Healthy Futures

Year Four Evaluation of Early Childhood Mental Health Consultation

BY THE DISTRICT OF COLUMBIA
DEPARTMENT OF BEHAVIORAL HEALTH

PREPARED BY:

Anna E. Davis, BA
Deborah F. Perry, PhD

Georgetown University
Center for Child and Human Development
3300 Whitehaven Street, NW, Suite 3300
Washington, DC 20007

SEPTEMBER 30, 2014

Acknowledgements

We want to acknowledge the ongoing contributions of Dr. Meghan Sullivan, program evaluator at the DC Department of Behavioral Health, for managing all of the data from the consultants in the field. We also appreciate the support of members of the Project LAUNCH team from the DC Departments of Health and Behavioral Health—especially Barbara Parks and Vinetta Freeman. Finally, we are grateful for the excellent work of the four mental health consultants as well as Dr. Shana Bellow who provides them with clinical and reflective supervision.

Table of Contents

List of Tables and Figures

Executive Summary

The Washington D.C. Department of Behavioral Health (DBH) recently completed the fourth year of implementing an evidence-informed mental health consultation project in 26 community-based child development centers (CDCs). Entitled Healthy Futures, this project is based largely upon the Early Childhood Mental Health Consultation (ECMHC) model developed by the Georgetown University Center for Child and Human Development (Cohen & Kaufmann, 2005; Duran et al., 2009). In Healthy Futures, four full-time, licensed mental health professionals provide CDCs with a range of on-site consultation services geared toward building the capacity of directors and staff to reduce challenging child behaviors and promote positive social-emotional development. Two types of intensive consultation services are offered:

- **Programmatic consultation**, focused on building the capacity of the teachers on behalf of all children in their classes.
- **Child-specific consultation**, focused on those young children in need of individualized services as well as facilitating referrals for community-based services.

DBH contracted with the Georgetown University Center for Child and Human Development (GUCCHD) to perform an external evaluation of the Healthy Futures project. This year, evaluation data were gathered from the consultants and teachers who received programmatic consultation in the CDCs. Additional data were collected about the children who were referred for child-specific consultation from their parents and teachers. Data were gathered from July 2013 to June 2014. Key findings from all analyses include:

- Overall 1,361 children had access to high-quality mental health consultation services in community CDCs throughout DC, with an emphasis on allocating services to Wards 7 and 8.
- While the expulsion rate for the first three years of the evaluation has been consistently below the national average of 6.7 children per 1,000 (Gilliam, 2005), this year was a landmark year with no expulsions in any of the CDCs receiving ECMHC services.
- There was excellent penetration of Healthy Futures services: consultants were active in almost 90% of the 131 classrooms in the 26 CDCs.
- In 28 classrooms, teachers received intensive programmatic consultation and classroom plans were developed. At baseline and follow-up, consultants observed these classrooms and completed the Arnett Caregiver Interaction Scale (CIS), an observational measure of classroom climate. Statistically significant improvements were seen from baseline to follow-up in the emotional climate of the classrooms that received programmatic consultation; specifically, teachers demonstrated more positive relationships with children and overall higher-quality interactions, as well as reduced detachment and punitive behaviors (see Figure 7).

- In addition, 52 children received individualized child-specific consultation. At baseline and follow-up, each child's parent and/or teacher completed the Devereux Early Childhood Assessment (DECA). Based on data from the 39 children with teacher-reported data at baseline and follow-up, these children demonstrated significant improvements in behavioral concerns, initiative, attachment, self-regulation, and total protective factors after 3-4 months of consultation (see Figures 5-6).
- This year, the Healthy Futures team implemented universal screening to assess the overall burden of behavioral difficulties in the sample. According to teacher-report, 14.5% of the children had a behavioral concern. This prevalence rate is consistent with other published reports (e.g., Gross, Sambrook, & Fogg, 1999).
- Of note, improvements in the classroom climate that resulted from intensive programmatic consultation were associated with significant reductions in the extent of problem behavior in that classroom. This finding suggests that consultation that is focused on changing the classroom environment can impact the behavior of children in this classroom—which underscores the efficiency of ECMHC as an intervention.
- There was also evidence of a generalized effect of intensive child-specific consultation. In addition to the expected improvements in the target children, classrooms in which one or more students received child-specific consultation showed a greater decrease in the total number of children that the teacher reported with severe behavior difficulties. This suggests that the behavior management tools that teachers acquire from working with a consultant on one child's behavior likely impact other children in that classroom with challenging behaviors (see Figure 8).
- Consistent with prior years, almost a third of the classrooms experienced a change in the lead teacher from baseline to follow-up. Interestingly, teacher turnover was significantly lower in classrooms that received intensive consultation—whether programmatic, child-specific, or both.

Summary and Synthesis

- In its fourth year of implementation, the Healthy Futures program has demonstrated a consistent pattern of positive findings across multiple domains: changes in teachers' behavior led to changes in the classroom climate and reductions in children's problem behaviors.
- For children who received individualized consultation, parents and teachers both reported increases in protective factors and reductions in problem behaviors.
- The addition of a universal screening protocol in all 131 classrooms provided important prevalence information about the levels of behavioral concerns in young children attending the 26 CDCs served by Healthy Futures. These data were also important in telling the story of the generalized effects of ECMHC on the behavioral well-being of all 1,361 children served in these programs.

Introduction

Early childhood mental health consultation (ECMHC) is an emerging evidence-based practice used to promote children's healthy social and emotional development in a variety of settings. One of the earliest definitions of ECMHC was included in the monograph *Early Childhood Mental Health Consultation* (Cohen & Kaufmann, 2000; rev. 2005). This definition emphasized the collaborative relationship between a mental health professional consulting with caregivers (i.e., early childhood staff and family members) and defined two types of consultation: child- and family-centered consultation and programmatic consultation. ECMHC is an intervention in which consultants use a capacity-building and problem-solving approach to give early childhood professionals and families the tools to support the social-emotional development of young children and to address concerns about children who have challenging behaviors (Duran et al., 2009; Kaufmann, Perry, Hepburn, & Hunter, 2013). Consultants do this by working alongside the early childhood professionals in their daily setting, sharing strategies, modeling evidence-based intervention approaches and cultivating a deeper understanding of the factors that shape young children's social-emotional development. While mental health consultation can be embedded within a variety of settings serving young children and their families, during the last decade, the majority of ECMHC evaluations have been conducted in early child care and education settings. Other settings in which ECMHC has been implemented include home visitation programs, primary care offices, domestic violence shelters, homeless shelters, and others (Ash, Mackrain, & Johnston, 2013; Brinamen, Taranta, & Johnston, 2012).

The ECMHC model is guided by a theory of change that emphasizes the multiple levels of influence on young children's behavior. ECMHC often relies on the involvement of the child care director as well as classroom teachers. A child care director's understanding of the factors that contribute to young children's social-emotional development can impact how supportive she is of her staff as they attempt to implement the strategies recommended by their mental health consultant (MHC). Additionally, the emotional climate of a classroom is a function of how well the teachers are able to work together, their own interaction styles and their emotional availability; this in turn has a direct impact on the behavior of young children in their classrooms. Children with challenging behavior may be particularly sensitive to the tone of the teachers' interactions and those children's negative behavior may also contribute to a negative classroom environment. Hence, intervention

and assessment occur at the child, classroom, and program level to understand and influence the reciprocal factors that shape children's social-emotional and behavioral well-being. The next section briefly describes the ECMHC context and summarizes what is known about the impact of ECMHC on a variety of outcomes from other research and evaluations.

The Evidence Base for ECMHC

There is a growing body of empirical evidence supporting the effectiveness of ECMHC in community settings. In a recent special issue of the journal *ZERO TO THREE* focused on ECMHC, an article summarized the findings from several recently completed program evaluations—including the first several years of the Healthy Futures project. Overall, there is strong evidence of positive impacts of ECMHC on classroom climate, teachers' skills, children's social-emotional behavior, and expulsions from child care (Hepburn, Perry, Shivers & Gilliam, 2013). The findings cited in that article, as well as findings from other recent publications, are briefly summarized below.

Improved Classroom Climate

One of the primary outcomes for programmatic consultation is improvement in the emotional climate of the classroom. This can be captured in several ways, most commonly through an observational tool that documents aspects of the teachers' behaviors and interactions with each other and the children. The most commonly used measures are the Preschool Mental Health Climate Scale (Gilliam, 2008), the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, & Harme, 2008) and the Arnett Caregiver Interaction Scale (CIS; Arnett, 1989). Across multiple state ECMHC program evaluations and using these different measures, the findings have been consistent: teachers improved in their interactions supporting social and emotional development, showed increased teaching about feelings and emotional problem-solving skills, and demonstrated higher-quality classroom interactions.

Improved Child Social-Emotional Functioning

Most of the children identified as needing child-specific consultation present with challenging behaviors. Perry, Allen, Brennan, and Bradley (2010) conducted a research synthesis examining the level of evidence for ECMHC, and found consistent impacts of consultation on children's behavior problems and social-emotional functioning. In particular, ECMHC has consistently been associated with reductions in externalizing behaviors, whether reported by teachers or rated independently by an external observer (Perry et al., 2010). Additionally, several recent studies used the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999; 2003) to assess change in social-emotional skills, and reported increases in social skills, social-emotional functioning, and protective factors for children who received child-specific consultation.

Reduced Expulsions

In 2005, Walter Gilliam published a landmark study providing the first ever national data on the rates of expulsions from state-funded pre-kindergarten programs. The rate was three times higher than that for K-12 programs (6.7 per 1,000 versus 2.1 per 1,000, respectively). More recently, out-of-school punishment for preschoolers has received increased attention from policymakers, including legislation under consideration in the DC City Council to ban most suspensions and expulsions of pre-kindergarteners (Brown, 2014). The DC Office of the State Superintendent of Education (OSSE) reported sobering findings that 205 three- and four-year-olds were suspended in the 2012-2013 school year. Furthermore, beginning in preschool, racial disparities are apparent in the rates of out-of-school punishment (OCR, 2014). Fortunately, Gilliam (2005) also reported an association between the presence of on-site ECMHC and reduced rates of expulsions in a nation-wide sample. Findings such as these served as catalysts for the development of many ECMHC programs across the country. Hoover et al. (2012) replicated this finding; they reported reduced expulsions from family child care settings in Colorado that had access to mental health consultation. Converging results have been reported in the Maryland evaluation as well as in the past three years of DC evaluations, all of which found expulsion rates that were well below the national average estimated by Gilliam in 2005.

Summary of the Evidence from ECMHC Evaluations

Taken together, these studies suggest the evidence base for the effectiveness of ECMHC continues to grow and strengthen. They also suggest ECMHC can be a critical tool for promoting school readiness in young children at higher risk of behavior problems and expulsion, as well as improving the quality of the social-emotional climate of classrooms where these children learn, grow and play.

The Healthy Futures Project

The Healthy Futures project was initiated by the Department of Behavioral Health (DBH; formerly the Department of Mental Health) as an outgrowth of work on a white paper on the importance of addressing early childhood mental health in DC. In 2009, DBH secured seed funding from the Deputy Mayor of Education to support the program's first year of operations. At the same time, DBH partnered with the DC Department of Health (DOH), which was awarded a federal grant, Project LAUNCH, in 2009 from the Substance Abuse and Mental Health Services Administration (SAMHSA). Project LAUNCH allowed the Healthy Futures project to expand. In years two and three, Project LAUNCH funding paid for all four mental health consultants, as the local seed money expired. DBH also funded an external evaluation contract with local money to provide data to improve fidelity and contribute to discussions regarding sustainability beyond the SAMHSA grant period. As the LAUNCH grant expires on September 30, 2014, the City Council has approved the allocation of local funding to continue the Healthy Futures project—in part as a result of strong program evaluation data during the first three years of implementation.

The Healthy Futures consultants are licensed mental health professionals who visit 6-7 centers once per week, or every other week depending on size of the CDC. The amount of time they spend in each classroom varies based on the specific needs of that program and is determined in collaboration with the CDC directors. Mental health consultants (MHCs) address children's existing mental health concerns through applying evidence-based techniques with children, teachers, and parents, but they also work to prevent future concerns from arising through promotion and prevention activities (Duran et al., 2009). While activities may vary based on the nature of the setting, consultants' work typically includes: conducting needs assessments for children and classrooms, linking families with community resources, implementing evidence-based techniques, frequently evaluating the effectiveness and appropriateness of the techniques chosen, and planning for sustainable changes (Kaufmann et al., 2013).

From the beginning, the Healthy Futures consultation model emphasized *programmatic consultation*, which builds the capacity of the staff in the CDCs to promote young children's positive social emotional development and reduce problem behaviors. In years two and three, the consultation model expanded to have a more explicit protocol to identify children with problematic behaviors in

the CDCs. With parental permission, these children receive *child-specific consultation* focused on their unique needs. In this fourth year of implementation, programmatic and child-specific consultation are both central aspects of the theory of change of the Healthy Futures team.

In addition to the explicit activities conducted by MHCs, their work is characterized by guiding principles of relationship-building that inform their "way of being," or consultative stance, with teachers, children, parents, and directors. Central tenets include: avoiding acting as the expert in favor of understanding the subjective experiences of others; considering all voices and contextual influences; and maintaining patience and hope (Johnston & Brinamen, 2006). Expertise in consultation is thought to operate as a parallel process, mirroring the reflective supervision that MHCs receive from their supervisory psychologist. Consultants meet regularly as a group and individually with their supervisor to share strategies and receive support in this difficult work. Supervision gives consultants access to multiple perspectives, insulates them against feelings of isolation, and provides them with a model of authentic interest, respect, and empathy. The consultants may internalize the skills modeled for them by their reflective supervisor and then apply them to their work with teachers, children, parents, and directors (Heller, Steier, Phillips, & Eckley, 2013). Effective MHCs have mastered not only the content material, but also the relationship-building activities that best deliver it.

Summary of the Findings from the External Evaluation

In this section, we provide an overview of the four year external evaluation led by the Georgetown University Center for Child and Human Development. A table summarizing the findings from all four years of evaluation is available in Appendix A. This evaluation has been implemented in accordance with the principles of community-based participatory research, ensuring that stakeholders from the Departments of Behavioral Health and Health helped to select measures, interpret the findings and make recommendations for changes in the protocol year to year. This is important as the model is refined and new approaches to measuring the impact of ECMHC on outcomes emerge from the literature.

Summary of Measures

The measures selected for the external evaluation were designed to assess change over time at multiple levels: (1) classroom climate, (2) child-level outcomes, and (3) generalized classroom outcomes. In each year of the four-year evaluation, adjustments were made to increase the rigor and/or precision of the measurement of these constructs. In addition Table 1 below lists the current measures used for the year four evaluation.

(1) **Classroom Climate:** In the first year of the evaluation, the mental health consultants completed the Preschool Mental Health Climate Scale (PMHCS; Gilliam, 2008) in all of the classrooms selected for the study. In the second year, an external research assistant conducted CLASS observations in a smaller sample of classrooms (n = 16). In year three, the evaluator recommended the use of the Arnett Caregiver Interaction Scale (CIS; 1989), which has been used in several statewide evaluations of mental health consultation in child care. In year three, and again in year four, this tool was completed by the consultants as they initiated intensive

TABLE 1

Measures Used in Year Four Evaluation

TOOL	WHAT IT MEASURES	COMPLETED BY	BASELINE/FOLLOW-UP
Devereux Early Childhood Assessment (DECA) Infant & Preschool Versions	Social-emotional development in infants, toddlers, and preschoolers	Teachers and parents of children who received child-specific consultation	After signed parental consent and then 3-4 months later
Arnett Caregiver Interaction Scales (CIS) Infant & Preschool Versions	Teachers' interaction styles and behaviors (1 positive and 3 negative scales)	Consultants providing programmatic consultation in selected classrooms	At initiation of consultation services and then 3-4 months later
Strengths and Difficulties Questionnaire (SDQ)	Teacher perceptions of the prevalence and severity of children's behavior problems	Teachers working in a CDC receiving consultation	Late fall of 2013 and end of the 2013-2014 school year
Observable Concerns	Concerns about children's behavioral, social, or developmental functioning	Any adult with concerns about a child; usually a teacher	Before child-specific consultation

classroom-focused consultation and developed their written action plans, and then again after 3-4 months of consultation services. The CIS is an observational, 26-item measure that assesses teacher-child interactions for the following characteristics: positive quality, detachment, punitive behaviors, and permissiveness (see Appendix B).

(2) **Child-Level Outcomes:** In all four years of the Healthy Futures evaluation, the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglierie, 1999; 2003; Mackrain & LeBuffe, 2007) was completed for children who received some type of child-specific services. In year one, this was administered for a small group of children whose parents participated in the Incredible Years parenting groups. In year two, the DECA was completed by teachers and parents of a small group of children who were referred for child-specific consultation services. This practice was continued in years three and four, but the second data collection point was standardized to 3-4 months following parental consent to ensure a higher number of matched pre-/post-assessments. Rather than focus only on children's problematic behaviors, the DECA uses a strengths-based approach to assessing children's functioning. It has two versions—Infant/Toddler and Preschool—and both measure attachment, initiative, self-regulation, and total protective factors. The Preschool version also includes a behavioral concerns subscale. Using the DECA allows the evaluation team to demonstrate the extent to which children's protective factors change after receiving child-specific consultation. This tool is protected by copyright, so cannot be included in the Appendix.

(3) **Classroom-Level Problem Behaviors:** A new measure, The Impact Supplement of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1999) was implemented in year four to facilitate the early identification of children who might need child-specific consultation. The SDQ was designed to assess the extent and impact of child behavior problems in the classroom. For each child on their roster, teachers indicated whether or not the child has difficulties in any of four domains: behavior, emotions, concentration, or getting along with others. Among

children with difficulties, teachers rated the difficulties as minor, definite, or severe. They then rated the impact of the difficulty on the child's learning, emotions, and peer relations, as well as the burden it places on the classroom and teacher. These responses were completed on a Likert scale ranging from 1 "Not at All" to 4 "A Great Deal" (see Appendix B). The measure is informative in that it can: 1) provide prevalence estimates of behavior problems across all the CDCs participating in Healthy Futures, and 2) assess change in the burden of behavior difficulties in classrooms. The evaluation team also hoped it might provide a tool to assess the value added by child-specific and programmatic consultation in these CDCs.

(4) **Directors' Attitudes and Beliefs:** To assess change over time in the attitudes and beliefs of the CDC staff, in the first three years of the evaluation, the Goal Achievement Scale (GAS; Alkon et al., 2003) was completed by the CDC directors. This measure was completed at the beginning of the school year and at the school year's end. Directors also completed an online satisfaction scale at the end of those program years. In year four, the GAS was dropped from the protocol due to ceiling effects, and the directors' online survey results were not analyzed due to an insufficient sample size of responses (n = 8).

(5) **Teacher Job Stress:** During the first three years of the Healthy Futures evaluation, a variety of items from the Child Care Worker Job Stress Inventory (CCWJSI; Curbow, Spratt, Ungaretti, McDonnell, & Breckler, 2001) were selected to measure the impact of ECMHC on teacher stress. Each year, a different set of indicators was used: for year one, subscales were selected to align with other statewide evaluations; for year two, a revised set of 27-items was selected by the evaluation team to reflect constructs that ECMHC could potentially change; for year three, a smaller subset of 6 of these items was piloted. None of these approaches yielded significant findings related to teacher stress. Factors such as teacher turnover and inclusion of data from teachers who did not receive consultation may partially explain the lack of significance. For year four, the evaluation team fielded a new teacher survey, one goal of which was to get a better understanding of self-reported teacher stressors. Teachers wrote, in their own words, what the two most stressful aspects of their job were. It was hoped that these qualitative data might be useful in selecting a more sensitive measure for future ECMHC evaluations.

(6) **Concerning Child Behavior:** Children were flagged for potential child-specific consultation using the Observable Concerns questionnaire, developed by DBH. Teachers, parents, directors, and consultants filled out this checklist for each child that they considered to have a problem. They endorsed at least one item among seven categories: behavior, appearance, family/social issues, speech/language, development, eating, and relationships.

Year Four Implementation

Description of the Participating CDC Programs

The 26 enrolled CDCs were located in all of the 8 Wards of the city except for Ward 3. Fifteen of the 26 CDCs were located in Wards 7 and 8, consistent with both the level of need and in alignment with the communities targeted by Project LAUNCH. All of the CDC directors were women and most (73%) reported they were African American. They had been CDC directors for an average of 20 years, with a range from 7 to 41 years. Centers served an average of 64 children, with a large range from 13 to 180. Across the CDCs there were 131 classrooms, with 58 (46%) of the classrooms serving infants, 53 (42%) serving toddlers, and 15 (12%) serving preschoolers. There was a total of 1,361 infants, toddlers and preschoolers enrolled in these classrooms. Nearly all of the lead teachers were female (97%) and two-thirds (67%) were African American. Teachers ranged in their years of experience from 1 to 40 years, with a mean of 12.9 years. Nearly all (90%) of the teachers reported having worked with their Healthy Futures consultant before the 2013-2014 academic year. Among those who had worked with their CDC's consultant previously, they reported working together for an average of over two years (see Table 2).

Penetration and Allocation of ECMHC Services

Working in collaboration with the CDC directors, the consultants targeted their services to children and classrooms with the greatest need. Consultants provided some children and classrooms with intensive consultation (child-specific, programmatic, or both), and were active in many other classrooms. Delivery of consultation was measured using two approaches: classrooms that received "intensive consultation" were those in which a CIS or DECA was completed and individualized plans were developed. The average duration of these consultations was 5 months, as defined by the dates of the baseline and follow-up assessments. In addition, consultants were asked to rate their level of activity in all of the classes on their roster; this was a retrospective assessment of the amount of time they actually spent in each classroom, without regard to whether they had an active plan in place. Activity level was rated on a three-point scale: (1) none; (2) some; (3) a lot. It was important to assess this independently of the presence of a CIS and/or DECA to accurately measure the extent of classes served because, without this information, it would appear that relatively few classrooms benefitted from the ECMHC services.

TABLE 2

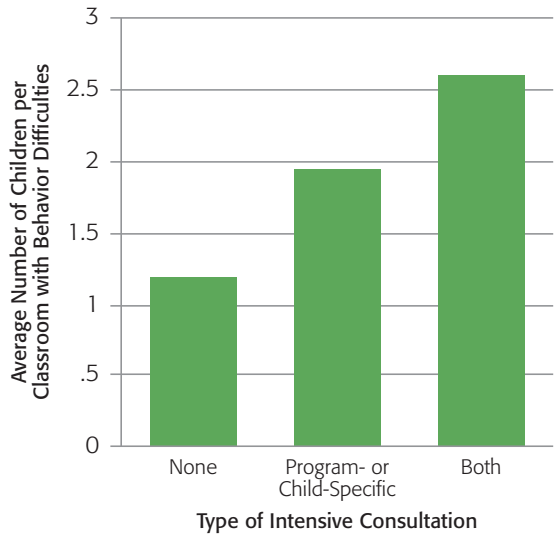
Length of CDC Involvement in the Healthy Futures Program

CHILD DEVELOPMENT CENTERS	YEARS IN HEALTHY FUTURES PROGRAM
Barbara Chambers	2
Big Mama's Children Center	4
Board of Child Care	4
CentroNia (Columbia Road)	4
CentroNia Annex (Newton Street)	4
First Rock Baptist Child Development Center	3
Happy Faces Child Development Center	4
Ideal Child Care Development Center #1	4
Ideal Child Care Development Center #2	1
Kiddies Kollege	3
Kids Are US Learning Center I	4
Kids Are US Learning Center II	4
Kingdom Kids at Springfield Baptist Church	4
Martha's Table Child Development Center	4
Matthew's Memorial Baptist Church Child Development Center	4
Northwest Settlement House Child Development Center	3
Paramount Child Development Center	4
Randall Hyland Private School	3
Southeast Children's Fund Child I	1
Southeast Children's Fund Child II	4
St. Philip's Child Development Center	3
St. Timothy Episcopal Child Development Center	3
Step by Step Therapeutic Child Care	2
Sunshine Early Learning Center	4
Wee Wisdom Child Development Center	3
Zena's Child Development Center, Inc.	4

Intensive consultation services were provided for the classrooms with the greatest level of need. Using the number of children per classroom with behavior difficulties as a metric of need for services, consultants delivered programmatic and/or child-specific consultation in classrooms with the greatest need (see Figure 1). Level of activity was significantly related to higher numbers of children with problem behavior as reported by their teachers on the baseline SDQ (see Figure 2).

FIGURE 1

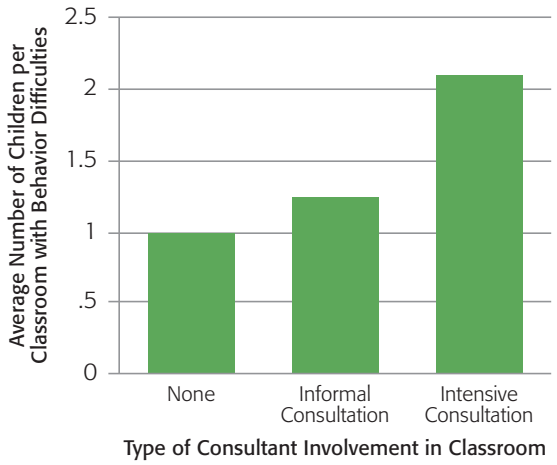
Implementation of Intensive Consultation by Classroom Burden of Behavior Problems



Note: $F(2, 126) = 3.92$, $p = .022$

FIGURE 2

Consultant Activity in Classroom by Classroom Burden of Behavior Problems



Note: $F(2, 126) = 3.43$, $p = .036$

The consultants' involvement in each classroom varied based on factors such as need and availability. Consultants reported spending a great deal of time working in 63 classrooms (48%), spending some time in 54 classrooms (41%), and spending little or no time in 14 classrooms (11%; see Figure 3). Among children involved in consultation, 92% were in classrooms that received programmatic consultation and 16% received child-specific consultation (see Figure 4). Among classrooms receiving intensive consultation, consultants reported spending *a great deal of time* in 77% of them and spending *some time* in the remaining 23%. The 14 classrooms with little or no involvement with the consultants in many cases were model classrooms functioning at a high level.

FIGURE 3

Penetration of Consultation Services

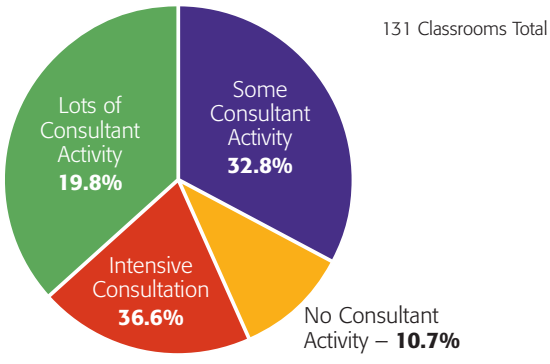
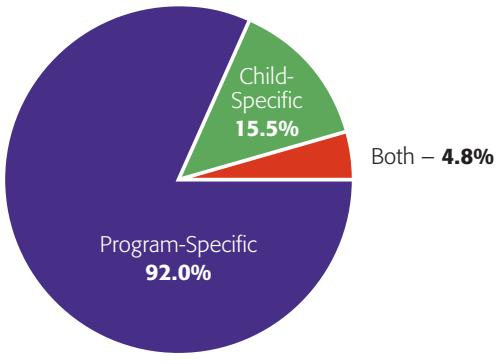


FIGURE 4

Breakdown of Intensive Consultation Services



Year Four Outcomes

The outcome evaluation assessed the impact of child-specific and programmatic consultation provided to the CDCs. Bivariate statistical analyses were conducted to assess change over time from baseline to follow-up (i.e., 4-6 months after baseline for the SDQ, 3-4 months after baseline for the CIS and DECA). Mean differences were assessed using t-tests, and associations between variables were assessed using linear regression and chi-squared tests of independence. All statistically significant findings appear in Figures 5-8.

Prevalence of Behavior Problems

For the first time in the four years of the Healthy Futures evaluation, a universal screening was implemented to gauge the burden of child difficulties in the CDCs served. For every student in the sample, teachers reported the presence and severity of problems in any of four areas (i.e., behavior, emotions, concentration, or peer relations) using the Strengths and Difficulties Questionnaire (SDQ). Out of 1,361 students assessed at baseline, 198 (14.5%) had teacher-reported difficulties. Among those, 103 (52.0%) were considered minor difficulties, 60 (30.3%) were rated as definite difficulties, and 35 (17.7%) were severe difficulties. Teachers reported that, of the 198 with difficulties, 63.3% of experienced attendant distress or upset feelings. The behavior of 59.4% of children with difficulties detracted from their learning, and the behavior of 64.6% detracted from their peer relationships to some extent. Of those with difficulties, 58.2% were identified as a burden to their teachers and 59.5% were identified as a burden to their classes. Interestingly, from baseline to follow-up across the entire sample, the prevalence of teacher-reported behavior difficulties decreased from 14.5% to 12.7%, likely reflecting the overall impact of Healthy Futures deep penetration into these CDCs.

Identification of Child-Specific Cases

As in the past, teachers, parents, directors, and consultants completed Observable Concerns forms to identify children that were exhibiting problematic behaviors (see Appendix C). This procedure allows the Healthy Futures clinicians to work to build the skills and capacity of teachers who identified children who had specific behavioral or social-emotional concerns. In year four, 85 children were referred for child-specific consultation by the completion of an Observable Concerns form. Of the 85 referrals, 52 became child-specific cases after receiving parental consent for consultation. The reasons that not all referrals become child-specific ECMHC cases vary: some families were better suited for Early Intervention services based upon the concerns raised by the teachers and consultant (n = 12), while others declined to give consent (n = 7) or voluntarily withdrew their child from the CDC (n = 9).

The data from the Observable Concerns form are summarized in Table 3 below. As in past years, the most common types of concerns are externalizing behaviors.[1]

TABLE 3

Most Common Child-Specific Concerns

SPECIFIC CONCERN	PERCENT OF CHILDREN (n = 85)
Difficulty with Peers	35%
Disruptive	32%
Not following directions	29%
Not following routines	26%
Fights	24%
Doesn't verbalize needs	22%
Easily Distracted	20%
Attention	19%
Irritable	17%
Doesn't follow commands	17%

NOTE: children are often identified with more than one presenting concern

In addition to the values listed in the table, respondents endorsed "other behavioral concerns" for 25% of the children.

Effects of Child-Specific Consultation

There were 52 children from 31 classrooms in 20 CDCs who received child-specific consultation. The average age of children receiving child-specific consultation was 3.2, with a range from 1.9 to 4.9. Thirty-eight of these children (73%) were male. Matched baseline and follow-up DECAs were obtained from 39 teachers and 15 parents.

While the younger children in the sample were assessed with the DECA Infant/Toddler version and older children were assessed with the DECA Preschool version, the two versions measured the same four subscales: Attachment, Initiative, Self-Regulation, and Total Protective Factors. T-scores were calculated for each subscale, and scores of 40 and above were considered to be above the clinical cutoff. Average t-scores at baseline and follow-up indicated that parents of children involved in child-specific services saw improvements in all four domains of the DECA: Attachment, Initiative, Self-Regulation, and Total Protective Factors. However, with a small sample size, these trends were not significant ($p > .10$). Compared to the number of parent responses, there were more teacher responses at baseline and follow-up, which increased the statistical power to detect differences.

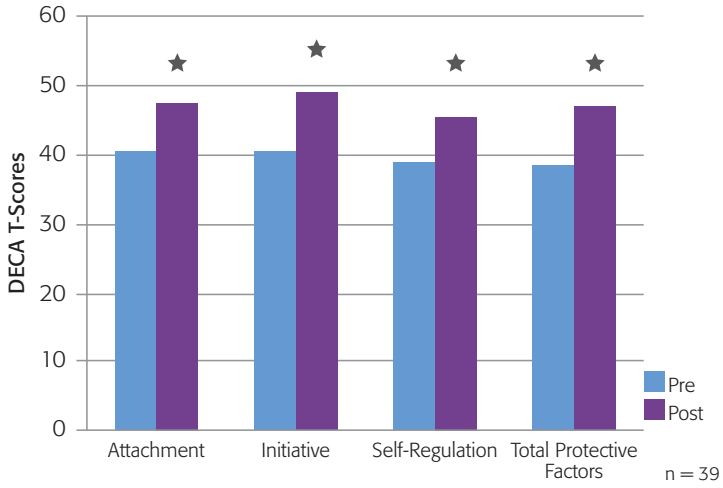
[1]This year, we have adjusted for differential missing data, which has improved the accuracy of these percentages. Hence, these figures are smaller than those reported in the year three report, but reflect comparable numbers of children.

Teacher reports on the DECA revealed statistically significant improvements in mean t-scores on every scale (see Figure 5):

- Total Protective Factors improved from 38.3 to 46.8 ($p < .001$)
- Self-Regulation improved from 38.9 to 45.5 ($p < .001$)
- Attachment improved from 40.5 to 47.3 ($p = .001$)
- Initiative improved from 40.3 to 49.0 ($p < .001$)

FIGURE 5

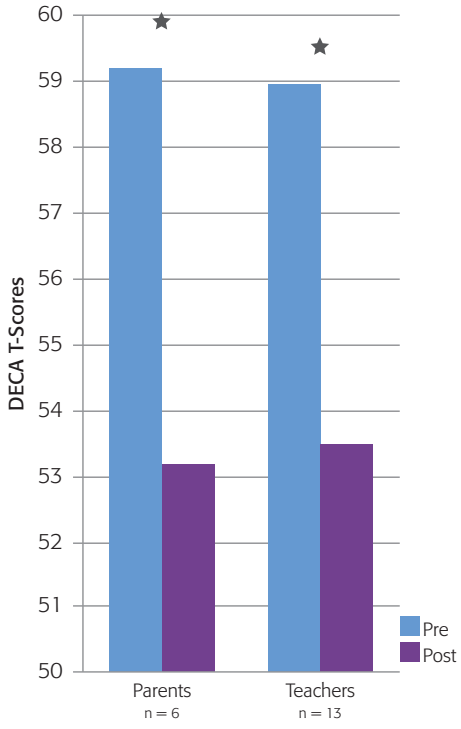
Changes in Teacher-Reported Social-Emotional Development



While the two versions of the DECA are largely the same, the preschool version of the assessment includes an additional subscale that measures Behavioral Concerns. Among the 19 preschoolers who received child-specific consultation (a subset of the 52 total cases), 13 teachers and 6 parents completed the DECA at both baseline and follow-up. Despite these small samples, both respondent types reported considerable decreases in Behavioral Concerns after children participated in child-specific consultation. T-scores of 60 and above were considered in the clinical range for Behavioral Concerns. Parents reported a mean t-score change from 59.2 to 53.2 ($p = .01$), and teachers reported a mean t-score change from 58.9 to 53.5 ($p = .07$). Child-specific consultation both successfully targeted children with serious behavior issues, as evidenced by their high scores at baseline, and reduced their scores so that their levels of behavioral issues were no longer borderline clinical (see Figure 6).

FIGURE 6

Changes in Parent and Teacher Report of Preschoolers' Behavioral Concerns



Impact of Programmatic Consultation

As mentioned above, consultants successfully targeted their services to classrooms with the greatest burdens of behavior problems. Classrooms that could benefit most from programmatic consultation were identified in a collaborative needs assessment process conducted by the consultants with the directors of the CDCs. The consultants then followed a protocol that included the use of a standardized

observational tool: the Arnett Caregiver Interaction Scale (CIS). After the observation process was completed, the consultants had a formal meeting with the classroom teachers to develop a classroom plan, which included creating specific goals that would be targeted for improvement.

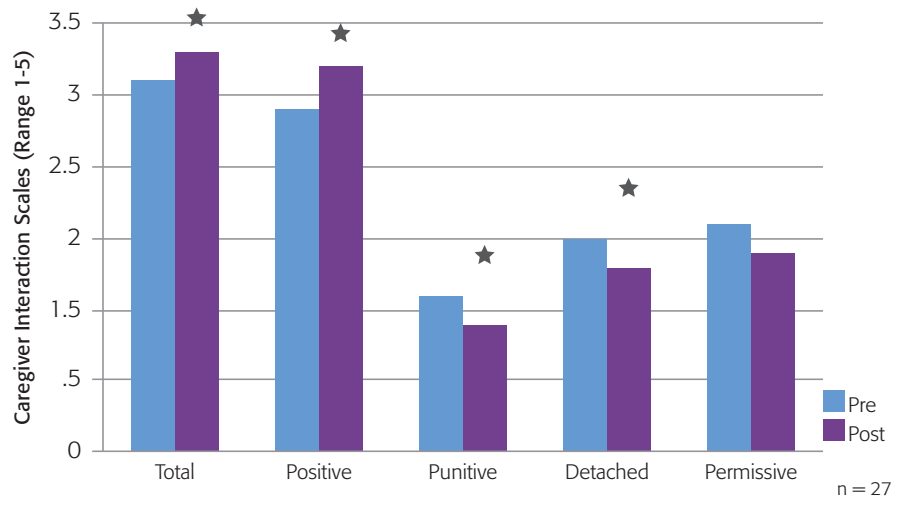
Classroom Climate as Rated by the Consultants

For the evaluation study, the major measure of the impact of consultation on teacher's behavior was the Arnett Caregiver Interaction Scale (CIS). This scale was completed at baseline (before beginning programmatic consultation) and then every 3-4 months. The CIS measures four domains, one of which is positive (positive relationships) and three of which are negative (punitive behaviors, permissiveness, and detachment). Response options range from 1 "Not True at All" to 4 "Very Much True." The scale has two versions; the version for preschool classrooms has 26 items and represents all 4 scales, whereas the version for infant and toddler classrooms has 20 items and omits the permissiveness scale. The consultants working with teachers (n = 28) who were receiving programmatic consultation completed the measure. Baseline and follow-up data were available for 27 classrooms at the time of analysis. Scoring for the subscales was standardized to adjust for the number of items per scale; therefore the mean for each scale ranges from 1-4. Higher scores are more desirable on the positive subscale, while lower scores indicate less negative climate for the other three subscales.

Statistically significant improvements were seen in three of the domains ($p < .08$), as well as in the total score for teacher interaction quality (see Figure 7).[2] Mean scores reflect the 1 to 4 Likert scale response options. The decrease in permissiveness after programmatic consultation was the only change that did not reach statistical significance ($p = .122$). This finding may reflect the smaller sample size for this domain rather than a lack of impact, since these items were not assessed in infant and toddler classrooms, so scores were available for only 20 classrooms.

FIGURE 7

Improved Quality of Teachers' Interactions



Teacher Self-Reported Stressors

Gilliam and Shahar (2006) found that teachers' self-reported job stress was positively correlated with their likelihood of expelling one or more students in a 12-month period. Their cross-sectional data does not indicate whether teachers experiencing more stress are more likely to feel the need to expel students, or if having to expel

[2]Given the sample size of less than 30, a p-value of less than .10 was used to assess statistical significance.

students increases teachers' stress levels. Nevertheless, teacher stress is a relevant variable in understanding expulsions from CDCs. In the past three years of the Healthy Futures evaluations, various approaches to measuring teacher stress were implemented. However, none proved sensitive enough to capture changes in teacher-reported job stress as a result of ECMHC. This is likely a function of the multitude of daily stressors that teachers experience, many of which may not be altered by ECMHC.

This year, to better understand the myriad of teacher stressors and to inform the selection of a more sensitive measure to use in future evaluations, qualitative data was gathered about teacher stressors. Teachers were asked to report the two aspects of their job that they perceived to be the most stressful. Recurrent themes in responses were noted, and most stressors reported could be classified into one of four categories: interpersonal, organizational, instructional, and physical. Interpersonal stressors predominated, with lack of communication and frustration with parents, colleagues, and directors mentioned by many teachers. Furthermore, perceived lack of respect and appreciation for their work was a common stressor. Organizational stressors included teacher-child ratios that the teacher perceived to be too high, and difficulty making and enforcing changes in CDC procedures and policies. Instructional stressors related to issues that limited a teacher's ability to teach effectively, such as insufficient teaching materials and children with disruptive behaviors. Finally, stressors such as fatigue, lack of acceptable working conditions, and exposure to sick children were mentioned as physical stressors. Responses that did not converge with any of these categories were considered "other stressors." The commonalities observed among teacher responses elucidate the everyday frustrations and difficulties of teaching. However, many of these stressors are not the primary targets of ECMHC. The challenge for future evaluations is to focus on measures of teacher stress that can be impacted by effective ECMHC—such as child behavior problems and perceived lack of supportive relationships with parents.

Analysis of Expulsion Data

In the first three years of the evaluation, the expulsion rates of CDCs receiving Healthy Futures services ranged from 2.3 to 2.8 children per 1,000; this was well below the national rate of 6.7 children per 1,000 served in pre-kindergarten reported by Dr. Walter Gilliam in his landmark expulsion study (2005). This year, however, **none** of the CDCs receiving Healthy Futures services reported any expulsions. This result provides support for an embedded ECMHC approach and parallels the finding by Gilliam (2005) that having on-site access to consultation was related to the lowest rates of expulsion. Over the long-term, access to ECMHC services in the CDCs allowed the consultants to form solid relationships and build the skills and capacities of the staff. As a result, teachers and directors may be more willing and able to retain students who have behavioral difficulties and/or to eliminate expulsion as an option.

Generalized Effects of ECMHC

A unique aspect of the year four evaluation was the implementation of universal screening by the Strengths and Difficulties Questionnaire. In late fall, the consultants interviewed every teacher about every child in their class, whether or not the teacher received intensive consultation. Initially, the

evaluation team hoped to be able to use those classrooms without consultation as a quasi-experimental comparison group. However, as was mentioned above, consultants were in the vast majority of the classrooms—and those few that did not receive consultation were dramatically different than those where intensive consultation was provided. Nonetheless, the presence of SDQ data on all 131 classrooms permitted new analyses to assess whether there were generalized effects of consultation in the classrooms and CDCs. Essentially, a generalized effect would demonstrate that, not only does intensive consultation have the intended proximal impact, but it also serves as an agent of change in bringing about improvements more broadly. This was observed for both programmatic and child-specific consultation as well as for consultation overall.

Generalized Effect of Programmatic Consultation

Classrooms that received intensive programmatic consultation had a baseline and follow-up CIS completed by the consultant to assess the teachers' responsiveness and the emotional tone of the classroom (n = 27). There was variability in the extent of the improvement in the CIS scores, which allowed for statistical tests to better understand the differential impact of programmatic consultation. Of note, greater improvements in the classroom climate were associated with larger decreases in the number of children per class with behavior difficulties, as rated by the SDQ at year's end, [$F(1, 23) = 5.00$, $R^2 = .18$, $\beta = -.422$, $p = .035$]. This finding suggests that not only does programmatic consultation improve teacher-child interactions (as demonstrated by the CIS scores), but also it was associated with reductions in teachers' perceptions of children's challenging behavior. This is notable because programmatic consultation is not always focused on children with challenging behaviors. This finding suggests that shifts in teachers' attitudes, stance and behaviors may have led to changes in their view of the level of children's problematic behaviors.

Generalized Effect of Child-Specific Consultation

There were 52 children who received child-specific consultation, and change in their behaviors was measured by the DECA. Child-specific consultation is intended to help the child's teacher implement strategies that will reduce this child's challenging behavior—and the data support gains in protective factors as well as decreases in problem behaviors. Interestingly, teachers who received child-specific consultation also reported a decrease in the overall burden of severe behavior problems in their classroom, whereas in classrooms without child-specific consultation, there was a slight increase in the burden of severe behavior problems. This difference in the trends was statistically significant and suggests that child-specific consultation decreases the severity of behavior problems for the target children (as demonstrated by improvements in their DECA scores), AND this effect can extend to other children in the class (see Figure 8). The exact mechanism of this generalized effect is not known from this study. It is likely that teachers are using techniques acquired from consultation in their work with other, non-target children in the classroom, thereby reducing the number of severe behavior problems in their classrooms. Reductions in the target child's problem behaviors and increases in their social skills might directly affect the behavior of other children in the classroom through changes in the quality of their peer interactions. It may also be that child-specific consultation alters teachers' perspectives of child behavior problems, rather than the actual incidence of the problems. Child-specific consultation may provide teachers with greater knowledge and self-

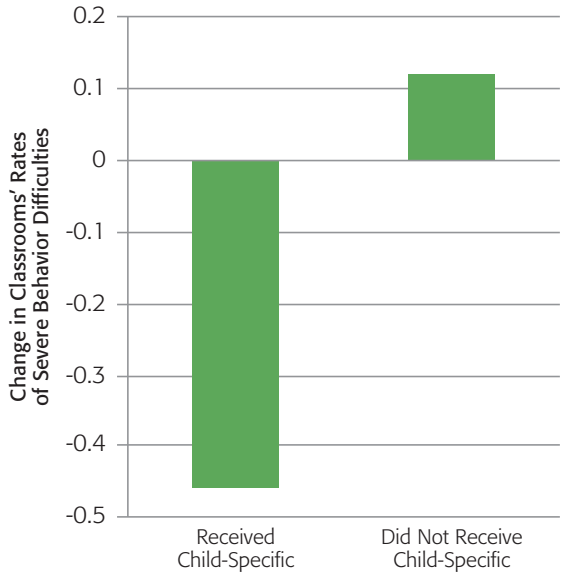
efficacy around managing behavior problems, making them rate behavior problems as less severe at follow-up, now that they have the skills to manage them.

Effect of Consultation on Turnover

High levels of teacher turnover in early education settings are common, and in many cases are disruptive for students. In this sample, 28.2% of classrooms had a different teacher completing the SDQ at baseline than at follow-up. Interestingly, there was an association between classroom involvement in intensive consultation and the incidence of teacher turnover. Receiving any kind of intensive consultation—whether programmatic, child-specific, or both—was significantly related to a decreased rate of teacher turnover [X^2 (1, n = 131) = 3.37, p = .066]. Only 19% of classrooms receiving consultation reported a change in teacher over the course of the year, whereas 34% of classrooms not receiving any consultation reported a change in teacher. These data are correlational, but this finding suggests that receiving consultation may reduce the likelihood that a teacher chooses to leave her job by providing supportive services.

FIGURE 8

Impact of Child-Specific Consultation on Classroom's Burden of Severe Behavior Difficulties



Note: $t(39) = 2.20$, $p = .034$

Limitations

In community-based program evaluation, the lack of experimental control is both its greatest strength and greatest weakness. Research in naturalistic community contexts mimics everyday life and answers questions that cannot be addressed in a laboratory setting. However, experimental research has the ability to control for contextual variables and reduce some of the "noise" in the data. By virtue of the fact that community-based research takes place in real-world settings, some control must be sacrificed. In this study, several main limitations of the data must be mentioned.

- In this embedded model of consultation, the results of three previous years of consultation have accumulated, so that the only effects that can be observed in year four are those that go above and beyond the effects already established.
- As with all child-centered research, it is important to note that children have a multitude of influences, many of which are beyond the scope and feasibility of any given research endeavor. This evaluation did not attempt to account for the impact of home life, parenting, and neighborhood environment on behavior problems, nor did it control for the differences among CDCs, although the evaluation team acknowledges the relevance of these variables.
- Teacher turnover may impact the success of both kinds of intensive consultation, because if a teacher who learned a great deal from consultation leaves, her classroom does not get the benefit of the new attitudes and techniques that the teacher acquired. However, to maintain a large enough sample size, all classrooms were analyzed, regardless of teacher turnover.
- Standardized times were set for data collection to occur across CDCs, but issues related to scheduling, absences, and availability made it so that not all baseline and follow-up measures reflect the same span of time.

Lessons Learned and Recommendations for Future Years

- In each year of evaluation, statistically significant improvements in classroom climate have been observed in classrooms receiving programmatic consultation. Different measures were used in each of the first three years, but the fact that all three measures documented improvements indicates the strengths of the intervention.
- Responses rates at follow-up were higher this year than in any previous year on the Devereux Early Childhood Assessment (DECA), which was used to assess social-emotional protective factors among children receiving child-specific consultation. Consistent with year three findings, children receiving child-specific consultation showed statistically significant improvements from baseline to follow-up (3-4 months).
- The implementation of a universal screening for child behavior difficulties added valuable information to the evaluation. Namely, it assessed the burden of behavior difficulties across the sample, as well as the change in this burden from baseline to follow-up. In future years, the Strengths and Difficulties Questionnaire (SDQ) should continue to be used, but teachers should complete it at times that correspond more closely with the beginning and end of the school year. Furthermore, to reduce the burden of completing the measure, it may be more efficient to have teachers only complete the first section of the SDQ.
- This year's evaluation showed preliminary evidence of generalized effects of ECMHC. The implementation of the SDQ as a universal screening measure made it possible to uncover these effects. Specifically, the data showed that not only did programmatic consultation improve classroom climate (the target of intervention), but also the extent of improvement in classroom climate predicted the extent of reduction in the classrooms' burden of behavior difficulties. Future evaluations would benefit from additional data collected by an objective rater to document the extent to which programmatic consultation is associated with observed reductions in children's challenging behavior.
- A second finding related to the generalized effect of child-specific consultation was reported: child-specific consultation not only reduced the problem behaviors of target children, but also translated into reduced incidence of teacher-reported severe behavior difficulties in the target children's classrooms. Again, future studies should explore and document the mechanisms of this generalized effect.

- Consistent with earlier studies (Brennan et al., 2008), the incidence of teacher turnover was lower in classrooms receiving intensive consultation services. While these data are correlational, they underscore the importance of ECMHC as a support to teachers with chaotic classrooms and children with challenging behavior.
- There was good penetration of ECMHC services, as well as allocation of services by need. Consultants were active in almost 90% of the 131 classrooms in the 26 CDCs. The extent of their activity and the "dose" of intensive consultation received in the classrooms were related to the burden of behavior problems in the classrooms.
- With substantial data supporting the effectiveness of ECMHC, a next step is identification of the "dose" of consultation that is sufficient to catalyze improvements. Next year, more information about the exact activities and the frequency and duration of each child-specific and programmatic case should be obtained to allow for additional analyses of impact.

References

Alkon, A., Ramler, M., & MacLennon, K. (2003). Evaluation of mental health consultation in child care centers. *Early Childhood Education Journal, 31*(2), 91-99.

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

Ash, J., Mackrain, M., Johnston, K. (2013). Early childhood mental health consultation: Applying central tenants across diverse practice settings. *ZERO TO THREE, 33*(5), 28-33.

Brinamen, C. F., Taranta, A. N., & Johnston, K. (2012). Expanding early childhood mental health consultation to new venues: Serving infants and young children in domestic violence and homeless shelters. *Infant Mental Health Journal, 33*(3), 283-293.

Brown, E. (2014, July 13). D.C. bill would ban school suspensions for city's pre-K students. *The Washington Post*. Retrieved from http://www.washingtonpost.com/local/education/dc-bill-would-ban-school-suspensions-for-citys-pre-k-students/2014/07/13/3af8270c-07b6-11e4-8a6a-19355c7e870a_story.html.

Cohen, E., & Kaufmann, R. K. (2000). *Early childhood mental health consultation*. DHHS Pub. No. CMHS-SVP0151. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

Cohen, E., & Kaufmann, R. K. (2005, Rev. Ed.). *Early childhood mental health consultation*. DHHS Pub. No. CMHS-SVP0151. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

Curbow, B., Spratt, K., Ungaretti, A., McDonnell, K., & Breckler, S. (2001). Development of the child care worker job stress inventory. *Early Childhood Research Quarterly, 15*(4), 515-536.

Duran, F., Hepburn, K., Irvine, M., Kaufmann, R., Anthony, B., Horen, N., & Perry, D. (2009). *What works? A study of effective early childhood mental health consultation programs*. Washington, DC: Georgetown University Center for Child and Human Development.

Gilliam, W. S. (2005). *Prekindergarteners left behind: Expulsion rates in state prekindergarten systems*. New Haven, CT: Yale University Child Study Center.

Gilliam, W. S. (2008). *Development of the Preschool Mental Health Climate Scale: Final report*. New Haven, CT: Yale University Child Study Center.

Gilliam, W. S., & Shahar, G. (2006). Pre-kindergarten expulsion and suspension: Rates and predictors in one state. *Infants and Young Children, 19*, 228-245.

Goodman, R. (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry, 40*, 791-801.

Gross, D., Sambrook, A., & Fogg, L. (1999). Behavior problems among young children in low-income urban day care centers. *Research in Nursing and Health, 22*(1), 15-25. doi:10.1002/(SICI)1098-240X(199902)22:1<15::AID-NUR3>3.0.CO;2-2

Heller, S. S., Steier, A., Phillips, R., & Eckley, L. (2013). The building blocks for implementing reflective supervision in an early childhood mental health consultation program. *ZERO TO THREE, 33*(5), 20-27.

Hepburn, K. S., Perry, D. F., Shivers, E. M. & Gilliam, W. S. (2013). *Early childhood mental health consultation as an evidence-based practice: Where does it stand?* Washington DC: ZERO TO THREE.

Hoover, S. D., Kubicek, L. F., Rosenberg, C. R., Zundel, C., & Rosenberg, S. A. (2012). Influence of behavioral concerns and early childhood expulsions on the development of early childhood mental health consultation in Colorado. *Infant Mental Health Journal, 33*(3), 246-255.

Johnston, K., & Brinamen, C. (2006). *Mental health consultation in child care: Transforming relationships among directors, staff, and families*. Washington, DC: ZERO TO THREE.

Kaufmann, R. K., Perry, D. F., Hepburn, K. S., & Hunter, A. (2013). Early childhood mental health consultation: Reflections, definitions, and new directions. *ZERO TO THREE, 33*(5), 4-9.

LeBuffe, P. A., & Naglieri, J. A. (1999) *Early Childhood Assessment—Technical manual*. Lewisville, NC: Devereux Press.

LeBuffe, P. A., & Naglieri, J. A. (2003). *Devereux Early Childhood Assessment Clinical Form (DECA-C)*. Lewisville, NC: Kaplan Early Learning Company Publishing.

Mackrain, M., & LeBuffe, P. A. (2007). *Devereux Early Childhood Assessment-Infant/Toddler Form (DECA-I/T)*. Lewisville, NC: Kaplan Early Learning Company Publishing.

Perry, D. F. (2013). *Healthy Futures: Year three evaluation of early childhood mental health consultation by the District of Columbia Department of Mental Health*. Washington, DC: Georgetown University Center for Child and Human Development.

Perry, D. F., Allen, M. D., Brennan, E., & Bradley, J. (2010). The evidence base for mental health consultation in early childhood settings: A research synthesis addressing children's behavioral outcomes. *Early Education and Development, 21*(6), 795-824.

Perry, D. F., & Deardorff, S. (2011). *Healthy Futures: Year one evaluation of early childhood mental health consultation by the District of Columbia Department of Mental Health*. Washington, DC: Georgetown University Center for Child and Human Development.

Perry, D. F., & Deardorff, S. (2012). *Healthy Futures: Year two evaluation of early childhood mental health consultation by the District of Columbia Department of Mental Health*. Washington, DC: Georgetown University Center for Child and Human Development.

Pianta, R.C., La Paro, K. M., & Harme, B. (2008). *Classroom Assessment Scoring System (CLASS)*. Baltimore, MD: Brookes Publishing.

The Office of the State Superintendent of Education (OSSE). (2013). *Reducing out-of-school suspensions and expulsions in District of Columbia public and public charter schools*.

U.S. Department of Education Office of Civil Rights (OCR). (2014). *Civil rights data collection. Data snapshot: Early childhood education. Issue Brief No. 2.*

Appendix A

Summary of Results from Healthy Futures Evaluation Reports

YEAR	CLASSROOM-LEVEL OUTCOMES	CHILD-LEVEL OUTCOMES	NUMBER OF CHILDREN IMPACTED	EXPULSIONS (national average: 6.7 per 1,000)
Year 1	**Preschool Mental Health Climate Scale (PMHCS)** • Staff Awareness of Behavior Problems+ • Positive Child Interactions* • Teaching about Feelings** • Negative Indicators of Classroom Climate**	N/A[1]	1,286 in 24 CDCs	2.3 per 1,000
Year 2	**Classroom Assessment Scoring System (CLASS)** • Emotional Support+ • Positive Climate**	N/A[1]	1,310 in 25 CDCs	2.3 per 1,000
Year 3	**Arnett Caregiver Interaction Scale (CIS)** • Positive Relationships** • Punitive Behaviors** • Detachment** • Permissiveness*	**Devereux Early Childhood Assessment (DECA)** Toddlers: • Attachment** • Initiative+ • Self-Regulation* • Total Protective Factors** Preschoolers: • Initiative* • Self-Regulation* • Total Protective Factors*	1,426 in 25 CDCs	2.8 per 1,000
Year 4	**Arnett Caregiver Interaction Scale (CIS)** • Positive Relationships** • Punitive Behaviors+ • Detachment* • Overall Teacher Interaction Quality**	**Devereux Early Childhood Assessment (DECA)** Toddlers: • Attachment* • Initiative** • Self-Regulation** • Total Protective Factors** Preschoolers: • Initiative** • Total Protective Factors** • Attachment** • Behavioral Concerns+	1,361 in 26 CDCs	0

[1]Formal child-specific consultation protocols developed in Year 2. • Note: significant improvements: $+p < .10$; $*p < .05$; $**p < .01$

Appendix B: Measurement Tools

Revised Caregiver Interaction Scale Infant Use 0-18 Months (Arnett 2013)

Teacher Name: _____ Teacher ID: _____

Center Name: _____ Classroom: _____

Observer Name: _____ Date: _____

Start Time: _____ End Time: _____ Assessment Type: _____

Observer: To what extent are each of the following statements characteristic of this caregiver? For each item, circle one of the numbers that indicates how often you observe these behaviors.

	Not at all	Somewhat	Quite a Bit	Very Much
1. Speaks warmly to the children.	1	2	3	4
2. Seems critical of the children.	1	2	3	4
3. Listens attentively and responds to infants' communication attempts (words, babbling, cooing).	1	2	3	4
4. Seems distant or detached from the children.	1	2	3	4
5. Seems to enjoy the children.	1	2	3	4
6. Encourages the children to try new experiences.	1	2	3	4
7. Doesn't try to exercise much control over the children.	1	2	3	4
8. Speaks with irritation or hostility to the children.	1	2	3	4
9. Seems enthusiastic about the children's activities and efforts.	1	2	3	4
10. Threatens children in trying to control them.	1	2	3	4
11. Spends considerable time in activity not involving interaction with the children.	1	2	3	4
12. Pays positive attention to the children as individuals.	1	2	3	4
13. Talks to the children about what they are seeing, doing, or feeling.	1	2	3	4
14. Encourages children to exhibit prosocial behavior (e.g., models social skills with words and actions, but do not expect toddlers to share or cooperate).	1	2	3	4
15. Finds fault easily with the children.	1	2	3	4
16. Doesn't seem interested in the children's activities.	1	2	3	4
17. Seems to prohibit many of the things the children want to do.	1	2	3	4
18. Doesn't supervise the children very closely.	1	2	3	4
19. When talking to the children, kneels, bends, holds in lap, or sits at their level to establish better eye contact.	1	2	3	4
20. Seems unnecessarily harsh when scolding or prohibiting children.	1	2	3	4

Please describe any concerns about set up of the classroom:

_____

_____

Caregiver Interaction Scale (Arnett 1989)

Center Name: _____

Teacher Name: _____ Observation Date: _____

Data Collector: _____

For instructions, clarifications and scoring, click here.	Not at All True	Somewhat True	Quite a Bit True	Very Much True
1. Speaks warmly to the children.	1	2	3	4
2. Seems critical of the children.	1	2	3	4
3. Listens attentively when children speak to him/her.	1	2	3	4
4. Places high value on obedience.	1	2	3	4
5. Seems distant or detached from children.	1	2	3	4
6. Seems to enjoy the children.	1	2	3	4
7. When the children misbehave, explains the reason or the rule they are breaking.	1	2	3	4
8. Encourages the children to try new experiences.	1	2	3	4
9. Doesn't try to exercise too much control over the children.	1	2	3	4
10. Speaks with irritation or hostility to the children.	1	2	3	4
11. Seems enthusiastic about the children's activities and efforts.	1	2	3	4
12. Threatens children in trying to control them.	1	2	3	4
13. Spends considerable time in activity not involving interaction with the children.	1	2	3	4
14. Pays positive attention to the children as individuals.	1	2	3	4
15. Doesn't reprimand children when they misbehave.	1	2	3	4
16. Talks to the children without explanation.	1	2	3	4
17. Punishes the children without explanation.	1	2	3	4
18. Exercises firmness when necessary.	1	2	3	4
19. Encourages children to exhibit prosocial behavior, e.g., sharing, helping. More	1	2	3	4
20. Finds fault easily with children.	1	2	3	4
21. Doesn't seem interested in the children's activities.	1	2	3	4
22. Seems to prohibit many of the things the children want to do.	1	2	3	4
23. Doesn't supervise the children very closely.	1	2	3	4
24. Expects the children to exercise self-control: e.g., to be undisruptive for group provider-led activities, to be able to stand in line calmly.	1	2	3	4
25. When talking to children, kneels, bends or sits at their level to establish better eye contact.	1	2	3	4
26. Seems unnecessarily harsh when scolding or prohibiting children.	1	2	3	4

Infant/Toddler Strengths and Difficulties Questionnaire

Infant/Center Name: _____ Date: _____

Classroom Name: _____ Teacher Name: _____

Ages of Children: _____ Number of Children: _____

Please reflect on each of the children in your classroom and circle your answer to the following question:

Do you think that [child name] has difficulties in any of the following areas: emotions, regulation, behavior or relationships with family, caregivers or peers?

Child 1	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 2	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 3	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 4	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 5	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 6	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 7	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 8	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 9	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 10	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 11	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 12	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 13	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 14	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 15	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 16	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties

Child's Name: _____ How long have these difficulties been present? _____	**Not at All**	**A Little**	**A Medium Amount**	**A Great Deal**
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Relationships?				
• Exploration and discovery?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ____________________ How long have these difficulties been present?__________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Relationships?				
• Exploration and discovery?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ____________________ How long have these difficulties been present?__________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Relationships?				
• Exploration and discovery?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ____________________ How long have these difficulties been present?__________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Relationships?				
• Exploration and discovery?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ____________________ How long have these difficulties been present?__________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Relationships?				
• Exploration and discovery?				
Do the difficulties put a burden on you or the class as a whole?				

Strengths and Difficulties Questionnaire

Infant/Center Name: _____ Date: _____

Classroom Name: _____ Teacher Name: _____

Ages of Children: _____ Number of Children: _____

Please reflect on each of the children in your classroom and circle your answer to the following question:

Do you think that [child name] has difficulties in any of the following areas: emotions, concentration, behavior or being able to get along with other people?

Child 1	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 2	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 3	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 4	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 5	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 6	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 7	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 8	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 9	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 10	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 11	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 12	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 13	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 14	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 15	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties
Child 16	☐ NO	☐ YES–Minor Difficulties	☐ YES–Definite Difficulties	☐ YES–Severe Difficulties

Child's Name: _____ How long have these difficulties been present?_____	**Not at All**	**A Little**	**A Medium Amount**	**A Great Deal**
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Peer relationships?				
• Learning?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ______________________________ How long have these difficulties been present?_________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Peer relationships?				
• Learning?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ______________________________ How long have these difficulties been present?_________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Peer relationships?				
• Learning?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ______________________________ How long have these difficulties been present?_________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Peer relationships?				
• Learning?				
Do the difficulties put a burden on you or the class as a whole?				

Child's Name: ______________________________ How long have these difficulties been present?_________	Not at All	A Little	A Medium Amount	A Great Deal
Do the difficulties upset or distress the child?				
Do the difficulties interfere with the child's everyday life in the following areas:				
• Peer relationships?				
• Learning?				
Do the difficulties put a burden on you or the class as a whole?				

Appendix C

Observable Concerns Checklist

Received By:_____Date: _____

Student's Name: _____Student's DOB: _____Student's Age: _____

Person Making Referral: _____

Child Development Center Name: _____Classroom Name/ID:_____

Has the family asked for:
- Information about services? ☐ Yes ☐ No
- An appointment to initiate help? ☐ Yes ☐ No
- Someone to contact them to offer help? ☐ Yes ☐ No

Please check area(s) of concern that are demonstrated on a consistent/frequent basis:

Behavior
___ Attention seeking
___ Bizarre thoughts or behaviors
___ Cutting/scratching/hurting self
___ Destroying property
___ Difficulty with peers in classroom
___ Disruptive
___ Does not follow classroom routines
___ Does not follow directions
___ Easily distracted
___ Excessive/uncontrollable crying
___ Fights classmates, staff members, parents
___ Irritable/angry/hostile
___ Isolated/withdrawn
___ Lethargic/low energy
___ Rejected by peers/picked-on
___ Self-esteem problems
___ Separation anxiety
___ Sexually acting out
___ Suffered sexual and/or physical assault
___ Threatening/intimidating remarks/bullying
___ Other concerns: _____

_____

Family/Social Issues
___ Mentions abuse (physical, sexual, emotional)*
___ Suffered recent loss (include parental divorce)
___ Homeless (no fixed address)
___ Pregnancy
___ Illness in family
___ Drugs
___ Other concerns: _____

_____

Appearance
___ Appearance/hygiene neglected
___ Bloodshot eyes
___ Bruises*
___ Needle/burn marks*
___ Other concerns: _____

_____

Speech/Language
___ Does not understand what is being said to him/her
___ Does not follow commands given to him/her
___ Does not verbalize needs/wants
___ Does not make needs known (verbal/non-verbal)
___ Repeats the same words over and over
___ Other concerns: _____

_____

Development
___ ASQ referral
___ Awkward/unusual walk
___ Does not use hands well
___ Does not walk
___ Has difficulty before/during naptime
___ Has trouble processing information
___ Other concerns: _____

_____

Eating
___ Eats items other than food
___ Eats too fast
___ Has difficulty in chewing food
___ Has difficulty in swallowing food
___ Picky eater
___ Refuses to eat
___ Throws food
___ Other concerns: _____

_____

Relationships
___ Clings to staff/parents/other adults
___ Plays alone
___ Shy
___ Withdrawn/isolated
___ Other concerns: _____

_____

*Any mention of abuse may have to be reported to CFSA. See policies & procedures or consult with Center Director. To be completed and returned to the Mental Health Specialist prior to initiating early childhood mental health consultation services.