفال وفقا لمقياس تقييم الزيارة المنزلية-المنقح(HVOF) كما في أبحاث (ماكبرايد وبيترسون 1996) وكان مرتبطا بالمستوى الأعلى من المشاركة العائلية وفقا لمقياس تقييم ملاحظة الزيارة المنزلية (HOVRS-روجمان وزملاءه 2014) . أما الوقت المستغرق في التفاعلات والمهام الاداريه التي تركز علي الكبار كان مرتبطا بالجودة الأقل لممارسات الزيارات المنزلية والمشاركة الأسرية. وتناقش الدراسة التطبيقات المترتبة علي البحث والممارسة.

الكلمات الرئيسية
جوده الزيارة المنزلية ، التفاعلات الثلاثية ، استراتيجيات التدخل ، جمع بيانات الملاحظة

1 | INTRODUCTION

Family support programs designed to optimize child health and development, prevent child maltreatment, and promote family well-being, usually delivered via home visits, are being implemented around the world (Engle et al., 2011). Home visiting programs, used in the United States for more than a century (Gomby, Larson, Lewit, & Berman, 1993), expanded rapidly when the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program was established as part of the Patient Protection and Affordable Care Act, 2010 (Rodrigue & Reeves, 2015). Recently reauthorized, the MIECHV served nearly 80,000 families in 2017 (Health Resources and Services Administration, 2017). More than two million U.S. families receive home-visiting services currently, but still fewer than 20% of children living in poverty are being served (Lanier, Maguire-Jack, & Welch, 2015). Enthusiasm for home-visiting services is building, but so are expectations. Interest in the quality of services and outcomes for participants is, understandably, high given the investments being made. In addition, a focus on precision home visiting includes a call to understand key ingredients necessary for effective (high-quality) home visits (Home Visiting Applied Research Collaborative, 2018).

1.1 | Assumptions guiding home-visiting programs

Home-visiting programs are undergirded by the ecological model of human development (Bronfenbrenner, 1961, 1994), which posits that a child's development is influenced most directly and strongly by daily interactions, primarily with family members. Strong research evidence has demonstrated

that responsive and stimulating caregiving promotes healthy child development (Bornstein & Tamis-LeMonda, 1989) even among children facing considerable risks (Egeland, Carlson, & Sroufe, 1993; Werner, 2000). A theory of change guiding evidence-based home-visiting programs (Sama-Miller et al., 2018) reflects the ecological model, as these programs are designed to help families enhance their children's outcomes and strengthen relationships by building parenting and interaction skills and using resources wisely; that is, working through the parent to optimize the child's development (Raikes et al., 2014). Because of this, home-visiting programs are sometimes described as an indirect approach to promoting child health and development (Peterson, Luze, Eshbaugh, Jeon, & Kantz, 2007).

Empirical relations among home-visit activities and outcomes (Peterson et al., 2013; Raikes et al., 2006) suggest home visitors strengthen parenting skills most effectively when they provide information and support while engaging the parent and child together in triadic interactions and facilitating positive parent–child interactions (McCollum & Yates, 1994). This reflects respect for the primacy of the parent–child relationship and sets the stage for collaborative planning between parents and home visitors. On a practical note, triadic interactions allow home visitors to observe families interacting during typical daily routines and support parents, via coaching, while they practice new skills and interaction strategies. These are the very practices recommended for quality home-visiting services (Hughes & Peterson, 2008; Roggman, Boyce, & Innocenti, 2008) and used successfully in family-guided, routines-based early intervention (Friedman, Woods, & Salisbury, 2012; Hughes, 2005). Home visitors need considerable skill, however, to develop a trusting, collaborative, and goal-directed relationship with the child's parent(s) and engage them actively in home-visit activities (Korfmacher et al., 2008; Roggman et al., 2016).

1.2 | What do we know about home-visit processes and quality?

Home-visiting programs, as implied by their name, are delivered in families' homes for a number of reasons. First, families tend to be most comfortable in their own homes, and trusting relationships among the home visitor and family members are the foundation of home-visiting programs (Korfmacher et al., 2008). Next, working in the home helps the practitioner understand the family's goals, devise individualized support strategies that can be embedded in daily activities, and provide coaching and guidance to family members as they practice these new skills (Friedman et al., 2012). Home-visiting programs generally target families facing challenges, and home visitors are expected to individualize services. In addition, transportation challenges can inhibit families from receiving services in clinics. A high percentage of families participating in MIECHV-funded programs face multiple challenges, as they live in poverty (72%), have a high-school diploma or less education (65%), and rely on Medicaid or the Children's Health Insurance Program to access healthcare (72%; Health Resources and Services Administration, 2017).

Evaluations of model home-visiting programs have shown positive outcomes across multiple areas of family functioning and child development (Health Resources and Services Administration, 2017; Sama-Miller et al., 2018; Sweet & Appelbaum, 2004), but home-visit quality varies considerably (Jones Harden, Chazan-Cohen, Raikes, & Vogel, 2012). Quantity, quality, and content of home visits are critical aspects of implementation, with more positive outcomes related to higher levels of family engagement and greater focus on child development (Peterson et al., 2013; Raikes et al., 2006).

Attention to evaluation of home-visiting programs is increasing, but much evaluation is designed to provide a broad overview of services and outcomes. Many home-visiting models have not demonstrated effectiveness through multiple high-quality studies, and little evidence is available to explain the differential effectiveness of home-visiting programs across families with different characteristics (Sama-Miller et al., 2018). Perhaps more important, explicit articulation of model components essential for program success is missing from research on home-visiting programs, as is true across the early childhood services system (Martinez-Beck, 2013). Evaluations designed to examine program fidelity generally do not identify program elements key to effectiveness or fully describe replication requirements or strategies needed for program improvement (Martinez-Beck, 2013). These are the data that program administrators and practitioners need to clearly describe program activities; recruit, train, and support home visitors; and assess program effectiveness—in short, to ensure program efficacy and engage in continuous program-improvement efforts.

The current study was undertaken to help fill gaps in knowledge about key ingredients of home-visiting services, specifically by examining how specific intervention activities are related to home-visit quality. Two observational measures were used to provide fine-grained descriptions and assessments of family-support home visits delivered under the auspices of the MIECHV. The Home Visit Rating Scales (HOVRS; Roggman et al., 2014)[1] yields global quality scores, and the Home Visit Observation Form-Revised (HVOF-R; McBride & Peterson, 1996) details specific home-visit activities. Examination of the intersection of data from these two observational systems was undertaken to provide evidence-based guidance for improving the quality of home visits. The specific research questions were:

RQ1: What is the distribution of home-visit intervention activities and quality across MIECHV home visits?

RQ2: How do home-visit intervention activities relate to home-visit quality?

2 | METHOD

Observations were made of home visits delivered through MIECHV-funded programs in one Midwestern state. Members of the research team and home-visiting program staff members collaborated to recruit family participants, plan data-collection activities, and interpret preliminary findings. Research team members were not, however, involved in design or implementation of the home-visiting programs.

Ninety-one home visits delivered by 41 home visitors were observed. Home visitors were employed by agencies implementing three program models: Early Head Start (EHS; n = 8), Nurse-Family Partnership (NFP; $n = 5$), and Healthy Families America (HFA; $n = 28$). Home-visit supervisors recorded one home visit with each participating family annually and sent that recording to the research team; the current study uses the first recorded home visit after the child's birth or the family's enrollment.

2.1 | Participants

Participants included 90 families who received MIECHV-funded home-visiting services and their home visitors (One family had two visits with two different home visitors.) Families had low income levels, with almost half (48%) reporting $10,000 or less income per year (M = $12,879, SD = $12,583). The majority of primary caregivers were unpartnered (83%), female (99%), and self-identified as White (88%). Most primary caregivers had a high-school diploma/GED or less education at enrollment (68%). The focal child in each family was less than 1 year old, and in all observations included in analyses presented here, the child was awake and available for interaction during at least 25% of the home visit, and the primary language spoken was English.

All home visitors were femal; 87% self-identified as White. Seventy-seven percent were between 20 and 40 years of age, and 65% were currently parenting a child under age 18 years. The majority spoke English as their only language (84%) and had a 4-year degree or higher education (92%). The number of observations per home visitor ranged from one to seven ($M = 2.22$, $SD = 1.70$).

2.2 | Measures

2.2.1 | Participant descriptions

Demographic information about families was collected by home visitors at the time of program enrollment. Home visitors, upon consent to participate in the evaluation study, completed a survey containing questions about their ethnicity, language, and family; education and training; and previous professional experiences.

2.2.2 | Observational measures

Trained research assistants used the HVOF-R and the HOVRS to describe home-visit activities and assess quality.

HVOF-R

This measure is designed to describe home-visit activities, facilitates simultaneous recording of data across three main categories: (a) Primary Interaction Partners, (b) Content of Interaction, and (c) Home Visitor's Activity. Each of these three categories was coded simultaneously during each 30-s observation interval by selecting the code most descriptive of the observed behavior. When more than one behavior was observed during an interval, the longest occurring behavior was coded for that interval. Subcategories of conceptually related codes within each category were summed for simplification of analysis and interpretation. All HVOF-R categories and subcategories, along with operational definitions, are presented in Table 1.

The HOVRS

This measure facilitates assessment of quality for home-visitor practices and family-member engagement. After watching an entire home visit, an observer rates seven subscales, each of which have multiple items with descriptive indicators of four levels of quality (1 = *needs training or support*, 3 = *adequate*, 5 = *good*, 7 = *excellent*). Subscale ratings are calculated from item ratings and further combined to create domain scores. Ratings from four subscales (Home Visitor Responsiveness to Family, Home Visitor Relationship with Family, Home Visitor Facilitation of Parent-Child Interaction, and Home Visitor Nonintrusive Collaboration) are averaged to provide a quality score for the home-visitor's practices domain. Ratings from three subscales (Parent-Child Interaction, Parent Engagement, and Child Engagement) are averaged to provide a quality score for the family members' engagement domain. Psychometric properties of the HOVRS are reported (Roggman et al., this issue).

Observer training

A number of steps were taken to ensure reliability of the data. Observers, undergraduate or graduate student research assistants, were trained to criteria prior to data collection, and inter-rater agreement was checked throughout the data-collection period. In addition, different research assistants coded the HOVRS and the HVOF-R to reduce the possibility of observer bias.

Observers training to code the HVOF-R received overall orientation to observational coding from an experienced team member and read all definitions. Next, two or three research assistants observed together and reached consensus on codes for each interval. Following these training sessions, each observer coded videos that had been coded previously

TABLE 1 The Home Visit Observation Form-Revised—Categories and subcategories, percentages of overall home visit time observed ($n = 91$)

Category & subcategory code	*M* (*SD*)	Range	Interrater Cohen's κ ($n = 15$)
Primary interaction partners			.869 (.634–.961)
Parent–home visitor	68.71 (16.49)	15–96	
Parent–child	2.74 (3.73)	0–16	
Home visitor–focal child	4.83 (5.55)	0–33	
Triadic interaction (home visitor, parent, & focal child)	18.60 (13.18)	0–73	
Other interactions	5.12 (9.45)	0–62	
No interactors	.77 (1.65)	0–9	
Home visitor–other adult	2.19 (5.49)	0–36	
Parent–other adult	.50 (1.44)	0–9	
Other adult–focal child	.06 (.31)	0–2	
Adult–nonfocal child	1.43 (4.84)	0–38	
Parent–other parent	.16 (.55)	0–3	
Content of interactions			.833 (.541–.960)
Child-focused content	65.90 (18.04)	1–98	
Child's development	50.97 (18.92)	1–96	
Child's health/safety	13.57 (10.03)	0–51	
Parenting issues	1.36 (2.06)	–8	
Family-focused content	25.58 (17.06)	0–89	
Functioning of family members	12.63 (12.64)	0–71	
Family member physical health	2.55 (3.19)	0–17	
Basic family needs	4.20 (5.24)	0–25	
Community resources/referral	3.24 (3.36)	0–14	
Employment and education	2.96 (4.09)	0–23	
Other content	8.53 (5.74)	0–26	
Administration/ scheduling	2.95 (2.74)	0–12	
Other content	4.83 (4.49)	0–25	
Home-visitor's activity			.850 (.576–.961)
Child-focused activity	22.39 (14.23)	0–77	
Direct teaching of child	4.52 (4.86)	0–26	
Modeling for the parent	7.87 (7.54)	0–48	
Coaching parent–child interaction	1.92 (2.66)	0–12	
Observing interaction	8.08 (8.93)	0–44	
Adult-focused activity	68.30 (16.73)	11–94	
Provides information/ makes comments/ suggestions	24.54 (12.66)	1–54	
Asks for information	26.58 (12.44)	2–59	
Listening	15.27 (11.99)	0–47	
Provides affirmation	.87 (1.60)	0–7	
Self-disclosure	.38 (1.09)	0–7	
Engages other family members	.02 (.24)	0–2	
General conversation	.64 (1.20)	0–7	
Other-focused activity	9.30 (10.12)	0–65	
No interactions	.74 (1.63)	0–9	
Paperwork	1.90 (2.57)	0–10	
Other interactions	3.87 (4.11)	0–20	
Interacts with nonfocal child	2.78 (8.28)	0–61	

by a primary observer. Point-by-point interrater agreement was used to establish and maintain observer reliability. Interobserver agreement was established at or above 85% overall, with no single category below 80% on three consecutive observations before an observer began independent data collection. To maintain interrater agreement and continue training for research assistants not yet reliable, team members met weekly to discuss disagreements and code, by consensus, if necessary. Of the 91 observations, 46 were coded independently, with 15 coded by two independent coders. Average point-by-point interobserver agreement was 88% overall, and average interobserver agreement for each category was Primary Interaction Partners (94%), Content of Interaction (88%), and Home Visitor's Activity (84%). The remaining 45 observations were consensus-coded to ensure reliability of the data while also supporting ongoing observer training.

Training on the HOVRS included initial interrater criterion agreement with developer master-coded videos. A minimum of 85% within 1 point agreement on each subscale score across three consecutive observations was obtained. Once initial criteria were met, every fourth observation was coded by two different research assistants to monitor interrater agreement ($n = 26$). Average agreement for home-visitor practice domain subscales were: Home Visitor Responsiveness to Family (100%), Home Visitor Relationship with Family (96%), Home Visitor Facilitation of Parent-Child Interaction (100%), and Home Visitor Nonintrusive Collaboration (88%). Interrater agreement averages for family members' engagement subscale domains were: Parent-Child Interactions (100%), Parent Engagement (100%), and Child Engagement (100%). These

calculations were used to maintain observer reliability, and team members met weekly to discuss disagreements and consensus-code any observations that did not meet the reliability criteria.

2.3 | Data analysis

Distribution of home-visiting activities and quality ratings were examined descriptively. For home-visit activities, the average percentage of time spent in specific activities as coded with the HVOF-R was calculated. Percentages were calculated by dividing the total number of minutes coded for the activity (number of intervals × 2) by the total number of home visit minutes (visit length). For example, child-focused content was coded for 65.90% of HVOF-R intervals. This indicates that on average, home visitors spent 66% of home-visit time on child-focused content. Average subscale ratings and domain scores for the HOVRS were calculated to provide overall quality scores for observed home visits.

For this study, the unit of analysis is the individual home visit. Because we were interested in how home-visit activities relate to quality ratings within each home visit, we considered each home visit individually. Nesting analyses within home visitor or program model would be appropriate, of course, if examining overall program quality, relative quality of services delivered by each home visitor, or child and family outcomes. A multiple-step process was used to examine relations among home-visit activities and quality scores. First, we examined relations among specific home-visit activity subcategories, captured with the HVOF-R, and quality scores for HOVRS domains. Next, HVOF-R home-visit activity data, at the subcategory level, were submitted to a principal components analysis (PCA) to empirically collapse the data for regression analyses. Last, we regressed the HVOF-R component scores onto the HOVRS practices and engagement quality domain scores to determine whether particular home-visit activities predicted higher quality of home visits.

3 | RESULTS

3.1 | Distribution of activities and quality ratings

3.1.1 | Home-visit activities

Home visits ranged in length from 11 to 91 min ($M = 47$, $SD = 17$). Table 1 presents average percentages of time spent in each specific home-visit activity captured with the HVOF-R. Note that home visitors spent nearly 70% of home-visit time interacting directly with the parent(s) and less than 19% of home-visit time engaging the parent and child together in triadic interactions. Child-related content was addressed a majority (66%) of the time, with home visitors spending considerable time (68%) in adult-focused activities such as providing information/suggestions, listening, and asking questions. Table 1 also presents the average and range of Cohen's κ reliability estimates, by home visit, for each of the three main categories of behaviors observed with the HVOF-R.

TABLE 2 The Home Visit Rating Scales—Adapted and Extended to Excellence (HOVRS A+ Version 2.0) quality ratings ($n = 91$)

HOVRS A+	*M* (*SD*)	Range	Interrater ICC ($n = 26$)
Practices domain	3.30 (.72)	1.50–5.25	
Home Visitor Responsiveness	3.44 (.73)	2–6	.48
Home Visitor Relationship	4.80 (.96)	2–7	.79
Home Visitor Facilitation of Parent-Child Interactions	2.51 (.98)	1–5	.81
Nonintrusive Collaboration	2.45 (1.00)	1–5	.67
Engagment domain	4.14 (.82)	2.33–7.00	
Parent-Child Interactions	4.02 (1.04)	1–7	.82
Parent Engagement	4.75 (.95)	2–7	.78
Child Engagement	3.66 (1.13)	1–7	.79

3.1.2 | Home-visit quality scores

HOVRS scores are summarized in Table 2. Across the 91 observations, overall total score quality averaged 3.66 ($SD = .68$), which is described as adequate by the scale authors. Quality scores varied among the subscales and were highest on Home Visitor Relationships with Families ($M = 4.80$) and lowest on Home Visitor Nonintrusive Collaboration with Families ($M = 2.54$) and Home Visitor Facilitation of Parent-Child Interactions ($M = 2.51$). Quality scores were adequate to good (e.g., scores between 3 and 5) on Parent Engagement and Parent-Child Interactions while Child Engagement also was rated as adequate. Table 2 also presents the average and range of intraclass correlations for interrater agreement on each subscale of the HOVRS by home visit.

3.2 | Relations among home-visit activities and quality ratings

3.2.1 | Home-visit activity subcategories and domain-quality scores

The relations among percentages of time spent in home-visit activities (at the subcategory level), captured with the HVOF-R, and quality scores for home-visitor practices and family engagement domains, captured with the HOVRS, were examined by mapping the proportion of time spent in specific activities onto the mean quality rating scores to identify

TABLE 3 Loadings for principle components analysis with varimax rotation of the Home Visit Observation Form-Revised (HVOF-R) subcategories

HVOF subcategories	Triadic	Adult/Other	Administrative	Parent-Child
Interaction partners				
Parent × Home Visitor	−.63	−.156	.034	−.178
Parent × Child	.186	−.051	.026	.938
Home Visitor × Child	.579	−.124	.667	−.232
Triadic	.789	−.413	−.315	.114
Other interactions	.200	.946	.014	−.035
Home-visit content				
Child content	.399	−.824	−.212	.119
Family content	−.381	.834	.035	−.162
Other content	−.217	.252		.145
Home-visitor activity				
Child-focused activity	.908	−.330	.007	.009
Adult-focused activity	−.936	−.234	−.085	−.216
Other-focused activity	.254	.847	.128	.340

patterns. We were most interested in relations among time spent in Triadic Interactions with a focus on Child-Related Content based on empirical evidence from previous work (Peterson et al., 2013; Raikes et al., 2006). Subcategories of the HVOF-R are mutually exclusive within categories. For example, within the category of Primary Interaction Partners, more time spent in Parent-Home Visitor interactions automatically means less time spent in Triadic Interactions.

Visual inspection of data confirmed that more time spent in Triadic Interactions with a focus on Child-Related Content was related to higher quality for both home-visitor practices and family engagement. To demonstrate, a score of 3 on the home-visitor practices domain was related to an average of 13% of home-visit time spent in Triadic Interactions and 62% of time focused on Child-Related Content whereas a quality score of 5 was related to an average of 24% of the home-visit time spent in Triadic Interactions and 75% of time focused on Child-Related Content. Similar patterns of relations were evident among subcategory time percentages and family engagement quality. Notably, the range of quality is larger for the family engagement domain; when quality was 7, nearly 96% of home-visit time was spent on Child-Focused Content, and the home visitor engaged the parent and child together in Triadic Interactions nearly 57% of the time. The home visitor, by definition, was engaging in Child-Focused Activity during Triadic Interactions. Conversely, lower percentages of time spent addressing Family-Focused Content were related to higher ratings of engagement quality.

3.2.2 | Home-visit activity subcategory components analysis

Subcategory percentages of home-visit time captured with the HVOF-R were submitted to a PCA to reduce home-visit activity data to a set of variables useful to test empirical relations among activities and quality scores. PCA provides a minimal number of linearly uncorrelated variables and is the most parsimonious solution for our purpose. Specifically, we wanted to better understand if home visitors interacted with particular people (interaction partners) in different ways (home-visitor activity) about particular things (content) within individual home visits.

A four-component solution was found for eigenvalues over 1.0, and varimax rotation was used to create orthogonal components (see Table 3). Subcategories from the HVOF-R with loadings greater than .70 were included in each component. Component 1 (Triadic Interactions) included greater percentages of time spent in Triadic Interactions along with greater percentage of time engaged in Child-Focused Activity and less time spent in Home Vistor-Parent Interactions and Adult-Focused Activity. Component 2 (Adult/Other) included time spent in interactions with adults, addressing Family Content, and the home visitor engaged in Other-Focused Activity (not child- or family-focused). Component 3 (Administrative) included only time spent addressing Other Content, which includes administrative topics (e.g., scheduling, agency procedures) and general conversation rather than topics related directly to the family. Component 4 (Parent-Child Interaction) included only one subcategory: time during which Parent-Child Interaction was the primary interaction.

3.2.3 | Predicting quality scores from activities

Component scores were calculated by adding positively loaded subcategories and subtracting negatively loaded subcategories (all above .70). These component scores were then regressed onto the practices and engagement domain quality scores captured with the HOVRS (see Table 4). Regression

TABLE 4 The Home Visit Observation Form-Revised component predictors of the Home Visit Rating Scales—Adapted and Extended to Excellence quality ratings

Practices quality					
Variable	**B**	***SE***	***B***	***t*-value**	***P*-value**
Constant	3.67	0.21		17.55	.00
Triadic	0.00	0.00	0.13	1.17	.24
Adult/Other	−0.00	0.00	−0.05	−0.49	.63
Administrative	−0.03	0.01	−0.24	−2.26	.03*
Parent–child	0.01	0.02	0.05	0.45	.65
Engagement quality					
Variable	**B**	***SE***	***B***	***t*-value**	***P*-value**
Constant	4.50	0.22		20.81	.00
Triadic	0.03	0.00	0.21	2.10	.04*
Adult/Other	−0.01	0.00	−0.30	−3.03	.00**
Administrative	−0.03	0.01	−0.20	−2.03	.05*
Parent–child	0.02	0.02	0.07	0.74	.46

Note. $N = 91$. $F(4, 86) = 2.40$, $p = .06$.†
†$p < .10$. $p < .05$. **$p < .01$.
Note. $N = 91$. $F(4, 86) = 7.17$, $p = .00$.**
†$p < .10$. *$p < .05$. **$p < .01$.

results indicate one statistically significant relationship between higher quality home-visitor practices and less time spent in Administrative Activity (Component 3). There were statistically significant relationships between quality scores for family engagement and Triadic Interactions (Component 1) in the positive direction and Adult/Other activity (Component 2) and Administrative Activity (Component 3), which are incompatible with Triadic Interactions, in the negative direction. During Administrative Activity, for example, the home visitor is focused on issues other than the Child's Health and Development (e.g., Family-Related Content) and engaged in activities (e.g., Providing Information to the Parent) not related to directly supporting parenting skills, such as facilitating and/or providing coaching support during a parent–child interaction.

4 | DISCUSSION

Data presented here provide an overall description of home-visit activities and quality scores for home visits delivered under the auspices of MIECHV-funded programs, as well as insight regarding how specific home-visit activities are associated with home-visit quality. Description of home-visit activities, captured with the HVOF-R, highlight the fact that home visitors, across all visits, spent the majority of their time (69%) interacting directly with the child's parent(s), with the majority of that time divided among providing information (25%), asking questions (27%), and listening to the parent (15%). Child-related content was addressed the majority of the time (66%), but the meager 19% of total time home visitors were engaged with the parent and child together in triadic interactions indicates that child development content was not addressed via active interactions that could provide opportunities for the parent to practice new activities or skills with home-visitor support. Quality scores for home visits, captured with the HOVRS, indicate that on average, quality of home-visit practices was in the adequate range ($M = 3.3$); despite this, quality of family engagement was somewhat higher, though still in the adequate range ($M = 4.1$).

Examination of quality scores and description of home-visit activities together reveals that time spent in Triadic Interactions, even though this was less than 20% of total home-visit time, is important. Based on the relationships found between quality scores and triadic interactions identified via visual inspection, we were particularly interested in the relation of the Triadic component from the factor analysis and HOVRS quality scores. The HVOF-R items that load on this component are conceptually sound in that time spent in triadic interactions should relate to time spent engaging in child-focused activities (since triadic interactions include children) and should be inversely related to time spent in parent–home-visitor interactions with adult-focused activities and content. The mathematical computation of this component, however, minimizes the likelihood of finding statistically significant relations between the component and the quality ratings because the proportion of time spent in triadic interactions is small compared to time spent in parent–home visitor interactions. This is supported by results from a related study (Peterson et al., 2018), which found moderate correlation, $r = .33$, between triadic interaction partners and the quality of home-visitors' practices with a similar sample size of 108 home-visit observations. Earlier work with an EHS program revealed that time spent in triadic interactions was related to engagement during home visits for mothers often considered to be facing more risks (e.g., teen, low levels of education). Thus, the clustering of these behaviors and their relation to quality practices (or lack thereof in this case), highlights the importance of increasing the frequency with which home visitors facilitate triadic interactions and engage in child-focused activity.

Inverse relations were found among home-visit time devoted to Administrative Activity and quality scores for both home-visit practices and family engagement. In addition, inverse relations were found between home-visitor interactions focused on adult participants that did not include the focal child and family engagement quality scores. We will discuss some limitations of the current study before reflecting on implications of the findings.

4.1 | Limitations

One limitation of the current study is that we are not able to compare relations among home-visit activity descriptions

and quality scores for different home-visit models. The majority of observations were of HFA visits (69), with 11 observations from each EHS and NFP. We note that this distribution of home-visit models is reflective of overall practice in this state, and use of home-visiting models is not distributed equally across the United States. While relations among home-visit activities and quality ratings are informative, it may be premature to examine activity and quality differences that may be found among various home-visiting models. Each home-visiting model has specific guidelines for home-visitor recruitment, training, and support as well as for curriculum content and implementation practices. Most home-visiting models have not articulated clearly the specific mechanisms through which home-visit activities are expected to influence child and family outcomes and done checks of implementation fidelity necessary to verify hypothesized links among processes and outcomes. Thus, systematic differences in activities or quality ratings among various home-visiting models that might be reflected differentially with the measures used here might not reflect the differences intended by program designers or be representative of outcome findings attributed to each model.

This sample of observations reflect only one home visit per family (with one exception), completed within the first year of enrollment. This likely does not provide a complete picture of the range of home-visit activities or of overall services any family received from the agency. Despite these limitations, we believe observations reported in the current study provide an important glimpse into how specific intervention activities are related systematically to higher and lower home-visit quality.

4.2 | Implications

Results of the current study have implications that can guide research and evaluation activities as well as inform professional practice.

4.2.1 | Implications for research

Observational methods, although resource-intensive and often rejected due to cost and logistical challenges, provide more accurate information about actual practices than do other data sources (e.g., self-report) (Yoder & Symons, 2010). Here, partnerships among university-based research team members, state-agency administrators, and local practitioners made it possible to efficiently conduct observations. Local practitioners made video recordings of home visits, contingent upon family consent, as a condition of their state-funding contracts. Thus, families could interact with service providers whom they already knew, and research team members had few travel demands related to coding home visits.

The HOVRS reflects recommended practices that focus on home visitors collaborating respectfully with family members to plan services and engage family members actively in home-visit activities (Roggman, Boyce, & Innocenti, 2008). Quality ratings of home-visit services, afforded by the HOVRS, have been related systematically to more positive outcomes for children and parents (Roggman et al., this issue). Use of the HVOF-R, in conjunction with the HOVRS, facilitated clearer understanding of the specific home-visit activities and home-visitor behaviors that underlie quality ratings. This information can assist future researchers in a number of ways. First, understanding the relations among specific home-visit activities and behaviors and quality ratings could inform study design and data-collection plans. It is important to understand the active ingredients of the intervention being examined in any research or evaluation study; this is necessary for interpretation of current results as well as for design and refinement of intervention models or strategies. We recognize that the HVOF-R places steep demands on observer time; moving forward, it might be helpful to examine HVOF-R data with a subsample of observations rated for model fidelity and/or overall quality to understand where patterns of home-visit activities do and do not match expected activities or whether the associations among home-visit activities and quality ratings reported here are similar in future studies. Examination of the length of observation needed to provide a stable description of home-visit activities is under way (Peterson et al., 2018).

Data that detail specific home-visit processes, such as that facilitated by the HVOF-R, could help researchers understand similarities and differences among practices undertaken within different program models, with different populations of participants, or in different locations. This could provide a helpful step forward in provision of precision home visiting by identifying active ingredients effective in home visits for different subgroups of participants or even with individual families (Home Visiting Applied Research Collaborative, 2018). This type of data could help researchers guide refinement of program models and associated training procedures as well as design data-collection protocols to ensure that program outcomes can be explained fully.

4.2.2 | Implications for practice

Systematic relations among specific home-visit activities and quality ratings presented here can help agency administrators and trainers (e.g., university faculty members, program consultants) identify behaviors to target for home-visitor professional development. For example, the relations between triadic interactions and home-visit quality provide empirical support for professional recommendations that home visitors actively engage family members and facilitate parent–child interaction (McCollum & Yates, 1994; Roggman, Boyce, & Innocenti, 2008). Triadic interactions can be described clearly, and home visitors can be instructed to use this strategy. This could, in turn, be used to help home visitors understand that facilitating parent–child interactions provides

rich opportunities for parent learning and behavior change, likely enhancing their purposeful support of these interactions. As well, triadic interactions provide ideal opportunities for home visitors to coach new parent–child interaction strategies and embed these learning opportunities into daily activities (Friedman et al., 2012; Hughes, 2005; McWilliam, 2012) where they are most likely to become comfortable practices and promote durable changes in ongoing interactions and routines (Bernheimer & Keogh, 1995).

Professional development focused on improving home-visitors' skills for engaging parents and children in triadic interactions would promote emphasis on parent engagement, child-focused content and activities, and collaborative planning—all of which have been related to enrollment duration (Roggman, Cook, Peterson, & Raikes, 2008) and more positive outcomes in the short-term (Raikes et al., 2006) as well as over time (Peterson et al., 2013). Early childhood and family support preservice training programs often provide little opportunity for students to practice engaging parents and children in triadic interactions due to strong and/or exclusive focus on strengthening university students' direct interactions with children (Roggman et al., 2016). Enhancing home-visit quality will require both new opportunities in university-based preparation programs and professional development activities for current practitioners.

Engaging parents and children in triadic interactions can be challenging; calls for enhanced opportunities for reflective supervision (Watson, Neilsen Gatti, Cox, Harrison, & Hennes, 2014) intersect with the need to help home visitors use this strategy more often and more effectively. Reflective supervision engages a home visitor in reflecting on current practice and identifying specific points in interactions where planned strategies did or did not work as anticipated and then brainstorming with a supervisor and/or peers on how practice might be changed to address the identified obstacle. Using reflective supervision to help home visitors understand when using triadic interactions is likely to be most effective should increase use of the strategy, engage parents and children more fully in home visits, and enhance home-visitors' satisfaction with their work.

Changes in practice, training and professional development, and supervision recommended earlier can be realized only with thoughtful attention to administrative support and funding necessary to ensure sustained attention to program quality. With an increased focus on precision home visiting, these initiatives are more critical than ever if we are to affect positive outcomes for all families who enter our family support systems.

ACKNOWLEDGMENTS

This project was made possible with support from the Department of Human Development and Family Services at Iowa State University and funding from Grant D89MC23537 from the Health Resources and Services Administration. Views expressed in written materials or publications do not necessarily reflect official policies of the Department of Health and Human Services nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

CONFLICT OF INTEREST

The authors report no conflicts of interest.

ENDNOTE

[1] The version of the HOVRS used was the HOVRS-A+ Version 2.0, currently referred to as the HOVRS-3.

REFERENCES

Bernheimer, L. P., & Keogh, B. K. (1995). Weaving interventions into the fabric of everyday life: An approach to family assessment. *Topics in Early Childhood Special Education*, *15*, 415–433. https://doi.org/10.1177.027112149501500402

Bornstein, M. H., & Tamis-LeMonda, C. S. (1989). Maternal responsiveness and cognitive development in children. In M. H. Bornstein (Ed.), *Maternal responsiveness: Characteristics and consequences. New directions for child development* (pp. 49–61). San Francisco, CA: Jossey-Bass. https://doi.org/10.1002/cd.23219894306

Bronfenbrenner, U. (1961). Toward a theoretical model for the analysis of parent–child relationships in a social context. In J. C. Glidewell (Ed.), *Parental attitudes and child behavior* (pp. 90–109). Springfield, IL: Charles C Thomas.

Bronfenbrenner, U. (1994). Ecological models of human development. In T. N. Postlethwaite & T. Husen (Eds.) *International encyclopedia of education* (Vol. 3, 2nd ed.). Oxford, England: Elsevier.

Egeland, B., Carlson, E., & Sroufe, L. A. (1993). Resilience as process. *Development and Psychopathology*, *5*(4), 517–528.

Engle, P. L., Fernald, L. C., Alderman, H., Behrman, C. O., Yousafzai, A., de Mello, M. C., … Iltus, S. (2011). Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *The Lancet*, *378*, 1339–1353. https://doi.org/10.1016/S140-6736(11)60889-1

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: Moving toward operational definitions. *Infants & Young Children*, *25*, 62–82. https://doi.org/10.1097IYC.013e31823d8f12

Gomby, D. S., Larson, C. S., Lewit, E. M., & Berman, R. E. (1993). Home visiting: Analysis and recommendation. *The Future of Children*, *3*, 6–22. https://doi.org/10.2307/1602540

Health Resources and Services Administration. (2017). *The Maternal, Infant, and Early Childhood Home Visiting Program: Partnering with parents to help children succeed*. Retrieved from https://mchb.hrsa.gov/sites/default/files/mchb/MaternalChildHealthInitiatives/HomeVisiting/pdf/programbrief.pdf

Home Visiting Applied Research Collaborative. (2018, June). *Introduction to precision home visiting* (Brief). Retrieved from https://www.hvresearch.org/wp-content/uploads/2018/06/PHV-Summary-Brief_Final.pdf

Hughes, K. (2005). Providing interventions to infants and toddlers through family-guided routines based intervention (FGRBI): Implications for learning disabilities. In G. D. Sideris & T. A. Citro, (Eds.), *Research to practice: Effective interventions in learning disabilities* (pp. 168–192). Boston, MA: Learning Disabilities Worldwide.

Hughes, K., & Peterson, C. (2008). Conducting home visits with an explicit theory of change. *Young Exceptional Children Monograph Series*, *10*(10), 47–59.

Jones Harden, B., Chazan-Cohen, R., Raikes, H., & Vogel, C. (2012). Early Head Start home visitation: The role of implementation in bolstering program benefits. *Journal of Community Psychology*, *40*, 438–455. https://doi.org/10.1002/jcop.20525

Korfmacher, J., Green, B., Staerkel, E., Peterson, C. A., Cook, G., Roggman, L., … Schiffman, R. (2008). Parent involvement in early childhood home visiting. *Child & Youth Care Forum*, *37*, 171–196. https://doi.org/10.1007.s10566-008-9057-3

Lanier, P., Maguire-Jack, K., & Welch, H. (2015). A nationally representative study of early childhood home visiting service use in the United States. *Maternal and Child Health Journal*, *19*, 2147–2158. https://doi.org/10.1007/s10995-015-1727-9

Martinez-Beck, I. (2013). Introduction: Where is the new frontier of implementation science in early care and education research and practice? In T. Halle, A. Metz, & I. Martinez-Beck (Eds.), *Applying implementation science in early childhood programs and systems* (pp. xix–xxix). Baltimore, MD: Brookes.

McBride, S. L., & Peterson, C. A. (1996). *Home visit observation form-revised*. Unpublished manuscript, Iowa State University, Ames, IA.

McCollum, J. A., & Yates, T. J. (1994). Dyad as focus, triad as means: A family-centered approach to supporting parent-child interactions. *Infants & Young Children*, *6*(4), 54–63.

McWilliam, R. A. (2012). Implementing and preparing for home visits. *Topics in Early Childhood Special Education*, *31*, 224–231. https://dor.org/10.1177/0271121411426488

Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 (2010).

Peterson, C. A., Luze, G. J., Eshbaugh, E. M., Jeon, H. J., & Kantz, K. R. (2007). Enhancing parent-child interactions through home visiting: Promising practice or unfulfilled promise? *Journal of Early Intervention*, *29*, 119–140. https://doi.org/10.1177/105381510702900205

Peterson, C. A., Roggman, L. A., Green, B., Chazan-Cohen, R., Korfmacher, J., McKelvey, L., … Atwater, J. B. (2013). Home visiting processes: Relations with family characteristics and outcomes. *ZERO TO THREE Journal*, *33*(3), 39–44.

Peterson, C. A., Zhang, D., Flittner, A., Shelley, M. C., Doudna, K., Chazen Cohen, R., … Fan, L. (2018). *Home visit observation: How much is enough?* Unpublished manuscript, Ames, IA: Iowa State University.

Raikes, H., Green, B. L., Atwater, J., Kisker, E., Constantine, J., & Chazan-Cohen, R. (2006). Involvement in Early Head Start home visiting services: Demographic predictors and relations to child and parent outcomes. *Early Childhood Research Quarterly*, *21*(1), 2–24. https://doi.org/10.1016/j.ecresq.2006.01.006

Raikes, H., Roggman, L., Peterson, C. A., Brooks-Gunn, J., Cohen, R. C., Zhang, X., & Schiffman, R. (2014). Theories of change and outcomes in home-based Early Head Start programs. *Early Childhood Research Quarterly*, *29*, 574–585. https://doi.org/10.1016/j.ecresq.2014.05.003

Rodrigue, E., & Reeves, R. V. (2015). *Home visiting programs: An early test for the 114th Congress*. Washington, DC: Brookings Institution. Retrieved from http://www.brookings.edu/blogs/social-mobility-memos/posts/2015/02/05-home-visiting-funding-reeves

Roggman, L. A., Boyce, L., & Innocenti, M. S. (2008). *Developmental parenting: A guide for early childhood practitioners*. Baltimore, MD: Brookes.

Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V. K., Boyce, L. K., Olson, T. L., … Peterson, C. A. (2019). The Home Visit Rating Scales: Revised, restructured, and revalidated. *Infant Mental Health Journal*, *40*(3), 315–330.

Roggman, L. A., Cook, G. A., Peterson, C. A., & Raikes, H. H. (2008). Who drops out of Early Head Start home visiting programs? *Early Education and Development*, *19*, 1–26. https://doi.org/10.1080/10409280701681870

Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump Norman, V. K., Christiansen, K., Boyce, L. K., … Hallgren, K. (2014). Home Visit Rating Scales-Adapted & Extended to Excellence: (HOVRS-A+). Unpublished measure.

Roggman, L. A., Peterson, C. A., Chazan-Cohen, R., Ispa, J., Decker, K. B., Hughes-Belding, K., … Vallotton, C. D. (2016). Preparing home visitors to partner with families of infants and toddlers. *Journal of Early Childhood Teacher Education*, *37*(4), 301–313. https://doi.org/10.1080.10901027.2016.1241965

Sama-Miller, E., Akers, L., Mraz-Esposito, A., Zukiewicz, M., Avellar, S., Paulsell, D., & Del Grosso, P. (2018). *Home visiting evidence of effectiveness review: Executive summary* (OPRE Report No. 2018–113). Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation. Retrieved from https://homvee.acf.hhs.gov/homvee_executive_summary.pdf

Sweet, M., & Appelbaum, M. (2004). Is home visiting an effective strategy? A meta-analytic review of home visiting programs for families with young children. *Child Development*, *75*, 1435–1456. https://doi.org/10.1111/j.1467-8624.2004.00750.x

Watson, C., Neilsen Gatti, S., Cox, M., Harrison, M., & Hennes, J. (2014). Reflective supervision and its impact on early childhood intervention. In E. Nwokah & J. A. Sutterby (Eds.), *Early childhood and special education* (pp. 1–26). Bingley, United Kingdom: Emerald Group.

Werner, E. E. (2000). Protective factors and individual resilience. In J. P. Shonkoff & S. J. Meisels (Eds.), *Handbook of early childhood intervention* (pp. 115–132). Cambridge, United Kingdom: Cambridge University.

Yoder, P., & Symons, F. (2010). *Observational measurement of behavior*. New York, NY: Springer.

How to cite this article: Hughes-Belding K, Peterson CA, Clucas Walter M, et al. Quality home visits: Activities to promote meaningful interactions. *Infant Ment Health J*. 2019;40:331–342. https://doi.org/10.1002/imhj.21779