

Healthy Futures

YEAR **5**

**Evaluation of Early Childhood
Mental Health Consultation**

BY THE DISTRICT OF COLUMBIA DEPARTMENT OF BEHAVIORAL HEALTH



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Executive Summary

The Washington D.C. Department of Behavioral Health (DBH) recently completed the fifth 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 this model, four full-time, licensed mental health professionals provide CDCs with on-site intensive consultation services using an embedded model. Each consultant is assigned to a group of CDCs and provides weekly visits throughout the calendar year.

The ECMHC services provided to CDC directors, teachers and families are designed to build their capacity for reflection about young children's relationships with adults and other children, enhance their skills in addressing challenging child behaviors, and promote positive social-emotional development and a positive classroom climate. ECMHC services have traditionally been described as either programmatic or child-specific, where programmatic consultation aims to build the capacity of teachers on behalf of all children in their classrooms and child-specific consultation provides individualized services to children identified as having behavioral difficulties. However, this distinction becomes somewhat less clear in practice as child-focused versus teacher-focused work often blends together.

The Georgetown University Center for Child and Human Development (GUCCHD) performs the annual, independent evaluation of the Healthy Futures project. This year, evaluation data were gathered from children enrolled in the CDCs receiving ECMHC, as well as from the consultants, teachers, and parents. Data were collected between October 2014 and May 2015. Key findings from this year's evaluation include:

- 1,366 young children in 130 classrooms in 26 CDCs had access to consultation. CDCs were located throughout the District, with a concentration in Ward 8.
- This year, only two children were expelled from any of the CDCs in the sample. Consistent with the four previous years of the Healthy Futures project, the expulsion rate of the CDCs being served was consistently below the national average of 6.7 children per 1,000 (Gilliam, 2005). This finding underscores the importance of ECMHC in providing CDC staff with skills and resources to handle difficult child behaviors and to limit expulsions.
- Across the sample, 15% of children had a behavioral concern, according to their teachers. These behavioral concerns were primarily externalizing, including disruptive behavior.
- Among the 54 children involved in child-specific consultation, teachers reported statistically significant reductions in their behavioral concerns and improvements in their self-regulation, initiative, and total protective factors after 3-4 months of consultation.

- Teachers who received programmatic consultation demonstrated significantly more positivity during interactions with children, as well as reduced permissive and punitive behaviors.
- This year's evaluation sought to quantify the amount of consultation that is necessary to achieve a range of positive outcomes. Dose was quantified in a variety of ways to determine which factors were the strongest predictors of change.
 - Because of attrition in consultants, some CDCs did not get a full year of ECMHC services.
 - Activity logs were analyzed to quantify: number of visits to each classroom; hours in classrooms; time spent with directors and parents; and time spent training staff.
 - Some CDCs receive a half-day of consultation weekly, whereas others receive a full day.
 - Some teachers have been working with the same consultant for two or more years, while others have not.
- Results of the dose analyses suggested the following:
 - A full year of consultation significantly predicted classroom- and individual-level improvements in behavioral concerns. Classrooms with a full year of consultation showed reductions in teachers' reports of the level of behavioral concerns in their classroom from the fall to the spring; but in the absence of a full year of consultation, the classroom-level burden of behavioral concerns actually increased. At the individual level, each child was more likely to show improved behavior in the spring if he/she was in a classroom with a full year of consultation.
 - The greater the number of consultant visits to a classroom, the higher the number of students per classroom who improved from fall to spring, and the greater the odds of an individual child improving from fall to spring. The same positive relationship was seen for the number of parent-consultant meetings and director-consultant meetings.
 - Classrooms in which the teacher and consultant had been working together for at least two years showed greater improvements from fall to spring than did classrooms in which the teacher-consultant relationship was less well established.
 - Two variables were associated with a decreased likelihood of having a different teacher in the spring: receiving child-specific consultation and having a longer teacher-consultant relationship.
- Lessons learned and recommendations:
 - The consistent pattern of findings from the five years of Healthy Futures implementation in the District of Columbia by the Department of Behavioral Health demonstrates that high quality ECMHC is associated with:
 - Lower than expected levels of expulsion
 - Improvements in children's resilience and reductions in behavior problems, for children who are identified for child-specific services
 - Improvements in the classroom climate, as measured by several different tools and approaches
 - Increased stability in the child care workforce.
 - Given the legislation that passed the City Council in 2015 banning expulsions for publicly funded pre-kindergarten students, District policy makers should explore ways to scale up this high quality program so that other early childhood professionals can benefit from ECMHC services.

Introduction

Early childhood mental health consultation (ECMHC) is an emerging evidence-informed 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 and caregivers (i.e., early childhood staff and family members). 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.

When implemented in the context of child care, an ECMHC model is guided by a theory of change that emphasizes the multiple levels of influence on young children's behavior. Working with the director, teachers, staff and families are all essential components of an effective ECMHC approach. A child care director's understanding of the complex factors that contribute to young children's social-emotional development can impact how supportive s/he is of her staff as they attempt to implement the strategies recommended by their mental health consultant (MHC). Consultants can also model reflective supervision strategies for CDC directors that they can use to foster a more supportive work climate for their teachers and families. 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 classroom. 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 address the reciprocal influences on children's social-emotional development.

The Need for ECMHC

Nationally, ECMHC has a solid body of empirical support indicating its effectiveness in community settings. In an article in the special issue of the journal *ZERO TO THREE* focused on ECMHC, Hepburn, Perry, Shivers and Gilliam (2013) reviewed the empirical evidence indicating that ECMHC has a positive impact on classroom climate, teachers' skills, children's social-emotional behavior, and expulsions from child care. The consistent pattern of these findings is mirrored by the data reported in the prior Healthy Futures' evaluation reports: children receiving child-specific consultation services have statistically significant improvements in their resilience, as measured by the Devereux Early Childhood Assessment, as well as declines in problem behaviors. Classrooms that received programmatic consultation showed significant declines in teacher negativity and improvements in positive emotional climate across multiple measures. And, consistent with national data, the rate of expulsion from the CDCs receiving EMCHC services has been well below the national average.

ECMHC Reduces Expulsions

Out-of-school punishment in early child care is receiving increased attention at the national (HHS, 2014) and local level (OSSE, 2013). Research conducted by Walter Gilliam in 2005 demonstrated that the rate of expulsion from a national sample of state-funded pre-kindergarten programs was three times higher than that for K-12 programs (6.7 per 1,000 versus 2.1 per 1,000, respectively).

Experts cite empirical support for the fact that suspensions and expulsions are not only ineffective, but also harmful for the youngest students (OSSE, 2013). Furthermore, the pattern of out-of-school punishments demonstrates a clear and unacceptable gender and racial disparity, with young boys of color suspended and expelled at vastly disproportionate rates (OCR, 2014). With these data in mind, the D.C. Council passed the Pre-K Student Discipline Amendment Act of 2015. This legislation, which goes into effect in the 2015-2016 school year, bans all suspension and expulsion of pre-kindergarten age students in any publicly-funded, community-based organization, with the exception of several specified behaviors that pose marked threat to the physical safety of the student and others in the classroom. In light of this legislation, District policy makers will need to scale up effective programs that are associated with reductions in expulsion.

ECMHC is one such program that has been associated with reduced expulsions. Gilliam (2005) reported an association between the presence of on-site ECMHC and reduced rates of expulsions in a nationwide sample. Hoover et al. (2012) replicated this finding in family child care settings in Colorado. Converging results have been reported in the Maryland ECMHC evaluation as well as in the past three years of D.C. Healthy Futures evaluations, all of which found expulsion rates that were well below the national average estimated by Gilliam in 2005.

Unanswered Questions About ECMHC

While the data on the positive impact of ECMHC on staff and child-level outcomes are very robust, less is known about the *process* of ECMHC and which aspects of ECMHC lead to the positive outcomes seen in the literature. Many evaluations fail to quantify the dose of consultation that teachers, children and classrooms are receiving; and others do not describe the specific activities that ECMH consultants are engaged in during the course of their work. There is also a high degree of variability in ECMHC models across the country, making these comparisons even more difficult. However, recently, some programs have attempted to more clearly articulate a common set of activities that characterize ECMHC (Duran, et al., 2009). What has emerged from this work is the following common tasks: conducting observations and needs assessments for children and classrooms; consulting with teachers, parents, and directors; linking families with community resources; modeling and conducting trainings for the staff; implementing evidence-based techniques; providing prevention services to individual children; and planning for sustainable changes (Kaufmann et al., 2013; Rabinovitz, 2013). What is often missing from these descriptions however, is more detail about “how” the consultant is doing the work, rather than “what” they are doing on a day to day basis.

While we have some insight into what consultants do, far less is known about the

frequency, intensity, and duration of these services. Duran et al., (2009) summarized evaluation data from six sites that implemented effective ECMHC models, providing some helpful insights into the norms as well as the variability of ECMHC “dose.” Their analysis revealed that consultants often visit a center weekly, although less frequent visits may be seen in rural areas, and at least one site (Colorado) reported that consultants may visit centers twice per week. The duration of consultation is often tentatively agreed upon before a consultant initiates work with a center, though sites report that this initial agreement is often tailored to the needs of the center at the time. Some ECMHC models (e.g., Connecticut) are designed to be shorter-term (3- to 6-months) while others write contracts for one or two years of consultation with a given center. Less information is available about the amount of time per visit that consultants spend in each classroom. Using the year three data of the Healthy Futures project, Rabinovitz (2013) analyzed the activity of the four consultants for two consecutive months of active consultation. Her results indicated that the MHCs spent an average of nearly 2.5 hours per day in the classrooms.

At this point in the evaluation of ECMHC nationally, researchers are trying to “unpack” the impact of consultation by analyzing which consultant activities lead to which results (Connors-Burrow et al., 2013). In their study of Project PLAY, the Arkansas ECMHC program, Connors-Burrow et al. (2013) found that the amount of time consultants

spent in the classrooms was associated with improvements in teacher-child interaction quality. Interestingly, they did not find that consultant time directly meeting with teachers predicted these changes in their interactions with children. These researchers also reported that more frequent teacher-consultant meetings were associated with reduced intent to leave the child care profession. More attempts to link specific kinds of activities to specific outcomes are needed to move the field forward.

Summary of Evidence

Taken together, these studies suggest that there is a considerable evidence base for the effectiveness of ECMHC across multiple outcomes. Findings that link ECMHC to improved classroom climate, improved child behavior, and reduced rates of expulsion have been well replicated. There is variability in the frequency, duration, and intensity of consultation, and the link between these factors and outcomes is not yet fully understood. This evaluation report sought to elucidate some of these relationships in the Healthy Futures model of ECMHC.

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 operation. 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 expired on September 30, 2014, the Department of Behavioral Health was able to secure 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 provide consultation to 6-7 centers once per week. Mental health consultants (MHCs) address children's existing mental health concerns through applying evidence-based techniques with children, teachers, and

parents. 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. This year, the team de-emphasized the difference between programmatic and child-specific consultation. Over time, the distinction has become less relevant, as both programmatic and child-specific consultation take place in the context of the teacher-consultant relationship, which is the primary mechanism through which change takes place.

The consultants' approach to forming relationships with teachers, parents, directors, and children is informed by central

tenets of the “consultative stance.” Key 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, through which consultants model relational skills that the teachers may then use with students and families. The essential ingredient of effective mental health consultation is cultivating reflective capacity in the consultee—whether it is the child care director, teacher or parent—which opens the door for empathy and curiosity about the underlying causes of a child’s difficult behavior. Greater reflective capacity also allows adults to gain insights about their own implicit biases, or unconscious stereotypes, about the behavior of boys or children of color that might be contributing to the disproportionality in expulsions that are seen in the national data.

To support their work in the CDCs, consultants receive weekly supervision from a licensed clinical 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. In another form of parallel process, the supervisor may model empathic, authentic, productive relationship skills that the consultants may implement with teachers (Heller, Steier, Phillips, & Eckley, 2013). Effective consultants combine evidence-based strategies for promoting social emotional development with the relationship-building activities that allow for adult behavior change.

Year Five Implementation

The external evaluation was led by the Georgetown Center for Child and Human Development over the past 5 years and this will be the last formal report on implementation and outcomes. The GUCCHD team follows the principles of community-based participatory research, ensuring that stakeholders from the Department of Behavioral Health helped to select measures, interpret the findings and made recommendations for changes in the protocol year to year.

This year there was a unique situation in the implementation of Healthy Futures, which also impacted the approach to analyzing the evaluation data: two of the four consultants moved to new positions. As a result of the hiring process, there was a gap in services to some of the centers because of the time required to recruit and train the two new consultants. Hence, roughly half of

the CDCs did not have access to consultation services for the whole year. While this was unfortunate from an implementation stand point, it proved to be advantageous from the perspective of the evaluation: the pattern in the findings at those CDCs that received a full year of services could be compared to those who got a partial year of services.

Description of the Participating CDCs

The 26 enrolled CDCs were located in 7 of eight of the district's wards (except for Ward 3). Eleven of the 26 CDCs were located in Ward 8. Six of the CDCs were receiving a Pre-K expansion grant, one was receiving a Pre-K program assistance grant, and four were receiving an infant-toddler grant. In the context of DC's embedded model of consultation, only one CDC was in their first year of receiving services.

TABLE 1

Length of CDC Involvement in the Healthy Futures Program

CHILD DEVELOPMENT CENTERS	YRS	CHILD DEVELOPMENT CENTERS	YRS
Barbara Chambers	3	Martha's Table Child Development Center	5
Big Mama's Children Center	5	Matthews Memorial Baptist Church Child Development Center	5
Board of Child Care	5	Northwest Settlement House Child Development Center	4
CentroNia (Columbia Road)	5	Paramount Child Development Center	5
CentroNia Annex (Newton Street)	5	Randall Hyland Private School	4
First Rock Baptist Child Development Center	4	Southeast Children's Fund Child I	2
Happy Faces Child Development Center	5	Southeast Children's Fund Child II	5
Ideal Child Care Development Center #1	5	St. Philip's Child Development Center	4
Ideal Child Care Development Center #2	2	St. Timothy Episcopal Child Development Center	4
Kiddies Kollege	4	Step by Step Therapeutic Child Care	3
Kids Are US Learning Center I	5	Sunshine Early Learning Center	5
Kids Are US Learning Center II	5	Wee Wisdom Child Development Center	4
Kingdom Kids at Springfield Baptist Church	5	Visions of Victory	1

Across the CDCs, there were 130 classrooms with a total of 1,366 enrolled infants, toddlers, and preschoolers. All of the CDC directors were women and most (76.9%) reported they were African American. They had been CDC directors for an average of 19 years, with a range from 2 to 42 years. Centers served an average of 53 children, with a range from 12 to 140. Out of 124 teachers who reported their gender, all but one was female. Ninety of the teachers (69.8%) were African American. Teachers ranged in their years of experience from 1 to 35 years, with a mean of 11 years. Most of the classrooms (n = 112, 89.6%) had at least one aide. Among those with an aide, half had one aide and the other half had between two and five aides. Most (68.0%) classrooms served toddlers (1-3 year olds), while 17.6% served infants (newborn to 12 months) and 14.4% served preschoolers (3-5 year olds). This distribution of children in child care is a result of increasing access to Pre-K3 and Pre-K4 services offered free to families through DC Public Schools and the Charter School system.

As far as the ethnic/racial composition of the classrooms, the median and modal percent of African American children per classroom was 100%, and the average was 85%. The average percent of Hispanic children per classroom was 41%, and the average percent of Caucasian children per classroom was 21%. Children were split fairly evenly by gender, with an average of 54% male children per classroom.

Measures

The measures selected for the external evaluation were designed to assess change over the course of the school year at the classroom and individual levels. A combination of universal and targeted data collection facilitates evaluation of both the direct and

indirect impact of consultation. As a result of consultant turnover, there were fewer data collected for measures of programmatic and child-specific consultation. Therefore, this year's evaluation focused more heavily on data collected by consultants for all classrooms in the fall and spring.

1. Children's Behavioral Difficulties:

- a. **THE MEASURE:** The Impact Supplement of the *Strengths and Difficulties Questionnaire* (SDQ; Goodman, 1999) 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 had 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.
- b. **THIS YEAR'S DATA COLLECTION:** SDQs were collected for all children enrolled in the CDCs in the fall (October or November 2014) and the spring (May 2015). SDQs were available for 1,292 children in the fall and 1,435 in the spring, with matched data (both fall and spring) for 642 individual children. These differences in fall and spring numbers reflect normal fluctuations in enrollment as well as the presence of all four consultants in May 2015.

This measure was used to: 1) facilitate the early identification of children who might need child-specific consultation, 2) provide a prevalence estimate of behavior problems across all the CDCs participating in Healthy Futures, 3) assess change in the burden of behavioral difficulties in classrooms, and 4) assess change in individual children's behavioral difficulties.

Data on behavioral difficulties were aggregated at the classroom level, yielding an index of the burden of behavioral concerns for each class. Each child was coded 0-3, where 0 = no difficulty, 1 = minor difficulty, 2 = definite difficulty, and 3 = severe difficulty. These scores were summed for all children in the class and the sum was divided by the total number of children in the class for an index of classroom-level behavioral difficulties.

2. Classroom Climate:

- a. **THE MEASURE:** *The Arnett Caregiver Interaction Scale* (CIS; 1989) was used in classrooms in which the teacher and consultant engaged in programmatic consultation. The consultants complete the observation-based, 26-item measure when programmatic consultation is initiated and again 3-4 months later. The CIS assesses teacher-child interactions, yielding a total score as well as scores on four subscales: positive quality, detachment, punitive behaviors, and permissiveness. The measure was designed for toddler and preschool classrooms, but has been adapted to be used for infant

classrooms. The infant version of the measure does not include a permissiveness subscale.

- b. **THIS YEAR'S DATA COLLECTION:** The timing of the consultant turnover resulted in reduced collection of the CIS among classrooms with programmatic consultation. While other data (e.g., activity logs) indicate that many more classrooms received programmatic consultation, only 7 classrooms had complete pre-/post-CIS data this year.

3. Child Social-Emotional Development:

- a. **THE MEASURE:** *The Devereux Early Childhood Assessment* (DECA; LeBuffe & Naglierie, 1999; 2003; Mackrain & LeBuffe, 2007) was completed for children who received child-specific consultation services. Teachers and parents of children who were referred for child-specific consultation services fill out DECAs when parental consent is received and again 3-4 months later. The DECA uses a resiliency-based approach to assess children's social-emotional functioning. It has two versions—one for infants and toddlers and another

TABLE 2

Outcome Measures Used in Year Five Evaluation

TOOL	WHAT IT MEASURES	COMPLETED BY	BASELINE/FOLLOW-UP
Devereux Early Childhood Assessment (DECA) <i>Infant and Preschool versions</i>	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 Scale (CIS) <i>Infant and Preschool versions</i>	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 2014 and May 2015
Observable Concerns	Concerns about children's behavioral, social, or developmental functioning	Teachers, parents, directors, consultants	Before child-specific consultation

for preschoolers. Both versions have subscales to assess attachment, initiative, self-regulation, and total protective factors. The preschool version also includes a behavioral concerns subscale. The DECA was used to measure the extent to which children's protective factors changed after receiving child-specific consultation. Clinical cut-off scores (T-scores) also allowed for analysis of whether consultation produced clinically significant changes.

- b. **THIS YEAR'S DATA COLLECTION:** There were 49 children who received child-specific consultation, but matched baseline and follow-up DECAs were only available from teachers for 17 of the children, and from parents for 7 of the children.

4. Concerning Child Behavior:

- a. **THE MEASURE:** The DBH team developed the *Observable Concerns* questionnaire to provide information on children's behavioral concerns. Respondents choose one or more response that best described the child's specific difficulty. There are seven categories of concerns: behavior, appearance, family/social issues, speech/language, development, eating, and relationships.
- b. **THIS YEAR'S DATA COLLECTION:** Children for whom a respondent filled out an Observable Concerns questionnaire were considered for child-specific consultation. Data were gathered for 80 children and most forms were completed by teachers or directors.

Consultation Dose

One of the recommendations from last year's evaluation was to quantify the "dose" of consultation and to determine whether dose was systematically related to changes in outcomes. In the past, dose has been assessed globally by determining whether or not classrooms received programmatic and/or child-specific consultation. The question regarding dose became particularly salient this year given the fact that two of the four consultants left and were replaced during the last 12 months. As mentioned above, there are limited data available about frequency, intensity and duration of ECMHC in relation to outcomes on a national basis. So to move the field forward, we chose to quantify consultant's level of involvement in each classroom using several different metrics. Ultimately, four approaches to quantifying dose were used.

1. Activity Level

Consultants used activity logs to keep track of their hours for supervision and administrative reporting. This year, a research assistant coded all of the consultants' logs from October 2014 to May 2015 and generated total values for each classroom for the following variables:

- Number of times consultants visited each classroom
- Total amount of time consultants spent in each classroom
- Number of times consultants met with parents
- Number of times consultants met with the director
- Number of trainings consultants provided for the center.

On average, consultants visited each classroom 11.5 times (SD = 7.98) from October to May, with a range from 0 to 35 visits for a total of 1,437 visits. They spent an average of 9 hours, 37 minutes in each classroom (SD = 7 hours 35 minutes), with a range from 0 to 33 hours, 35 minutes. There were only two classrooms in which a consultant did not spend any time. Based on reporting categories, it appears that the majority of consultant time in the classrooms was spent consulting with teachers, performing classroom observations, and engaging in early intervention activities. On average, consultants had one or two meetings with a parent in each classroom over the course of the school year ($M = 1.57$, $SD = 2.34$), with a range from 0 to 13 parents meetings per classroom.

At the center level, consultants met with center directors between 9 and 10 times on average ($M = 9.67$, $SD = 6.52$), with as few as 1 and as many as 31 meetings from October to May. Consultants provided one or two trainings for the Center staff over the year, on average ($M = 1.59$, $SD = 2.44$).

There was a considerable range in consultants' activity in each classroom (see Figure 1), which reflects several factors: 1) some classrooms had an incomplete year of consultation, and 2) centers are seen either weekly or every other week, and 3) certain classrooms within each center have more needs than others.

Consultants effectively targeted their services towards classrooms with greatest need. There was a positive relationship between classrooms' behavioral difficulties index in the fall and the number of consultant visits over the school year, $\beta = .32$, $t(121) = 3.68$, $p < .001$, as well as the total time consultants spent in classrooms $\beta = .31$, $t(120) = 3.55$, $p = .001$.

FIGURE 1

Average Frequency of Four Types of Consultant Activities

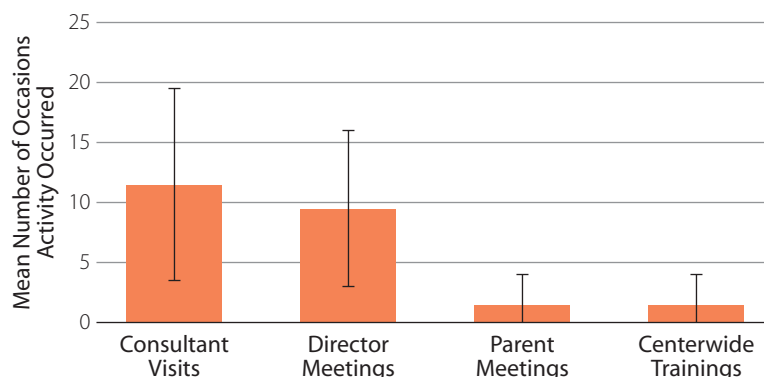


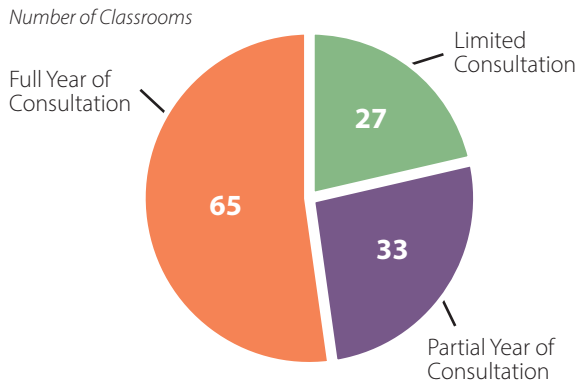
TABLE 3

Average Consultant Activity Levels for Complete and Partial Year of ECMHC

	COMPLETE YEAR	INCOMPLETE YEAR
Consultant Visits	14.4	8.35
Director Meetings	12.54	6.75
Parent Meetings	2.55	0.52
Center-wide Trainings	2.72	0.37

2. Dose defined by consultant employment status

This was the first year with appreciable consultant turnover. While the same four consultants worked for the Healthy Futures project for the majority of the first four years, two consultants left during Year 5. Unfortunately, the process of replacing the consultants was time-consuming, and a portion of the classrooms in the sample did not receive a full year of consultation services. One consultant left before the 2014-2015 school year began and was replaced in November 2014, so the classrooms served by this consultant received a partial year of consultation. Another consultant left in November 2014 and was not replaced until May 2015. Given the time needed for data collection, introductions, adjustment to the

FIGURE 2**Penetration of Consultation Services**

new position, the classrooms served by this consultant received very little consultation services (see Table 3). Hence, there were two consultants who provided a full year of consultation, one who provided a partial year of consultation, and one who provided limited consultation. Classrooms that received an incomplete year of consultation were used as a comparison group for classrooms that received a full year of consultation.

3. Weekly Dose

Consultants do not devote equal portions of their weekly time to each center. Rather, they spend either a full day or half a day per week in each CDC. This decision is based on center size, need for services, and use of services. Classrooms were fairly evenly split between centers that received a full day of consultation (n=57, 45.6%) and a half day of consultation (n=68, 54.4%).

4. Longitudinal Dose

Consultants have been working in many of these centers for up to five years, forming relationships with teachers and directors. Research indicates the importance of relationship-building in the effectiveness of consultation (Green, Everhart, Gordon, & Gettman, 2006), and length of time enrolled in the Healthy Futures project might impact outcomes. To calculate the length of a teacher-consultant relationship, it is necessary to know whether there was teacher turnover in each classroom and whether there was consultant turnover. While we know that there was no consultant turnover until this year, teacher turnover was only systematically tracked in Years 4 and 5. These data were used to determine whether teachers and consultants have been working together for at least two years, or less than two years. With this information, we were able to compare two-year relationships (in which there was no teacher or consultant turnover) to classrooms with less established relationships.

Year Five Outcomes

The outcome evaluation assesses the impact of consultation on child behavior, social-emotional development, and classroom climate. Repeated measures statistical analyses were conducted to assess change over time from baseline to follow-up (i.e., 6-7 months after baseline for the SDQ, 3-4 months after baseline for the CIS and DECA). Mean differences were assessed using paired samples t-tests and General Linear Models (GLM), and associations between variables were assessed using linear regression, binary and multinomial logistic regression, and chi-squared tests of independence. All statistically significant findings appear in Figures 4-10 and Table 5.

Prevalence of Behavior Problems

The Strengths and Difficulties Questionnaire (SDQ) was implemented as a universal screening measure 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). Out of 1,292 students assessed at baseline in the fall, 194 (15.0%) had difficulties. Among those, 111 (57.2%) had minor difficulties, 52 (26.8%) had definite difficulties, and 31 (16.0%) had severe difficulties. Interestingly, from baseline to follow-up in the spring, the prevalence of teacher-reported behavior difficulties increased from 15.0% to 16.9%. When comparable data were reported last year, the prevalence went down; this difference could be attributable to turnover in consultants.

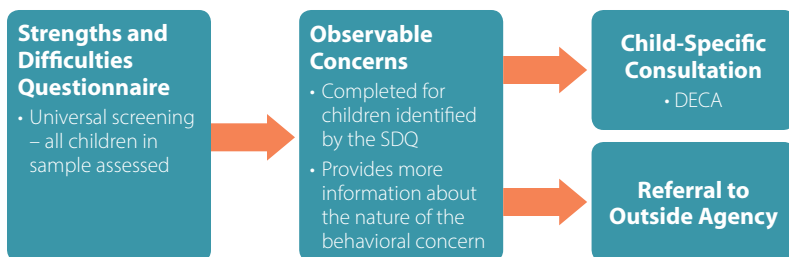
The SDQ data were aggregated to create a classroom-level behavioral concerns index, a weighted composite of child behavior difficulties divided by the number of children in the class. A behavioral concerns index of 0 means that there were no children with any concerns in the classroom, and higher scores indicate greater classroom burden of problematic behaviors. Roughly one-third of classrooms in the fall (36.6%) and the spring (33.1%) had a behavioral concerns index of 0. At both time points, behavioral concern indices were related to the age of the children in the class. Toddler and preschool classrooms had significantly higher behavioral concern indices than infant classrooms in the fall $F(2, 120) = 6.16$, $p = .003$ and spring, $F(121) = 11.56$, $p < .001$.

Identification of Child-Specific Cases

Following the SDQ, a subgroup of children with problematic behaviors were identified by the CDC team who might benefit from child-specific consultation. The Observable Concerns questionnaire provided information about the type of behavior the child was exhibiting. It was most commonly filled out by the teacher, but could also be filled out by the child's family, center director, or DBH staff member from the Primary Project. (Primary Project is an evidence-based preventive mental health program that is implemented in a subgroup of the CDCs participating in Healthy Futures). In Year 5, Observable Concerns questionnaires were completed for 80 children, 49 of whom were subsequently engaged in child-specific

FIGURE 3

Sequence of Events for Child-Specific Concerns



consultation after receiving parental consent for consultation. There were a variety of reasons why the rest of the children did not have child-specific consultation, including improvement in behavior, referral to Early Intervention services, and voluntary transition to a new child care provider.

The most common concerns selected on the Observable Concerns questionnaire are summarized in Table 3 below. As in past years, the most common types of concerns are externalizing behaviors.

TABLE 4

Most Common Child-Specific Concerns

SPECIFIC CONCERN	PERCENT OF CHILDREN (n=80)
Not following directions	62.5%
Easily distracted	56.3%
Not following routines	51.3%
Doesn't verbalize needs	50.0%
Doesn't follow commands	47.5%
Disruptive	37.5%
Difficulty with Peers	36.3%
Doesn't make needs known	32.5%
Attention	31.3%
Plays Alone	22.5%

Effects of Child-Specific Consultation

This year, there were 54 children from roughly 35 classrooms in 18 CDCs who received child-specific consultation. Of the 49 children with available demographic data, the average age of children receiving child-specific consultation was 3 years 3 months, with a range from 1 year 10 months to 5 years 7 months. Thirty-seven of these children (75.5%) were male. Thirty-one were African American (63.3%), 15 were Hispanic, (30.6%), two were Caucasian, and one was 'Other.' Thirty-three (67.3%) were in toddler classrooms and 16 (32.7%) were in preschool classrooms.

Classrooms with at least one child receiving child-specific consultation received more consultation than classrooms without child-specific consultation. Relative to classrooms without child-specific cases, over the course of the school year they received significantly more:

- Consultant time [$t(45.39) = -5.71, p < .001$]
- Consultant visits to the classroom [$t(42.13) = -6.08, p < .001$]
- Consultant meetings with a parent [$t(35.57) = -5.21, p < .001$]
- Consultant meetings with the center director [$t(44.96) = -2.73, p = .009$].

To assess child-level outcomes, teachers provided matched baseline and follow-up DECAs for 25 of the children, and parents provided matched baseline and follow-up DECAs for 7 of the children. Average t-scores at baseline and follow-up indicated that parents of children involved in child-specific services saw improvements in three domains of the DECA: Attachment, Self-Regulation, and Total Protective Factors. However, with a small sample size, these trends were not

statistically significant. Teacher reports on the DECA revealed a statistically significant improvement in three domains of the DECA:

- Self-Regulation t-scores increased from 36.0 to 42.6 ($p = .002$)
- Initiative t-scores increased from 40.8 to 45.0 ($p = .063$)
- Total Protective Factors increased from 37.3 to 42.6 ($p = .011$)

In addition to being statistically significant, these are clinically significant findings because t-scores below 40 are considered to be in the clinical range for protective factors and resilience domains.

Parents and teachers of preschoolers also reported on children's Behavioral Concerns. Among the 16 preschoolers who received child-specific consultation, 7 teachers and 2 parents completed the DECA at both baseline and follow-up. Both respondent types reported decreases in Behavioral Concerns after children participated in child-specific consultation. Despite the small sample size, teachers reported a significant decrease in Behavioral Concerns t-scores from 63.4 to 55.3 ($p = .052$). Results from parents were not significant, due to sample size. However, they reported a large decrease in Behavioral Concerns from an average of 63.5 to 46.0. The decreases reported by both teachers and parents also reflected a shift out of the range of clinical significance, with t-scores of 60 and above considered to be in the clinical range for behavioral concerns.

Overall, consultant resources were effectively targeted to classrooms with child-specific consultation cases, and improvements in children's functioning are likely a product of the higher dose of consultation that they received.

FIGURE 4

Impact of Child-Specific Consultation on Social-Emotional Development

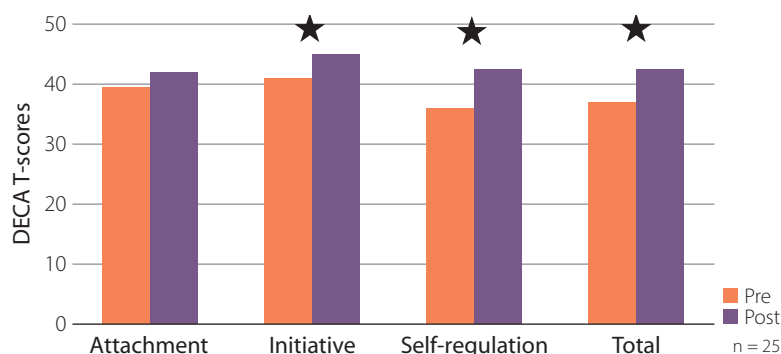
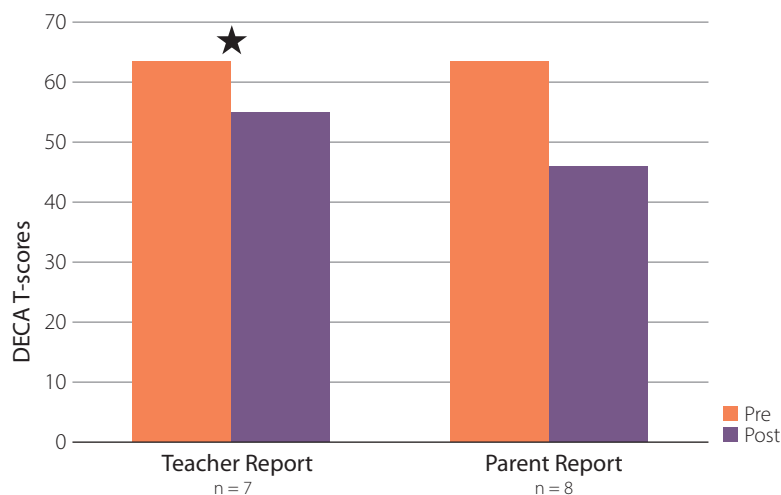


FIGURE 5

Impact of Child-Specific Consultation on Behavioral Concerns



Effects of Programmatic Consultation

Consultation that aims to build the capacity of teachers to improve the behavior and social-emotional competence of children in the class as a whole is typically classified as programmatic consultation. As demonstrated in analyses above, consultants successfully targeted their services to classrooms with the greatest need. In most cases, classrooms with a higher level of need would have a classroom plan developed for their consultation work; and then an Arnett

Caregiver Interaction Scale (CIS) would be completed by the consultant before they start their work with the teacher. However this year there were only seven CIS completed; this was a direct result of the consultants turnover this year. Of the seven classrooms with CIS data, five were toddler or preschool classrooms and two were infant classrooms. The sample size for pre-/post- analyses of the subscales was seven, with the exception of the permissive subscale. Because the permissive scale was not included for infant classrooms, the sample size for that subscale was five.

Despite limited sample size, statistically significant improvements were seen for the permissive, punitive, and positive quality subscales ($p = .008 - .051$), as well as for the overall teacher interaction quality score ($p = .027$). Only the decrease in teacher detachment did not reach statistical significance.

Effect of Consultation Dose

1. Activity

Analyses were conducted to understand the impact of consultant activity (both its nature and extent) on change in classrooms' behavioral concerns. At the classroom and the child level, analyses focused on the extent to which consultants engaged in three activities (classroom visits, meetings with parent, meetings with director) and their relationships with change in behavior.

At the classroom level, analyses focused on whether there were relationships between different activities reported by consultants and changes in the burden of behavioral problems in the classrooms. For example, there was no relationship between the number of consultant visits to a classroom and change in the classroom's burden of behavioral concerns. The number

FIGURE 6

Improved Quality of Teachers' Interactions

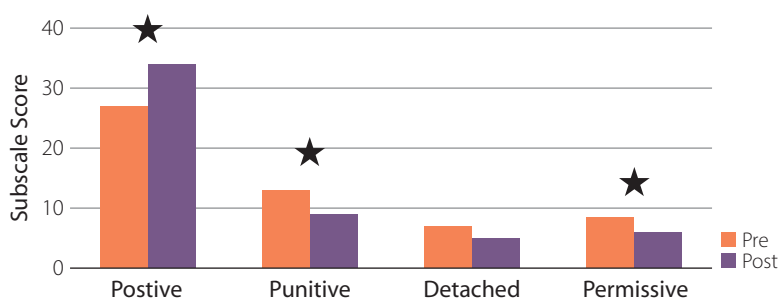
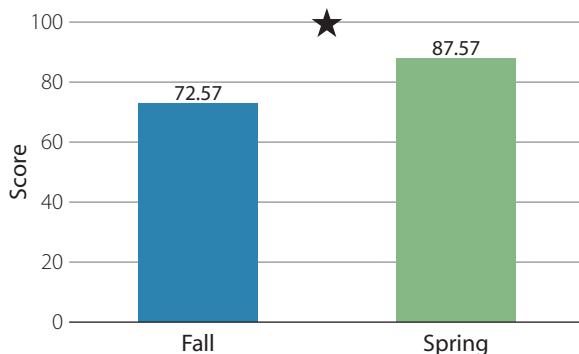


FIGURE 7

Change in Overall Quality of Teachers' Interactions



of consultant-parent meetings similarly was unrelated to change in classroom behavioral concerns. Interestingly, the number of consultant meetings with the *director* predicted a decrease in the classroom burden of behavioral concerns that was marginally significant [$\beta = -.16$, $t(119) = -1.80$, $p = .075$]. This is not surprising, given the consultant is only on-site once a week; and the level of director buy-in and engagement is an important source of support to teachers seeking to implement consultant recommendations.

Other analyses focused on the number of children in each classroom whom the teacher rated more positively in the spring than in the fall. Classroom-level child improvement was calculated to include the number of children whose behavioral difficulty was fully addressed from fall to spring as well as those children whose behavioral difficulty diminished in intensity. In this case, a higher number of consultant visits to the classroom was associated with a larger number of children whose behavioral ratings improved, among classrooms that had at least one child with problematic behavior in the fall [$\beta = .27$, $t(46) = 1.87$, $p = .068$]. A positive relationship was also seen between the number of consultant-director meetings and the number of students whose behavior improved [$\beta = .26$, $t(46) = 1.82$, $p = .076$]. The number of consultant-parent meetings was not significantly related to the number of students who improved.

Child-level outcomes were also investigated. Specifically, multinomial logistic regression was used to calculate the odds of a child improving from fall to spring based upon the different consultation activities. These analyses focused on children with behavioral concerns at baseline on the SDQ. These children had better odds of their teacher rating them as improved when their

classroom received more consultant visits, parent meetings, and director meetings. Interestingly, the total amount of consultant time spent in each classroom was not a statistically significant predictor of change in an individual child's behavior as rated on the SDQ. This may reflect the fact that many of these children were not receiving child-specific consultation services.

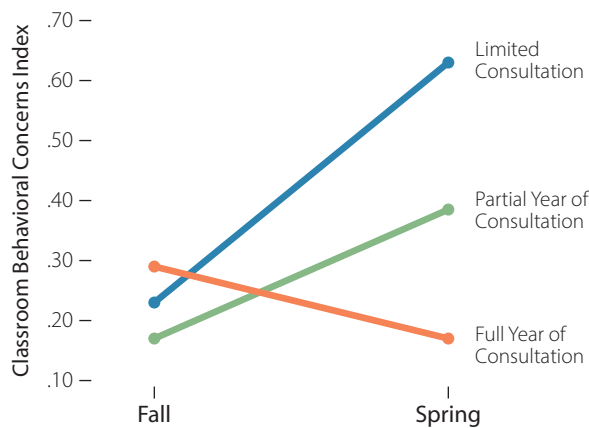
2. Dose defined by consultant employment status

As a result of consultant turnover, some classrooms did not have access to a consultant for the entire school year. Classrooms were classified as having a full year of consultation, a partial year of consultation, or limited consultation. This measure of dose was used as the independent variable in repeated-measures GLM. (Note: this procedure takes into account that data collected about the same child at two different times will be highly correlated to produce a more precise measure of true change.) These analyses investigated whether the change in behavioral concerns index from fall to spring was related to the presence of a consultant at that center and in that classroom for a full year or less.

The GLM results indicated that classrooms' change in behavioral concerns significantly depended on their access to consultation [$F(2, 119) = 17.93$, $p < .001$]. While classrooms that received a full year of consultation showed a decrease in the burden of behavioral difficulties from fall to spring, classrooms with a partial year showed a slight increase in burden and classrooms with limited consultation showed a larger increase in burden. The differences between the effect of limited consultation and a full year of consultation, and between no consultation and a partial year, were both

FIGURE 8

The Impact of Consultant Dose on Change in Classrooms' Burden of Behavioral Difficulties



statistically significant. This is the first time this type of analysis has demonstrated such a clear impact of access to consultation on classroom level child behaviors.

Similar to the analyses reported above, SDQ data from the fall and spring were examined to determine whether an individual children's behavioral rating improved, remained the same, or worsened. For ease of interpretation, the consultant employment variable was recoded into a dichotomous variable, with classrooms having either a complete or incomplete year of consultation (which includes both classrooms that received a partial year or limited consultation). Results from a chi-square test indicated that children with a full year of consultation were

more likely to improve and less likely to worsen, $X^2(1, n = 642) = 39.22, p < .001$. See Table 5 for the percentages in each category.

3. Weekly Dose

Some CDCs received a full day of consultation each week, while others received half a day per week. Interestingly, there were no significant differences in cumulative consultant time spent in classrooms over the school year based on whether the center received a full or half day per week. Similarly, the number of consultant visits to a classroom over the course of the year did not differ based on whether the center received a full or half day. Likewise, the change in classrooms' behavioral concern indices did not depend on weekly dose of consultation. It may be that because centers that received half a day of consultation per week are smaller, their needs appear to be equally well met with less consultant time, relative to the time needed for larger centers with more classrooms.

4. Longitudinal Dose

While the Healthy Futures project has been involved with CDCs for up to five years, data on teacher turnover were only reported in the Years 4 and 5 evaluations. Therefore, this was the first year it was possible to track whether a classroom has had the same teacher for at least two years, or whether there has been turnover within the past two years. In terms of consultant turnover, no classrooms in the sample had experienced consultant turnover until the 2014-2015 school year, at which point 60 classrooms (48% of the sample) experienced consultant turnover. Combining this information with data on teacher turnover, about a quarter (24.8%)

TABLE 5

Impact of Consultation on Child Behavior Change

	FULL YEAR OF CONSULTATION	INCOMPLETE YEAR OF CONSULTATION
Behavior Improved	78.3%	21.7%
Behavior Got Worse	29.7%	70.3%

of the classrooms had neither teacher nor consultant turnover in the past two years. In those classrooms, then, the teacher-consultant relationships could have lasted about two years. Previous studies have indicated the importance of the teacher-consultant relationship on consultation outcomes (Alkon, Ramler, & MacLennan, 2003; Green et al., 2006), so the impact of teacher-consultant relationship length on classroom-level child behavior was explored.

Using repeated measures GLM, SDQ data were analyzed to determine whether teacher-consultant relationship length (dichotomized as explained above) affected change in classrooms' behavioral concerns index from fall to spring. Indeed, change in the behavioral concerns index was related to length of teacher-consultant relationship [$F(1, 120) = 7.52, p = .007$]. Classrooms with at least a two-year teacher-consultant relationship demonstrated a decrease in behavioral concerns, while classrooms with turnover in the past two years demonstrated an increase.

Because many of the classrooms with less than a two-year consultation relationship also had limited access to consultation this year, this analysis was repeated, using only classrooms that had a partial or complete year of consultation and excluding those that received none. A similar pattern was found, whereby behavioral change was associated with relationship length [$F(1, 93) = 4.00, p = .048$]; specifically, there was a significant decrease in behavioral concerns in classrooms with at least a two-year relationship and an increase in classrooms with less than a two-year relationship.

FIGURE 9

Impact of Teacher-Consultant Relationship (using all cases)

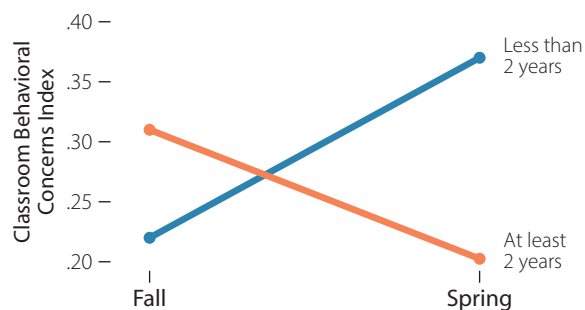
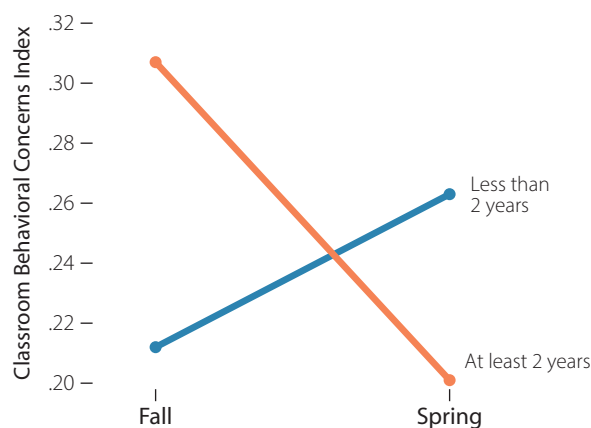


FIGURE 10

Impact of Teacher-Consultant Relationship (using select cases)



Change in Teacher

Similar to the past several years, 30.3% of classrooms in the Healthy Futures project experienced a change in teacher during the 2014-2015 school year. The Healthy Futures Year 4 evaluation showed that receiving intensive consultation services (operationalized as receiving programmatic and/or child-specific consultation) decreased teachers' likelihood of leaving their classrooms over the course of the year. As noted above, comparable data classifying which classrooms received programmatic consultation were not collected this year, so this analysis could not be replicated. However, this year comparable data on classrooms receiving child-specific consultation were available. A chi-squared test

revealed that there was less teacher turnover in classrooms receiving child-specific services [$X^2(1, n = 122) = 4.93, p = .026$]. Another chi-square test assessed whether rates of teacher turnover might vary based upon the length of teacher-consultant relationship. As above, teacher-consultant relationships were dichotomized as less than or greater than two years. Results indicated that classrooms with more established consultation relationships were less likely to have teacher turnover [$X^2(1, n = 122) = 18.09, p < .001$]. It seems that teachers with the support of a consultant with whom they have built a relationship and are problem-solving to address specific challenging behaviors may be less likely to leave their positions.

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. In this study, several limitations of the study design and data should be highlighted.

- The Healthy Futures ECMHC program is an embedded model, and many of the CDCs in this sample have been receiving consultation for up to five years. This continuity in service is offset by the fact that child care is a highly dynamic environment with teachers, families and students changing throughout the year. While the evaluation has been ongoing for 5 years, it is not possible to aggregate effects over time nor have there been data to measure whether changes seen during the school year are sustained into the future.
- Change in behavior from fall to spring was only analyzed for children who remained in the same classroom over that time span. In child care, children transition between classrooms throughout the school year as they reach chronological and developmental milestones. Therefore there may be bias introduced to the estimates of improvement in children's behavior.
- The reliability and validity of the data from the activity logs is dependent on consultants' methods for accounting for and recording their time as well as the accuracy of their recollection of their activities. Given the inherent difficulty of retrospective reporting, there may be error in these estimates. There is also error introduced by a third party coding and categorizing consultants' activity logs.
- Data collection for the main outcome measures for programmatic and child-specific consultation was impacted this year by turnover in consultants. Findings were bolstered by data from the universal measures, but the introduction of these analyses this year limits direct comparisons with previous results from earlier years of the Healthy Futures evaluations.

Looking Back: Five Years of ECMHC Implementation

In five years of implementation, the Healthy Futures project has evolved significantly. Each year of implementation was different, building upon the lessons learned from previous years as well as the new challenges presented each year.

Year 1 Highlights:

- Data were collected from a random sample of classrooms (n = 58).
- Programmatic consultation was offered, but not child-specific consultation. However, children could be referred to participate in Incredible Years groups.
- The Preschool Mental Health Climate Scale was used by the consultants to assess classroom climate. Strong positive effects were seen across multiple domains.

Year 2 Highlights:

- Child-specific consultation was initiated. Outcomes were assessed using the DECA in this and future years.
- The Classroom Assessment Scoring System (CLASS) was used to assess classroom climate. An external observer rated classrooms and positive findings from the Preschool Mental Health Climate Scale were replicated.

Year 3 Highlights:

- The protocols for programmatic and child-specific consultation were better defined, which led to improved data collection.
- Child-specific consultation was expanded from serving 24 children in Year 2 to serving 55 children in Year 3, and programmatic consultation was expanded from serving 16 classrooms in Year 2 to

serving 28 classrooms in Year 3. Strong positive findings were reported for children receiving child-specific consultation.

- The Arnett Caregiver Interaction Scale (CIS) was used to assess classroom climate in this and future years. This measure of teacher interaction style showed improvement.

Year 4 Highlights:

- The Strengths and Difficulties Questionnaire was introduced as a universal screening measure. This led to prevalence estimates of behavioral concerns and facilitated the identification of children in need of child-specific consultation.
- DECA data continued to show improvements for children getting child-specific consultation and CIS data showed impacts on teachers who received programmatic consultation.
- Analyses demonstrated the effects of consultation on children beyond those receiving child-specific consultation and impacts of consultation on reducing teacher turnover.

Year 5 Highlights:

- Consultant turnover allowed for a naturally-occurring comparison group.
- The “dose” of consultation was analyzed to assess the relative contribution of consultant time and availability associated with desired outcomes.

The findings from five years of data collection are presented in Appendix A. The weight of evidence indicates that ECMHC has positively impacted children, teachers, and CDCs in D.C.

Summary/Conclusions

In the final year of the evaluation for the Healthy Futures project, the findings for the effectiveness of ECMHC are robust.

- In this year's sample, the presence of a consultant for an entire year was associated with significant declines in child behavioral problems; while in those classrooms that had more limited access to consultation services, levels of behavior problems actually increased from fall to spring. This finding presents a compelling argument for continuing the embedded model of ECMHC that Healthy Futures has implemented over the past five years.
- Analyses confirmed that the extent to which consultants are present in the classrooms and interface with parents and directors are related to measurable improvements in behavior problems for individual children and aggregated at the classroom level. This suggests that consultation impacts children through a number of indirect pathways, not only through teachers, but also through parents and directors.
- Data demonstrated a significant association between longer consultant relationships with teachers and greater improvements in children's behavior. In addition, longer relationships with the consultant were associated with lower rates of turnover. This supports D.C.'s embedded model of consultation in which consultants work at the same centers for long periods of time rather than provide shorter-term services.

- Behavioral concerns continue to be reported at considerable rates: this year teachers believed that 15% of their children had at least mild problems. There is still a higher percentage of problematic behaviors reported that are externalizing rather than internalizing problems, and these problems are reported more often in older children. There is a need to continue to educate the child care community that internalizing behaviors also warrant a referral for consultation. There is also a need to bring greater awareness to the child care community of mental health of needs of babies—especially given the shift in the proportion of children in child care who are under the age of 3 in DC.

Taken together, these results tell the story of the evolution of a high quality ECMHC program that has demonstrated consistent positive effects across multiple indicators over many years. As policy makers in the District of Columbia seek to expand the range of services and supports available to the early childhood community to eliminate pre-kindergarten expulsions, the Healthy Futures team at the Department of Behavioral Health has a wealth of lessons learned to share. As these efforts move forward, there must be enhanced attention to addressing the racial disproportionality seen in the national data on expulsion of young boys of color. When implemented well—like in Healthy Futures—early childhood mental health consultation can be an important intervention to address these disparities and inequities.

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Summary of Results from Healthy Futures Evaluation Reports

YEAR	NUMBER OF CHILDREN IMPACTED	EXPULSIONS (National Average: 6.7 per 1,000)	CLASSROOM-LEVEL OUTCOMES	CHILD-LEVEL OUTCOMES	GENERALIZED OUTCOMES
Year 1	1,286 in 24 CDCs	2.3 per 1,000	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	N/A ²
Year 2	1,310 in 25 CDCs	2.3 per 1,000	Classroom Assessment Scoring System (CLASS) • Emotional Support ⁺ • Positive Climate**	N/A ¹	N/A ²
Year 3	1,426 in 25 CDCs	2.8 per 1,000	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*	N/A ²
Year 4	1,361 in 26 CDCs	0	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 ⁺	• Consultation was associated with reduced teacher turnover ⁺ • Improvements in teacher interaction quality predicted improvements in child behavior*

YEAR	NUMBER OF CHILDREN IMPACTED	EXPULSIONS (National Average: 6.7 per 1,000)	CLASSROOM-LEVEL OUTCOMES	CHILD-LEVEL OUTCOMES	GENERALIZED OUTCOMES
Year 5	1,366 in 26 CDCs	1.5 per 1,000	Arnett Caregiver Interaction Scale (CIS) • Positive Relationships* • Punitive Behaviors** • Overall Teacher Interaction Quality*	Devereux Early Childhood Assessment (DECA) TODDLERS AND PRESCHOOLERS COMBINED: • Self-Regulation** • Behavioral Concerns*	• Classrooms with a full year of consultation showed improved behavior, while classrooms with interrupted or reduced consultation showed an increase in behavior problems* • The number of consultant visits, consultant-parent meetings, and consultant-director meetings positively predicted improvement in behavior at the classroom and child level¹ • Longer consultant-teacher relationships predicted greater improvements in child behavior and reduced likelihood of teacher turnover*

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

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.	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 undistruptive 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

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

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.

