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Supporting Family Engagement in Home Visiting with the Family Map Inventories

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Abstract

The purpose of this study was to examine the feasibility and usefulness of a universal screening tool, the Family Map Inventory (FMI), to assess family strengths and needs in a home visiting program. The FMI has been used successfully by center-based early childcare programs to tailor services to family need and build on existing strengths. Home visiting coordinators (N = 39) indicated the FMI would provide useful information, and they had the capacity to implement. In total, 70 families who enrolled in a Home Instruction for Parents of Preschool Youngsters (HIPPPY) program were screened by the coordinator. The results of the FMI provided meaningful information about the home and parenting environment. Overall, most caregivers provided high levels of school readiness and parental warmth and low levels of family conflict and parenting stress. On the other hand, many families did not provide adequate food quality, exhibited chaotic home environments, and practiced negative discipline. This study demonstrated that the FMI is a feasible and useful option to assess comprehensive family needs in home visiting programs. It also demonstrated that the FMI provided home visiting coordinators a system to measure family strengths and needs. This could provide an assessment of program effectiveness and changes in the family's environment.

Keywords

early childhood; home visiting; family environment; parenting

Introduction

Home visitation programs focus on improving both maternal and child outcomes such as prevention of child abuse and neglect, school readiness, and maternal and child health. Their principal goal is to prepare the parent with the knowledge needed to be the primary resource for their child (Family Strengthening Policy Center, 2007). Evidence-based home visiting (EBHV) programs support parents to foster healthy, nurturing environments for children, create positive family relationships, and develop personal, educational, and vocational skills for a more productive life. Evidence indicates a comprehensive system of care is necessary to build the community supports needed to enhance healthy child and family development

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(Azzi-Lessing, 2011; Family Strengthening Policy Center, 2007; Sweet & Appelbaum, 2004).

EBHV programs each have individual strengths, and no one approach can be viewed as the best match for every family. Further, without research-based tools to measure the family and parenting context experienced by the child, it is difficult to ascertain which EBHV programs and even the characteristics of the services themselves are best suited for families with various environmental risks (Howard & Brooks-Gunn, 2009). Using common criteria for assessing family contexts across various EBHV programs could better enable the individualization of services for families toward whom services are targeted. EBHV services that address the full scope of needs important to participating families often demonstrate higher retention rates (Azzi-Lessing, 2011) and promote the development of a positive home visitor-participant relationship.

Several factors are related to program effectiveness. In a review of home visiting programs, Azzi-Lessing (2011) indicated the need for consideration of community characteristics and service context with regard to program effectiveness. For example, differences found in rural vs. urban or low vs. high socioeconomic areas could potentially confound the outcomes for families participating in EBHV. Higher crime neighborhoods could impact maternal depression, for example, which could affect the mother's ability to parent effectively (Azzi-Lessing, 2011; Latkin & Curry, 2003). Indeed, maternal depression has been found to be a moderator of program impacts (Cluxton-Keller et al., 2014). These findings support the need to consider the context of the family as programs are implemented. That is, programs should assess specific family strengths and concerns that are likely to impact child development and the ability of the family to benefit from the program. Addressing these barriers or enhancing family characteristics to protect the child will likely be linked to program success.

Respectful and trusting relationships are critical to the delivery of EBHV services and have been found to yield better outcomes for families (Krysik, LeCroy, & Ashford, 2008; Paris & Dubus, 2005). In fact, some studies have indicated that families are more likely to engage in services when home visitors show that they can take on the challenge of addressing concerns within the home, such as access to basic needs and other community services (Azzi-Lessing, 2011). In one qualitative study of 90 families in the Ohio Help Me Grow program, Allen (2007) found that those participating in services anticipated that home visitors would show interest in the needs of their family, taking the lead in asking potentially difficult questions, and attempting to reduce risk factors and enhance protective factors.

As EBHV interventions occur in the home, home visitors are in a unique position to provide a family-wide approach to services. By determining and attending to family situations that interfere with the uptake of the program, both the families served and EBHV programs could improve their success (Brookes, Summers, Thornburg, Ispa, & Lane, 2006; Damashek, Doughty, Ware, & Silovsky, 2011; Gomby, Larson, Lewit, & Behrman, 1993). Recognizing this possibility, a rural Arkansas Home Instruction for Parents of Preschool Youngsters (HIPPY) program adopted a comprehensive assessment tool called the Family Map Inventory (FMI) as part of their process of working with families.

Whiteside-Mansell and colleagues (Whiteside-Mansell, Bradley, Connors, & Bokony, 2007; Whiteside-Mansell et al., 2013) developed the FMI to facilitate caregiver-educator relationships by giving educators a tool to individualize support, information, referrals, and community linkages for families of children in center-based care. The FMI screens for family strengths and risks associated with early child development. The FMI is research-based and developed in collaboration with early childhood educators and families that met income eligibility criteria for early childcare programs. Items are based on similar questions from national studies, with details presented in previous research (Whiteside-Mansell et al., 2007). The development process included an extensive literature review, the identification and evaluation of screening tools and items, and a cyclical process of field testing new items, input from Head Start staff and families, revising, and repeating field testing.

The FMI gives educators (e.g., center- and home-based educators, interventionists, etc.) a process to talk about important family topics that influence children's healthy development (Whiteside-Mansell, et al., 2007). When the FMI is used in center-based programs, the conversation related to these family topics occurs sooner than when traditional systems are used (Whiteside-Mansell et al., 2013). The implementation training for the FMI recommends that educators help parents identify needs and strengths, set tailored family goals, and connect parents to available resources and referrals in their area during and as a result of the interview. The FMI was originally developed for use in center-based programs targeting low-income families with children age 3 to 5 years and has been successfully implemented in Head Start programs. Evaluations of implementation have demonstrated that educators and parents find the FMI useful (Whiteside-Mansell et al., 2007). Both educators and parents also report conversations that are more meaningful and about parenting and family issues (Whiteside-Mansell et al., 2013).

Center-based programs such as Head Start tend to have relatively few home visits a year (a minimum of two is required). The HIPPY model is significantly different, with educator-parent home visits typically occurring once a week for 30 weeks (HIPPY USA, 2014a). Use of a universal tool, such as the FMI, could help EBHV programs determine family strengths and needs to individualize services. Addressing the myriad of family needs at program entry could yield enhanced family retention and engagement in services to promote program effectiveness. This study focuses on two specific objectives. First, we explore the feasibility of use of the FMI by examining home visiting coordinator perceptions after completing Family Map training. Second, we examine the usefulness of the FMI with families enrolled in one HIPPY program in rural Arkansas.

Methods

Procedures

HIPPY is an international program for children between the ages of 3 and 5 years old (National Research and Evaluation Center, 2013). Designed to promote school readiness through parent involvement, HIPPY encourages the parent to be the primary educator of their child. Recognized as an EBHV model by the Maternal, Infant, Early Childhood Home Visiting program, the HIPPY program has shown moderate to high effects in the areas of school readiness and parent support of literacy in the home (U.S. Department of Health and

Human Services, Administration on Children and Families, 2013). HIPPY educators provide materials and curricula in the home to support the parent in preparing their child for school, primarily targeting literacy. These early childhood interactions lead to continued parental involvement in the child's schooling (HIPPY USA, 2014b).

Similar to families enrolled in federally-funded, center-based programs like Head Start, HIPPY parents face a wide range of challenges that distract from the key educational goals of the curriculum. In the face of family stress, it can be difficult for parents to focus on the educational needs of the child and for educators to help the parent draw on family strengths (e.g., social support) if those strengths are unknown to the home visitor.

HIPPY program coordinators were trained by the FMI developer. The 6-hour training emphasized the link to child development for the areas and questions in the interview, how to engage families, and what to do when risks to child development were identified. The training also included interview techniques such as body language, tone of voice and phases that lead parents to feel judgment. About half of the time was used to role play the interview and discuss concerns. Because the FMI is intended to screen for potential risks to health child development, the training included extensive discussion on how to engage parents in a conversation to determine if the area identified was in fact a risk for the child. The training evaluation included an assessment of the trainee's perception of the usefulness of the FMI.

Families served by the one specific Arkansas HIPPY program were interviewed using the Early Childhood FMI by the HIPPY Coordinator. All families served by the program agreed to participate in the interview. Assessments were completed between October 2010 and April 2011. The study was approved by the University of Arkansas for Medical Sciences Institutional Review Board.

Participants

This study targets two specific samples of participants: 1) HIPPY coordinators from across the state of Arkansas, and 2) families from one specific HIPPY program in rural Arkansas.

HIPPY Coordinators—HIPPY coordinators trained in August 2010 included 46 attendees, with 39 providing completed evaluation tools. The majority of HIPPY program coordinators had a Bachelor's Degree (64%), with an additional 31% indicating completion of education "Post College." Most (70%) indicated more than 5 years of experience in the field of early childhood. Coordinators represented programs from a southern, rural state. As a preliminary pilot of the FMI in HIPPY programs, one coordinator volunteered to pilot the FMI interviews.

HIPPY Families—To be eligible for HIPPY services, families had incomes not exceeding 200% of the federal poverty limit and experienced other risk factors, such as single parent household status, teen pregnancy, or family history of abuse (Arkansas Department of Education, 2012). Indeed, according to the FMI, HIPPY family participants were nearly all white (94%) and English-speaking (96%), which is consistent with the demographics in this rural county (91% white; U.S. Census Bureau, 2015, see Table 1). Almost all participants interviewed were the child's biological parent (99%), and most were female (93%, and 7%

unreported). In addition, most parents had at least a high school education (96%), though only one-third (33%) were employed at the time of assessment. Many parents interviewed also had a partner or were married (81%). Over half of the target children were female (56%). Families report having an average of 2.62 children ($SD=1$; range=1 to 5).

Measures

HIPPY Coordinator Training Evaluation—The training evaluation included three sections: training quality, perceptions of usefulness of the FMI, and perceptions of the level of need for families served by their program. In section one, respondents rated the quality of the training (1 = poor, 3 = adequate, and 5 = excellent) in four domains: perception of the trainer, set up of the room, overall presentation, and length. In section two, attendees reacted to eight statements (6 positively worded and 2 negatively worded) about the FMI regarding their perceptions of its utility and their personal comfort and understanding with the interview. Response options ranged from 1 (not at all) to 5 (very much). In section three, providers gave their perception of family needs in eleven areas assessed by the FMI by indicating how many families (a few, many, or don't know) they perceived needed support in the area.

Family Map Inventory (FMI) for HIPPY Families—The FMI was designed to be used in home visits as a one-on-one interview by early childcare educators. The FMI is available in English and Spanish in three versions: prenatal, birth to 3 years, and 3 to 5 years. For purposes of this study, the Early Childhood FMI for children ages 3 to 5 years was used.

The FMI typically takes about an hour to complete (Whiteside-Mansell et al., 2007). It is primarily a structured interview but also includes observational items. The FMI covers 12 domains that are grouped into three broad areas: 1) family climate and context, 2) parental characteristics, and 3) physical and social conditions children directly experience. As seen in Table 3, each domain has multiple indicators. The rationale for each construct within the domains has been described in previous research (Whiteside-Mansell et al., 2007).

As seen in Figure 1, the FMI is structured to allow parent and interviewer to immediately identify responses that may be a risk for the child. For example, the lack of a regular daily routine is difficult for children. In item 18, evidence of daily routine is the practice of at least two of the common activities at least four days a week. When two or more practices are lacking this often, the child might be exposed to a risk for a lack of structure in daily activities. For use as an intervention tool, this information is used to address the concern with the parent. To summarize the level of risk in this study, the groups of items were used to categorize children based on their experience of risk (presence of risk, 1, versus absence of risk, 0). Risk areas are usually assessed with three or fewer items. Risks were summed to create overall scale scores for each domain. The proportion of HIPPY families at risk in each domain was computed based on all children with data for each area.

Cut-points indicating familial “risk” are shaded on the FMI tool itself. This shading acts as a visual indicator for the educator to address those specific concerns. These cut scores are also described in previous studies (Whiteside-Mansell et al., 2007). The response options that indicate risk were based on expert recommendations (e.g., American Academy of Pediatrics)

when possible. When recommendations are not clearly established, the identification of risk was set to assure over-identification. For example, a child is considered a risk on the “materials for learning” construct on the FMI if they do not have access to at least one toy in each of four areas (i.e., large muscle development, creative activities, comparing/sorting, and building).

The use of shading also communicates the healthiest response to the parent (i.e., shaded responses are not desired). Despite the risk of cuing the socially desirable answer, there are several reasons that the shading is preferred. First, by indicating the most optimal options to parents, the parent will become aware of recommended practices. Second, the non-shaded response communicates the social norm to the parent (e.g., using car seats) and may have impact on some behavior (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007). For example, parents may become aware that it is not just recommended practice to use car seats but that most people use them (i.e., social norm).

Third, when parents are interviewed on topics in which the appropriate response is obvious, reliability of parental response is increased when the parent perceives the response is linked to corrective assistance (Hatfield et al, 2006). For example, parents willing to use car seats may not know how to obtain one they can afford. Finally, if parents are not truthful, it may indicate they are not ready to address the issue. This may be similar to the response many people have to a physician’s query regarding regular exercise or diet habits. However, when the teacher asks the question, it signals the topic as one that is safe to discuss. Additionally, the question should suggest to the parent that the program might be able to offer services or support.

A variety of evidence of validity and reliability has been published by the developer supporting the use of the instrument in home visits conducted by center-based early childcare programs (Whiteside-Mansell et al., 2007; Whiteside-Mansell et al., 2010a; Whiteside-Mansell, Johnson, Conners-Burrow, McKelvey, & Bradley, 2010b; Whiteside-Mansell et al., 2013). The structure of the FMI does not lend itself to traditional measures of reliability. However, seven constructs in the FMI have published alpha’s ranging from .68 to .90 (Whiteside-Mansell et al., 2013), and several published studies support criterion and construct validity for a subset of FMI constructs (Conners-Burrow, Swindle, McKelvey, & Bokony, 2015; Conners-Burrow et al., 2014; Conners-Burrow et al., 2013; Bokony, Whiteside-Mansell, & Swindle, 2013; Swindle, Whiteside-Mansell, & McKelvey, 2013).

One risk construct is based entirely on observational items. This scale is based on the PICCOLO, Parenting Interactions with Children: Checklist of Observations Linked to Outcomes. The PICCOLO is a reliable, valid, and practical observational parenting measure developed for practitioners to assess four domains known to support children’s early development: (1) Affection, (2) Responsiveness, (3) Encouragement, and (4) Teaching (Roggman, Cook, Innocenti, Jump Norman, & Christiansen, 2013). Average inter-rater agreement across scales ranged from 0.69 for Teaching to 0.80 for Affection, with a 0.77 for the full PICCOLO (Cook & Roggman, 2009). Internal consistency reliability was moderately high with Cronbach’s alpha ranging from 0.75 to 0.80 (Cook & Roggman, 2009).

Results

HIPPY Coordinator Training Evaluation

Training evaluation results indicated the overall quality of the training was appropriate ($M = 3.39$, $SD = 1.05$), with response options ranging from 1 (poor) to 5 (excellent). Nearly all coordinators understood the goals of the FMI (92%) and perceived the FMI as being helpful working with families (85%). Most (85%) indicated they would be comfortable conducting a FMI interview. Coordinators expressed that most families they will be serving throughout the year would likely need support in “using effective discipline strategies.” Coordinators, however, believed that few families would be at risk for difficulties in social integration and supports (i.e., “finding family and friends to support and help”). In every area, 31% or more of coordinators indicated that they did not know how many of their families had need in that area (see Table 2).

Family Map Inventory for HIPPY Families

In the pilot HIPPY program, the FMI was completed on all families enrolled for services. Below, we present details of these elements of child well-being (see also Table 3) describing families in HIPPY. Because the assessments were conducted over the full year of intervention, the interpretation of risk level is confounded with intervention services received.

Physical and Social Conditions—For children to reach optimal development both physically and psychologically, they need social supports, stimulation, and sustenance. The constructs within the Physical and Social Conditions on the FMI address such concerns.

Basic Needs: All children require adequate nutrition, shelter, and care to ensure survival. This section of the FMI inquires about the family’s ability to provide these basic needs, as well as the food quality and quantity in the home. The majority of families surveyed (76%) expressed difficulty in providing for their families at least one area of basic need (i.e., rent: 13%, utilities: 11%, transportation: 16%, food insecurity: 17%). The largest individual risk in this group was providing the child with food of adequate quality (70%). In this sample, 44% of children did not eat the recommended levels of fruit and vegetables at home. When this was excluded as a basic need, only 33% of families had trouble with basic needs at the time they were interviewed, and 50% of the total sample were exposed to more than two areas of basic needs when food quality was excluded.

Family self-support, such as parent education and employment, are included in the Basic Needs Section. The most prominent risk for HIPPY families in this section was employment, with 80% of this sample at risk. These families indicated they were unemployed, working multiple jobs, and/or working split shifts, which can lead to less quality time together. In addition, many guardians lacked education beyond high school (61%).

Home & Car Safety: Unintended injury is the leading cause of death and disability for children in the U.S. (Child Trends Databank, 2014; Gilchrist, Ballesteros, & Parker, 2012).

The FMI includes an assessment of vehicle safety practices, fire and secondhand smoke safety, child access to dangerous materials and poisons, and household injury risk. Almost half of the families surveyed (44%) reported child exposure to secondhand smoke. Many were not practicing safe vehicle riding (37%) or keeping children away from potentially dangerous objects, substances, and situations in the home (58%). Overall, 91% of families had one or more risk in the area of Home and Car Safety, and 50% were exposed to more than two home and car safety risks.

Health Care: The FMI includes a range of health related issues, including treatment of chronic illnesses, access to health care, and health care utilization. Few caregivers reported chronic conditions that are not well managed (3%). However, many (30%) caregivers struggle with getting access to the health care they need. Regarding the health of the children, 13% had a chronic health condition, but most were well managed (97%). Most children had access to needed health care (97%). Overall, 50% of families had one or more risk related to physical health care, and 10% were exposed to more than two health access risks.

School Readiness: The FMI assesses the child's access to materials for play and learning, books and reading, extra activities outside the home, and parent engagement in play and learning. Most children had adequate toys for play, such as items that encourage building, muscle development, creativity, and music (93%). Children had adequate books available (100% had at least 10 children's books) and were read to often (93%). Children (94%) experienced enriching activities outside of the home, such as visits to the local library, sporting events, or children's movies. More than a third of children (36%) did not have parents that actively engaged in play and learning activities at least three times a week with their children (i.e., counting, naming shapes/colors, playing toys or games, arts and crafts). Overall, 41% of families had one or more risk related to academic stimulation, but only 6% were exposed to more than two areas of risks.

Discipline and Warmth: Discipline practices were assessed by inquiring about specific discipline strategies, such as frequency of spanking, yelling, timeout, and redirection. Although few parents used discipline practices defined as inconsistent (1% reported using a variety of practices frequently) or excessive (7%), many children experienced overly harsh (50%, e.g., verbal or physical) discipline practices.

The FMI also includes an observational assessment of warmth and bonding between the guardian and the child. Using a list of positively-worded parent behaviors, the home visitor indicated how often the parent was observed engaging in the behavior. Of 8 items, parents had to be observed using at least 5 during the interview to be considered responsive. All parents were rated as warm and responsive to their children, with no children identified as at risk in this area. Overall, 54% of families had one or more risk related to discipline practices, but none were at risk in all areas.

Routines: Predictable daily routines, consistent sleeping arrangements, and an organized environment have been shown to support child emotional regulation and social development (Bridley & Jordan, 2012; Ferretti & Bub, 2014). As seen in Table 3, six areas regarding

do not feel close to and support one another. Nearly that many parents (19%) reported problematic parenting stress, indicating that they agreed/strongly agreed on items such as “During the past month, I have felt stressed out with the day-to-day demands of raising children” and “I feel that my child is much harder to care for than most children his/her age.” Children did not experience serious family conflict. For example, parents reported that family members only sometimes lose their tempers or raise their voices, 21% and 29%, respectively.

Parental Characteristics—In Belsky’s (1984) parenting process model, parental characteristics are classified as parental personality. In particular, the FMI includes parental characteristics that affect parents’ ability to be effective nurturers (e.g. the parents’ sense of control over their own lives, depression, and social support network). Research indicates that negative facets of parental history and personality (such as mental illness or substance abuse) are likely to have deleterious impacts on children.

Alcohol and Drug Use: Children that live in a home in which alcohol or drugs are overused have been found to have many developmental problems (e.g., Singer et al., 2002). While caregiver reports of drugs or alcohol abuse are low (1%), 16% of families report that a close friend or family member has a current problem with substance use. This latter situation has been shown to be linked to less optimal caregiving by parents (Conners-Burrow et al., 2010).

Caregiver Mental Health: Even low maternal depression has been shown to impact the ability of parents to provide a quality home environment (Conners-Burrow et al., 2013; Conners-Burrow et al., 2014). About one-third (37%) of caregivers in our sample reported mental health issues. Almost a third reported feelings of hostility (31%), such as feeling easily annoyed or irritated, or getting into arguments often. Caregivers indicated low or moderate depressive symptoms (23%) and anxious (16%) feelings.

Discussion

This study examined the usefulness of a screening tool, The Family Map Inventory (FMI), for assessing the family environments of children enrolled in a HIPPY home visiting program. This is the first examination of the assessment tool in an Evidence-Based Home Visiting (EBHV) program. Findings suggest that HIPPY Home Visiting Coordinators found the tool useful and were confident in its use. Further, families assessed with the FMI accepted the use of the interview. Based on the results of the FMI, the families enrolled in the HIPPY program were at risk in a variety of areas.

One benefit to employing the FMI in home visiting services is to provide home visiting staff with real information about families’ needs. There were areas where home visitor perceptions of family strengths matched the findings from the FMI. For example, most of the families had adequate social support and were integrated into their community. This finding was consistent with the perception by coordinators that program families would not typically need help “finding family and friends to support and help.”

Another area of match of perceptions to families' real needs was that coordinators felt that the most (39%) families needed help with "using effective discipline strategies." This is consistent with the FMI finding that 50% of families use harsh discipline. Coordinator perceptions were also confirmed in that only 29% felt that families would need help with family conflict.

There were also areas where home visiting coordinators' perceptions and data from families were discordant. For example, few coordinators perceived that children were at risk for poor monitoring and supervision in the home. When assessed with the FMI, 70% of children were at risk. These findings suggest that the FMI may be useful in targeting resources that match specific needs and identifying areas of concern that are not recognized by home visitors without an in-depth assessment.

Overall, the results suggest that home visiting coordinator perceptions of the typical family were relatively consistent with the detailed findings from the FMI. However, the findings also identified areas that the coordinators did not perceive as problems for the typical family served. That is, the use of the FMI may identify risks that are often not discussed in this home visiting program. It is understandable that the home visiting coordinators base their perceived needs for a family on a stereotype of many program participants. Assessing the resource need in each family will help programs tailor services for the family. This may be particularly useful to new and less experienced home visitors. Home visitors working with families over the academic year often identify family needs because of their frequent contact with families. However, these conversations may only occur when the need is urgent. Engaging families in an in-depth conversation early in enrollment will allow the home visitor to support the family before the need becomes critical.

HIPPY strives to support families to enrich the home environment, specifically with regard to school readiness. In this study, many parents were providing parenting supports to children related to school readiness. However, the results should be interpreted in context. In this feasibility study, the FMI interviews were conducted across the school year. Families had from one to eight months of HIPPY services. It is likely that many families received education related to school readiness before the interview.

When considering the implementation of an in-depth assessment of the home and parenting environment, several factors should be examined. Research cites conflicting evidence on the benefits of paraprofessionals in the home visiting arena (Duggan et al., 2004; Kendrick et al., 2000; Korfmacher, O'Brien, Hiatt, & Olds, 1999; Korfmacher et al., 2008; Tandon, Parillo, Jenkins, & Duggan, 2005). In HIPPY programs, the Home Visiting Coordinators are often, as in this study, members of the same community as the families they serve (with many past HIPPY participants themselves). Based on anecdotal comments during the training of HIPPY coordinators, this may be a barrier to implementation of a comprehensive assessment of the home environment. For example, one coordinator mentioned that she already knew her families well due to the small population in her town (i.e., had gone to school with some of them, known others through family members, etc.). These preconceived thoughts may lead the coordinator to skip certain items on the Family Map which could, in turn, result in key areas of need being overlooked. However, the same is true of the center-

based programs currently using the FMI successfully (e.g., with validity, Whiteside-Mansell et al., 2007). That is, before educators have conducted interviews with the FMI, they often worry that it may generate more depth in conversation than is typical. After implementation, center-based teachers report comfort with the conversation (Whiteside-Mansell et al., 2013). Differences that may occur in home visiting situations have not been examined.

While educators new to the role of comprehensive family engagement may find the transition to asking “uncomfortable” questions difficult, most families do not express concern over such discussions (Whiteside-Mansell et al., 2007; Whiteside-Mansell et al., 2013). Paris and Dubus (2005) found that mothers in their study were comfortable talking to home visitors about their struggles and looked forward to their visits each week. In a similar study by Krysik and colleagues (2008), mothers who indicated a strong need for services seemed to understand why home visitors were asking specific questions of a more personal nature and viewed their home visits as helpful and important.

A valid and reliable assessment tool, such as the FMI, could support programs in several ways. First, it could help organize program efforts to include support to families in key areas in the home related to healthy child development. According to the Family Strengthening Policy Center (Family Strengthening Policy Center, 2007), establishing a comprehensive approach to nurture positive family and child functioning is critical to improve program effectiveness. Second, programs would benefit from the targeted partnership with families by individualizing intervention services. Finally, EBHV programs are responsible for showing the need and effectiveness of their services (Family Strengthening Policy Center, 2007).

This study is not without limitations. Because the goal of the study was to test the acceptance of the FMI with families, the interviews were conducted from October to April of the intervention year. For some families, rapport was already well established. However, this familiarity may also be a hindrance to successful implementation of the instrument, as home educators may feel like they already know the families they are interviewing, which may make adherence to the interview questions seem unnecessary or uncomfortable. For example, if the educator and parent have been working on reading practices for several visits, they may tend to reword or skip items about reading because of their recent conversations about the topic. Families may have had specific needs addressed before the FMI assessment was completed. In particular, the results suggest that many parents may have benefited from materials and education related to school readiness. Additionally, 94% of our sample was Caucasian in race/ethnicity, and all were from one geographic (and rural) location.

This present study adds to the existing literature as evidence that such engagement is possible and needed. By engaging families in these conversations, programs can connect on a deeper level with the families they serve, potentially leading to increased program retention and effectiveness. In fact, Gomby, Larson, Lewit, and Behrman (1993) posit that EBHV programs that do not address the myriad needs of the whole family will produce less robust results than multi-focused programs.

Based on this and other research using the FMI, the FMI has been approved by and is being successfully used by a variety of home visiting programs (McKelvey & Fitts, 2012; McKelvey, Fitzgerald, Burnett, & Fitts, 2014; Swindle, Shapley, Kyzer, Cheerla, & Whiteside-Mansell, in press; Swindle et al., 2013; Ward, Swindle, Kyzer, & Whiteside-Mansell, 2014). For example, it is listed as an approved family assessment in the Parents as Teachers home visiting program. These programs use the FMI both to inform and target services and to evaluate the impact of the results. Additional studies are needed to explore the usefulness of FMI in other home visiting environments. This study provides evidence of the feasibility of the use of the tool, however.

While research is clear that key family and home characteristics can affect children's social, emotional, and cognitive skills, these characteristics are often not identified in home visiting programs that target school readiness. Often the services offered are those that 'most' families need rather than tailoring the services to the specific family need. Many home visiting programs are increasing their role in the support of families more holistically. The use of the FMI as a screening tool shows promise as a tool to tailor service needs to specific family need.

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The next set of questions is about things that have happened in the **past week**. If your child stayed with someone else for part of the week, answer to the best of your knowledge.
If the past week was very unusual (e.g., school out), you may ask family to think about prior week. If no routine for item, mark none.

18. Thinking about the past 7 days , how many days did your child:	None	1 day	2 days	3 days	4 days	5 days	6 days	7 days
a) Brush their teeth about the same time?	0	1	2	3	4	5	6	7
b) Eat dinner at about the same time?	0	1	2	3	4	5	6	7
c) Go to bed within 30 minutes of their regular bedtime?	0	1	2	3	4	5	6	7
d) Stick to their regular morning routine?	0	1	2	3	4	5	6	7

If 2 or more responses in gray: Consider Nurturing Family Routines as a Family Goal

Figure 1.

Sample Interview Question for Daily Activities from the Family Map Inventory.

Table 1

Sample Description of Rural Families Enrolled in HIPPY (N = 70)

	Percent
Race	
White	94.3%
Black	0%
Hispanic	2.9%
Other	2.8%
Have Partner/Married	81.4%
Education	
Caregiver	
No High School Diploma/No GED	4.3%
High School Graduate/GED	42.8%
Some Post-Secondary Education	52.9%
Partner	
No High School Diploma/No GED	7.0%
High School Graduate/GED	50.9%
Some Post-Secondary Education	42.2%
Employed	
Caregiver	32.9%
Caregiver's Partner	89.5%
Child Male	43.9%

Table 2

Comparison of Home Visiting Coordinator and Family Perception of Family Need (N = 39)

	Home Visitor Response			Family Response	
	Don't Know	A Few	Many	At risk	
How many families need help with:					
Establishing routines for the family and child	31.4%	31.4%	37.1%	100%	
Getting and using toys and books to help the child begin to learn	34.3%	37.1%	28.6%	41.4%	
Maintaining safe monitoring at home	33.3%	51.5%	15.2%	70.0%	
Protecting the child and family from unsafe neighborhoods	35.3%	41.2%	23.5%	21.4%	
Reducing family conflict	32.4%	38.2%	29.4%	31.4%	
Using effective discipline strategies	33.3%	27.3%	39.4%	54.3%	
Managing physical health problems of parent or child and getting access to dental or physical health care	32.4%	41.2%	26.5%	50.0%	
Managing existing mental health concerns	33.3%	45.5%	21.2%	37.1%	
Meeting basic needs including housing, food, and utilities	32.4%	29.4%	38.2%	75.7%	
Providing a safe home and using safe car practices	35.3%	44.1%	20.6%	91.4%	
Finding family and friends to support and help	38.2%	47.1%	14.7%	24.3%	

Table 3

Percent of Children at Risk Based on Family Map Inventory

Constructs Assessed by Family Map Module ^a	Rural HIPPY Families Percent of Risk (N=70)
Area 1 Physical/Social Conditions Sustenance Safety	
<i>Meeting Basic Needs</i>	75.7%
Utilities (1)	11.4%
Rent (1)	12.9%
Health Care (1)	15.9%
Housing (2)	11.4%
Transportation (1)	15.9%
Clothing (1)	11.4%
Food Quantity (2)	17.1%
Food Quality (8)	70.0%
Education	61.4%
Caregiver (2)	44.3%
Caregiver's Partner (2)	47.1%
Employment	80.0%
Caregiver (3)	77.1%
Caregiver's Partner (1)	40.4%
<i>Safety - Home & Car</i>	91.4%
Vehicle Safety (4)	37.1%
Fire Safety (2)	10.0%
Secondhand Smoke (2)	44.3%
Poison Accessibility (4)	68.6%
Lead Paint (1)	12.9%
Injury or Accident (6)	58.6%
<i>Physical Health</i>	50.0%
Child Health Care	
Health Care Access (1)	2.9%
Child Chronic Condition (1)	13.0%
Child Chronic Treatment Need ^b (1)	2.9%
Child Health Care Use (3)	8.6%
Caregiver Health Care	
Health Care Access (1)	30.0%
Caregiver Chronic Condition (1)	12.9%
Caregiver Chronic Treatment Need ^b (1)	2.9%
Other Family's Health Care	
Other Family Chronic Condition (1)	8.8%
Other Family Chronic Treatment Need ^b (1)	11.1%
Caregiver Pregnant (1)	2.9%
Caregiver Physical Activity (1)	48.6%

Constructs Assessed by Family Map Module ^a	Rural HIPPY Families Percent of Risk (N=70)
Caregiver Sleep (1)	50.0%
Stimulation	
Promoting School Readiness	41.4%
Materials for Learning (5)	7.1%
Read to Child (3)	7.1%
Educational Play with Child (6)	8.6%
Teaching Child (5)	35.7%
Variety of Experience (8)	5.7%
Discipline	54.3%
Excessive Punishment (1)	7.4%
Inconsistent Discipline (5)	1.4%
Harsh Discipline (3)	50.0%
Physical Discipline (2)	47.1%
Parental Warmth ^b (8)	0%
Structure	
Nurturing Routines	100%
Nighttime Lodging (2)	15.7%
Daily Activities (4)	17.1%
Inadequate Child Sleep (1)	81.2%
TV Content (3)	82.9%
Amount of TV (2)	78.6%
Physical Structure ^b (3)	31.4%
Adult Absent from Home (4)	8.6%
Surveillance	70.0%
Monitoring (3)	70.0%
Aftercare Safety (2)	2.9%
Social Integration	24.3%
Social Support (3)	20.0%
Social Integration (4)	5.7%
Program Integration (5)	1.4%
Area 2 Family Climate/Context	
Exposure to Violence	21.4%
Neighborhood Safety (5)	8.6%
Exposure to Violence (4)	2.9%
Family Cohesion/Conflict	31.4%
Parenting Stress (7)	18.6%
Conflict with Co-Parent (3)	9.2%
Family Conflict (2)	0%
Family Cohesion (2)	24.3%
Area 3 Parental Characteristics	
Alcohol/Drug Use	15.7%

Constructs Assessed by Family Map Module ^a	Rural HIPPY Families Percent of Risk (N=70)
Caregiver Use (5)	1.4%
Friend/Family Use (2)	15.7%
Use Impact Parenting ^b (1)	0%
<i>Caregiver Mental Health</i>	<i>37.1%</i>
Depression (2)	22.9%
Hostility (2)	31.4%
Anxiety (3)	15.7%
Impact Parenting ^b (1)	1.6%
Legal Involvement (3)	11.4%

^a Note: Number of items in each construct are listed beside the item in parentheses.

^b Observational items part or all of risk.