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STRENGTHENING SOCIAL AND EMOTIONAL HEALTH

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## **BEHAVIORAL SUPPORTS FOR CHILDREN**

BEHAVIORAL HEALTH CONSULTATION FOR ROCHESTER CHILD CARE CENTERS

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### 2016-17 Report

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EDGARDA ZORDAN ELLEN LEOPOLD LAURI STRANO REBECCA DRAPER STAS LOTYCZEWSKI CHARLES INFURNA KATHLEEN EMBT

AUGUST, 2017

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# **Behavioral Supports for Children** Behavioral Health Consultation for Rochester Child Care Centers

## 2016-17 Report

EDGARDA ZORDAN ELLEN LEOPOLD LAURI STRANO REBECCA DRAPER STAS LOTYCZEWSKI CHARLES INFURNA KATHLEEN EMBT

AUGUST, 2017

Children's Institute is a recognized leader in programs, research, and evaluations supporting children's social and emotional health. Our partner COMET Informatics offers a data support system that provides informed decision-making, organizational quality improvements, and improved outcomes for children and youth. Children's Institute (EIN 23-7102632) is a 501©(3) non-profit organization.

For more information, visit www.childrensinstitute.net and www.comet4children.com



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# Acknowledgments

This report, and the work and outcomes it represents, would not be possible without key contributions from our partners including child care centers staff, parents/ grandparents/ guardians, funders, and professionals in the community; it truly takes a village to support children and families socially and emotionally. It is Children's Institute's mission and honor to be part of that village. Without the willingness of so many to team across disciplines and roles, we would be ineffective in addressing and responding to children's social, emotional and behavioral needs.

We especially acknowledge the contribution made by our funders who underwrite Behavioral Supports for Children (BSC) services. It is through their generosity, vision, and commitment to the many low-income children and families in this community that BSC services are provided. As one very young parent, whose child received Behavioral Health Consultation stated, "We still do at home what we all talked about months ago in the behavioral support plan. And it works... my girl, she listens better, and I am calmer too."

The Children's Institute profoundly appreciates the financial support provided this past year by Brighter Days Foundation, Daisy Marquis Jones Foundation, Feinbloom Supporting Foundation of the Community Foundation, Rochester Area Community Foundation and Wilson Foundation. Thank you for all you do to support the social and emotional development of young children in Rochester.

With children's lives, our future economy, and a dime on the dollar value, social and emotional skills can and should be taught. We honor our partners — child care centers, families, funders, and mental health and other professionals – in this work. We all collaborate to support those social and emotional skills that promote current and future capacity in our children and families.

# **Executive Summary**

Behavioral Supports for Children (BSC) is a project developed through the collaboration of Children's Institute with six Rochester child care centers. BSC provides a continuum of services to promote social-emotional health and prevent and reduce challenging behaviors and social-emotional difficulties in three and four-year-old children.

BSC integrates Behavioral Health Consultation (BHC) with the Pyramid Model (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003; Hemmeter, Ostrosky, & Fox, 2006) – an evidence-based approach endorsed by New York State. BHC is based on the consultation model developed by the Georgetown University Center for Child and Human Development (Cohen & Kaufmann, 2005). BHC offers two types of consultation: programmatic consultation – aimed at building capacity of centers staff and families – and child-centered consultation – focused on the individual needs of children exhibiting social-emotional and/or behavioral challenges. Consistent with the Pyramid Model and essential components of BSC are universal social-emotional screening and the implementation of the social-emotional curriculum PATHS (Promoting Alternative Thinking Strategies) (Kusche' & Greenberg, 1994). PATHS is recognized as evidence-based and effective by SAMHSA (Substance Abuse and Mental Health Services Administration) and CASEL (Collaborative for Academic, Social and Emotional Learning).

This report outlines populations served, processes and learnings. Outcome data identify statistically significant positive change both at the classroom and individual child levels.

#### Major Findings for 2016-17:

- The majority of teachers serving three- and four-year old children received Pyramid Model training.
- ◆ All teachers participated in group or individual orientation to the PATHS curriculum.
- ♦ All but one teacher in three and four-year-old classrooms taught PATHS.
- Eight teachers were assessed pre- and post- with the Teaching Pyramid Observation Tool (TPOT) (Hemmeter, Fox, & Snyder, 2014).
  - Seven of the eight teachers demonstrated statistically significant positive changes (p< .05) in the implementation of the Pyramid Model key practices.
  - In the fall TPOT observations, half of the teachers displayed at least one red flag indication (concerning teaching practice). In the spring, no teacher displayed red flags.
  - Teachers demonstrated improvement in their ability to teach children social-emotional skills including friendship skills and problem solving, and to connect with families, and support family use of Pyramid Model practices.
- Nearly 400 children were screened for social-emotional competencies and risks with the Teacher-Child Rating Scale (T-CRS 2.1) (Hightower & Perkins, 2010).
  - Twenty-six percent (26%) of children in four-year-old classrooms presented one or more risk factors with 11% presenting multiple risk factors.

- Fifty-two percent (52%) of children in three-year-old classrooms presented one or more risk factors, with 20% presenting multiple risk factors.
- Children in both four-year-old and three-year-old classrooms demonstrated statistically significant improvement (p<.01) in all social-emotional areas on the Pre-/Post- T-CRS 2.1.</p>
- Children in the six BSC centers compared with children attending other Rochester centers that were RECAP (Rochester Early Childhood Assessment Partnership) participants, showed greater positive changes on the T-CRS.
  - $\circ$  Changes for four-year-old students in BSC centers compared to changes for students in non-BSC classrooms were statistically significant (p<.05) on the Behavior Control subscale of the T-CRS.
  - Changes for three-year-old students in BSC centers compared to changes for students in non-BSC classroom were statistically significant (p<.05) on the Behavior Control, Assertiveness and Task Orientation subscales.
- Thirty-seven (37) children received BHC; pre and post data were collected for 32 of those children.
  - Statistically significant improvement was seen on the DECA-P2 (Devereux Early Childhood Assessment) on all three social emotional competency subscales: Initiative, Self-Regulation and Attachment/Relationship (p<.001).</li>
  - Statistically significant decrease was seen on the DECA-P2 Behavioral Concerns subscale (p<.001).
- No child was expelled because of behavioral challenges, however three children were released from centers because of their parent or guardian's inappropriate behavior and reluctance to collaborate and follow center policies.
- Child care directors reported high level of satisfaction with Behavioral Supports for Children program. All of the directors stated that they want to continue receiving this program, but preferred that consultants spend more time at their centers.
- Workforce issues within the early childhood care and education field have a significant impact on implementing and maintaining evidence-based professional development and strategies within centers. The degree of staff and leadership turnover provides a significant barrier.
- Children referred for behavioral health consultation are impacted by very complex family and community situations as well as systemic issues such as very high rates of child poverty.

# **Introduction to Behavioral Supports for Children**

Behavioral Supports for Children (BSC) is an initiative developed to respond to the social, emotional and behavioral needs of Rochester's very young children. The BSC program integrates Behavioral Health Consultation (BHC) into the Pyramid Model (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003; Hemmeter, Ostrosky, & Fox, 2006) to inform consultants' work with families, children, center directors and teachers and promote Pyramid Model practices (Perry, & Kaufmann, 2009). Two other essential components of BSC—also aligned within the Pyramid Model--are universal social-emotional screening and the implementation of the evidence-based social emotional curriculum PATHS Preschool (Promoting Alternative Thinking Strategies) (Kusché & Greenberg, 1994). PATHS Preschool is recognized as evidence-based and effective by SAMHSA (Substance Abuse and Mental Health Services Administration) and CASEL (Collaborative for Academic, Social and Emotional Learning).

Children's social, emotional and behavioral disorders are on the rise in the United States, with approximately 13% to 20% of children diagnosed with a mental disorder within a given year (Perou et al., 2013). The prevalence of mental health problems is even higher among children living in an environment of risk, such as poverty and exposure to maternal depression, with estimates ranging from 17%–25% (Godoy & Carter, 2013; Larson & Halfon, 2010). However, only 50% of these children are identified before school entrance (Glascoe & Marks, 2011). Social, emotional and behavioral difficulties often start in early childhood. Prekindergarten children with challenging behaviors are expelled at a rate that is three times that for K-12 students (Gilliam, 2005), negatively impacting their entire school career. Gilliam's research lends support to the understanding that unaddressed difficulties may have long lasting consequences on children's academic performance and quality of life (social, financial, work satisfaction, mental health).

Children in Rochester live in extreme poverty conditions with multiple related risk factors. Rochester is ranked 1<sup>st</sup> in similar sized cities for child poverty and rates of extreme poverty (people living below half the federal poverty level) and is the 5<sup>th</sup> poorest city in the United States among the top 75 metropolitan areas (Johnson, Doherty, & Hebda, 2016). The Greater Rochester Health Foundation (GRHF) documented the high social, emotional and behavioral needs of Rochester children in their report Crisis *in Care: Gaps in Behavioral Health Services are Failing our Children* (2016). Recent results of teacher assessment of their students in Rochester Universal Pre-Kindergarten (UPK) indicate that 23%-25% of children presented with one or more social emotional risk factors (RECAP 2015-2016 Annual Report and Fall 2016 data analysis) (Infurna et al, 2016). In addition, in a new entrant screening at kindergarten, 12% of parents/guardians appraising their children indicated that they would like to speak with someone about their child's behavior (Parent Appraisal of Children's Experiences PreK; K PACE) (Hightower et al, 2008).

A growing body of research shows that preventive interventions that strengthen relationships and promote social-emotional competencies equip children to be successful academically, in their relationships and future life (Domitrovich, Moore, & Greenberg, 2012; Dunlap & Fox, 2014). In a 2015 longitudinal study of 750 urban and rural kindergartners who were followed for 20 years,

children who had a strong social and emotional foundation were four times as likely to graduate from college as those scoring at the bottom of a 5 point social and emotional skills scale; conversely, for every point decrease, there was a 67% greater chance of an arrest (Jones, Greenberg & Crowley, 2015). These outcomes support the analysis of the Nobel Prize winning economist, James Heckman and his colleagues on the long-term benefits of teaching social and emotional skills in preschool (Heckman, Moon, Pinto, Savelyev & Yavitz, 2010).

### **Behavioral Supports for Children Components**

### 1. Pyramid Model

The Pyramid Model was developed by the Center on the Social and Emotional Foundation for Early Learning (CSEFEL) and the Technical Assistance Center on Social Emotional Intervention (TACSEI) for Young Children. The Pyramid Model is a three-tiered framework to support children's social and emotional development and address challenging behaviors. Based on a public health model, the Pyramid Model's Tier 1, the base of the Model, is "Universal Promotion" of all children and is comprised of two components: building positive relationships with children, families and colleagues, and promoting supportive and high quality environments. Tier 2, or "Secondary Prevention", consists of teaching children social and emotional skills. Tier 3, or "Intervention", consists of developing intensive individualized interventions for those children, usually less than 5%, who continue to exhibit challenging behaviors despite the implementation of universal and preventive practices (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003; Hemmeter, Ostrosky & Fox, 2006).

#### Figure 1. Pyramid Model

# The Pyramid Model: Promoting Social and Emotional Competence and Addressing Challenging Behavior



# 2. Universal Social-Emotional Screening

Screening all children for social-emotional competencies and risks helps identify those children who present difficulties and would benefit from intervention strategies that prevent the development of more severe future problems. Screening is part of a prevention approach and consistent with the Pyramid Model (Henderson & Strain, 2009).

In the fall, teachers at each center screened all three and four-year-old children for socialemotional competencies and risks with the Teacher-Child Rating Scale (T-CRS 2.1) (Perkins & Hightower, 2002), a screening tool that measures a child's task attention, behavior control, assertiveness and peer social skills.

## 3. PATHS: An Evidence-Based Social Emotional Curriculum

Children who have social-emotional competencies are attentive, follow directions, get along with other children, are assertive and engaged and are able to regulate their emotions (Denham, Brown, & Domitrovich, 2010). Teaching children social-emotional skills is an effective intervention which may improve mental health and social skills as well as academic achievement, as shown on a meta-analysis study (213 studies) including more than 270,000 students from kindergarten through high school (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

In an effort to provide universal social-emotional skill development, teachers delivered the PATHS Preschool curriculum (Promoting Alternative Thinking Strategies) (Kusche' & Greenberg, 1994) in their classrooms. The program includes options to strengthen home-school connections in order to promote continuity of pro-social and emotional concepts and language for children between home and school. PATHS is recognized as a Model Program (the highest possible rating) by the National Registry of Effective Programs – Substance Abuse and Mental Health Services Administration (SAMHSA). In two studies of children attending Head Start classrooms, children exposed to PATHS compared to those who were not, showed improvement in their emotional vocabulary, empathy, and social skills (Bierman, Domitrovich, et al., 2008; Domitrovich, Cortes, & Greenberg, 2007). In addition to the improvement in social and emotional competencies, a more recent study of 24 elementary schools determined that children exposed to PATHS also improved their proficiency in reading, writing and math (Schonfeld, et al, 2015).

## 4. Behavioral Health Consultation

Behavioral Health Consultation (BHC) aligns with 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. 2009a; Duran, et al. 2009b). Characteristics of this model are illustrated in Figure 2. BHC is an effective strategy that builds the capacity of center staff, families and programs to promote social-emotional health and prevent and reduce mental health difficulties in young children (Cohen & Kaufmann, 2005; Duran, et al. 2009a; Duran, et al. 2009b). Several studies, including randomized-controlled studies, have reported a significant decrease of challenging behaviors in children receiving behavioral health consultation compared to children in control groups (Gilliam, Maupin, & Reyes, 2016; Sheridan, Ryoo, Garbacz, Kunz &Chumney, 2013; Upshur, Wenz-Gross & Reed, 2009).

#### Figure 2. Behavioral Health Consultation Model

#### **Behavioral Health Consultation Model**

**A multi-tiered approach:** Consultants provide a continuum of supports for: promotion of social-emotional and behavioral competencies; prevention of behavioral difficulties for children at risk; and early identification, support and intervention for children demonstrating social-emotional and behavioral needs.

**Strength-based:** Support builds on the strengths of children and their families, and helps develop positive relationships and social emotional competencies.

**Mostly indirect:** Consultants educate and work in collaboration with center staff and families to address children's social, emotional and behavioral needs. Consultants provide some direct services such as child observations, assessments and modeling of effective practices, however the intent of consultation is to develop or increase competencies in teachers and families.

**Collaborative and relationship-based:** The ability of consultants to build positive and collaborative relationships with caregivers is fundamental for effective outcomes. Consultants avoid the role of expert and empower staff and families.

**Grounded in knowledge of child development and child-focused:** Consultants provide services that are individualized for each child, developmentally appropriate, and designed to maximize a child's full potential.

**Family-centered:** Families are central partners and need to be involved in all stages of the consultation from planning to delivery of intervention. They know their child's and family strengths, and they are crucial for the implementation of strategies with fidelity. Consultants involve a child's family or caregivers, and promote responsive and nurturing relationships between parents/guardians and children.

**Culturally responsive:** Consultants are aware, respectful and appreciative of cultural differences and diversity. Consultants listen to staff and families, consider their values, attitudes, and beliefs and understand how their personal experiences influence their perceptions, interactions and practices. Consultants reflect on their own cultural differences and respect ethnic, racial, linguistic, socioeconomic and educational differences.

**Informed on evidence-based practices and data-driven:** Consultants adopt evidencebased interventions to meet the needs of children with social-emotional and behavioral difficulties. They build the capacity of early childcare providers and families to implement evidence-based interventions to reduce challenging behaviors.

**Reflective:** Consultants approach each situation openly and without preconceived notions of what to do. They listen to caregivers and educators. They also help consultees reflect on their practices by modeling listening and problem solving.

Adapted from Module 1 Tutorial 2 Defining Early Childhood Mental Health Consultation, Center for Early Childhood Mental Health Consultation – Georgetown University Center for Child and Human Development. Retrieved from https://www.ecmhc.org/tutorials/defining/mod1\_1.html



# **Behavioral Supports for Children Implementation**

#### **Participating Programs and Children**

Six child care centers participated in the project. Each center was a RECAP participant, held national certification and reached consensus among center leadership and classroom staff to participate in BSC.

Across centers, BSC served a total of 24 classrooms, which were mostly UPK (Universal Pre-Kindergarten) and EPK (Expanded Pre-Kindergarten) providers contracted with Rochester City School District (RCSD) Department of Early Childhood Education. Centers varied in size: the smallest served 26 preschoolers and the largest 123 preschoolers. Overall they served 394 preschoolers: 260 (65.5%) in four-year-old classrooms and 134 (34.5%) in three-year-old classrooms. Thirty-nine percent (39%) of children were African American, 29% Hispanic, 22% White, and 6% Asian.

Children at the Six Centers (n=394)			
Gender	Male	48.6%	
	Female	51.4%	
Age	3-year-old	34.5%	
	4-year-old	65.5%	
	Asian	6%	
	Black/ African American	39%	
Race/Ethnicity	Hispanic/Latino	29%	
	Native American	< 1%	
	White/Caucasian	22%	
	Other	4%	

#### **Table 1. Children Demographics**

### **Behavioral Health Consultation Activities**

Typically the two BSC consultants visited each center once a week to conduct observations in the classrooms and consult with center director, teachers and parents. However, based on center needs, consultants visited centers at additional times, for example early or late in the day to accommodate meetings with parents. Consultants completed daily logs entering the time spent for each specific activity: child's assessment and intervention, consultation with director, consultation with teachers, consultation with parents, consultation with other providers, time allocated for PATHS support, administration time which included internal meetings and supervision time. Time spent in activities varied depending on center needs. (See Table 2).

#### **Programmatic Consultation**

Programmatic consultation focuses on improving the overall quality of the child care center and supporting the social and emotional development of all young children in the program. In programmatic consultation, BSC consultants worked collaboratively with child care center staff and families using a "strength-based" approach. Building positive relationships, as well as the strength-based approach, is foundational to the Pyramid Model.

Children's Institute program director and consultants met regularly with center directors to plan, develop timelines, clarify reciprocal expectations, align work to meet grant requirements, discuss measures, identify center needs, develop strategies to respond to those needs, and analyze data. To increase center implementation of the Pyramid Model and staff engagement in effective strategies, a New York State Pyramid Model Master Cadre trainer at Children's Institute and two staff at a partnering child care center joined in the effort to train staff at participating programs on all three Modules and tiers of the Pyramid Model.

In the fall, consultants supported teachers in screening all three and four-year-old children with the T-CRS 2.1 (Perkins, & Hightower, 2002) to determine social-emotional competencies and risks. Then, consultants met with teachers and center directors to review results and discuss possible referrals for Behavioral Health Consultation or other services.

Consultants supported classroom staff in creating a prosocial learning environment informed by Pyramid Model and PATHS practices. They provided center staff and families with information, shared and modeled effective strategies and offered resources and materials to foster socialemotional competencies and positive interactions among children, their families and center staff. Consultants participated in classroom meetings, and other school events to engage families. They provided support for everyday activities as well as extraordinary challenges such as difficulties with children, families and/or staff; navigating the foster care system; addressing staff turnover; and coping with tragic events such as death, severe illnesses, fires and incarcerations.

### **Child-Centered Consultation**

Child-centered consultation addresses the needs of those children who, despite the implementation of universal social and emotional promotion and preventive practices, continue to present severe social, emotional and behavioral difficulties, such as aggression, withdrawal, anxiety, or are at risk because of family stressors or trauma – death, divorce, incarceration, job loss or mental illness.

Typically in the BSC project, teachers or center director made the first connection with parents/guardians to discuss concerns for children identified as at risk. Once parents/guardians provided written consent for their child to receive child-specific consultation, the BHC started the assessment process by first asking the child's teacher to fill out a referral form, the DECA-P2, and other assessment forms based on needs. Typically, consultants then conducted observations of the child in the classroom and met with parents and teacher. Finally, the consultant met again with parents and teacher to develop behavioral strategies or a support and intervention plan to meet the specific needs of that child. Depending on the child's difficulties, a teacher could be involved in collecting data on target behavior.

The consultant provided weekly monitoring of the behavioral plan and tracked the child's progress through formal or informal observations and modeled strategies and offered feedback to the teacher relative to the implementation of the agreed upon behavioral strategies. Periodically, the consultant met with the child's parents and teacher to discuss progress and make modifications to the plan if needed. Once consultant support was no longer necessary the teacher completed a post DECA-P2 to measure social competency development and any decrease of behavioral challenges. When a child's needs could not be met at the center, the consultant facilitated referrals for additional outside services.

#### **Table 2. Consultant Activities**

Type of Consultation	BSC Component	BHC Activities
	Pyramid Model	Develop positive and collaborative relationships with center directors, classroom staff, families and providers
		<ul> <li>Attend directors' meetings: share information, listen and respond to concerns, create shared goals and action plans, plan trainings</li> </ul>
		Provide trainings
Programmatic Consultation		<ul> <li>Explain and align BSC services and Pyramid Model practices</li> </ul>
		<ul> <li>Consult with, support, and provide information and resources to staff and families</li> </ul>
	PATHS	Orient new teachers
		<ul> <li>Support teachers in PATHS implementation</li> </ul>
		<ul> <li>Periodically observe PATHS lessons and offer feedback and suggestions for improvement</li> </ul>
	Universal Screening	Meet with teachers and center directors to review T-CRS results and identify children at risk
Child-	Child- Specific Consultation	<ul> <li>Conduct child assessments through observations, rating scales and interviews with parents, teachers and other providers</li> </ul>
		<ul> <li>Develop behavioral strategies/support plans in collaboration with staff and families</li> </ul>
		<ul> <li>Offer mental health and wellness perspective, provide recommendations, information and resources</li> </ul>
Centered Consultation		<ul> <li>Facilitate behavioral data collection</li> </ul>
oonsulation		Model effective strategies, coach teachers
		<ul> <li>Monitor child's behavior progress through regular observations and/or behavioral data</li> </ul>
		<ul> <li>Provide assistance for referrals to special education services and other community services</li> </ul>
		Participate in BHC reflective supervision

#### **Measurement Tools**

Through the implementation of BHC with the Pyramid Model approach, the ultimate goal of BSC was to build teachers' capacity and skills to promote children's social emotional competencies and prevent and address challenging behaviors. More specifically BSC aimed to:

- 1. Increase staff engagement in behaviors, strategies and skills that support children's social emotional development and prevent acting out behaviors;
- 2. Increase center implementation of the Pyramid Model (promotion, prevention, intervention) and use of effective strategies to support children's social competence;
- 3. Increase children's positive behaviors related to adaptation to school;
- 4. Decrease children's behaviors which interfere with positive attachment to the classroom.

To measure changes over time, BSC used the following instruments:

- Teaching Pyramid Observation Tool (TPOT) The TPOT assesses evidenced-based, best teaching practices associated with the Pyramid Model framework for building social and emotional competences in young children (Hemmeter, Fox, & Snyder, 2014). This instrument—often used to inform coaching-- measures the fidelity of teachers' Pyramid Model aligned practices and positive change. The TPOT consists of fourteen subscales that measure key teaching practices, one subscale that measures "red flags" concerning behaviors, and a subscale that measures the overall use of key practices. At Tier 1 the TPOT measures the implementation of strategies that promote a high-quality environment and nurturing relationships with children, families and colleagues: schedules, routines, rules and expectations, activities, transitions, directions, child engagement, teacher collaboration and connection with families. At Tier 2 the TPOT measures the teacher's ability to directly teach children social and emotional skills and problem solving; and at Tier 3, it measures the ability to address children's challenging behavior.
- Teacher-Child Rating Scale 2.1 (T-CRS 2.1) The T-CRS 2.1 is a brief 32-item rating scale with proven reliability and validity, designed specifically for teachers, that assesses a child's social-emotional competence in four areas: task orientation, assertiveness, behavior control and peer social skills. The T-CRS 2.1 can be used as a screening tool to identify children at risk, as well as an instrument to measure social emotional competencies and development (Hightower & Perkins, 2010).
- Devereux Early Childhood Assessment for Preschoolers Second Edition (DECA-P2) The DECA-P2 is a social emotional assessment behavior rating scale that was designed for children from ages 3 through 5 years old (LeBuffe & Naglieri, 2012). The DECA-P2 has four subscales including initiative, self-regulation, attachment/relationships, and behavioral concerns.

The *Inventory of Practices for Promoting Children's Social Emotional Competence* (Center on the Social and Emotional Foundations for Early Learning, 2003) was initially selected to help teachers self-assess their abilities in implementing the Pyramid Model practices. However, center directors felt it was premature to introduce this tool to teachers since at the beginning of the school year many teachers still needed to be trained in the Pyramid Model. In order to avoid undue pressure for teachers, use of this tool was postponed to the 2017-18 program year at which time all teachers will have received Pyramid Model training and are more familiar with its practices.

# Outcomes

#### **Pyramid Model Implementation**

By the end of the school year, the majority of teachers, directors and classroom staff received training in the Pyramid Model and, with support, were beginning to implement new social and emotional practices in classrooms. However, center directors felt that it was premature to subject all their teachers to the evaluation with the Inventory of Practices and the TPOT, considering that for many of them the Pyramid Model was a very new approach, and full implementation of the Model takes 3-5 years. For this reason, nine teachers (the ones more experienced with the Pyramid Model) out of 24 lead teachers (37%) were evaluated with the TPOT. Of these nine teachers, eight had pre-/post- assessments (See Figure 3). In subsequent program years, TPOT will be used to assess additional classrooms and measure the extent of improvement in skills over time and across centers as teachers and directors begin to implement practices learned in 2016-17 Pyramid Model training.

#### **TPOT:** Overall Implementation of Pyramid Model Practices and Red Flags

- Seven out of eight teachers showed a positive change from pre to post assessment on the overall implementation of the key practices aligned with the Pyramid Model.
- No teacher displayed "red flags" at post measurement compared to pre-, when four teachers displayed concerning behaviors. (See Figure 3).

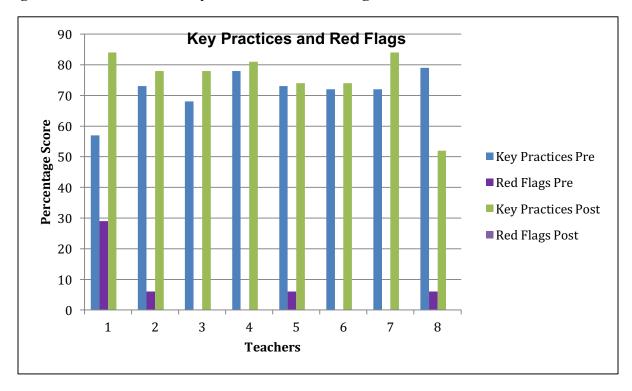
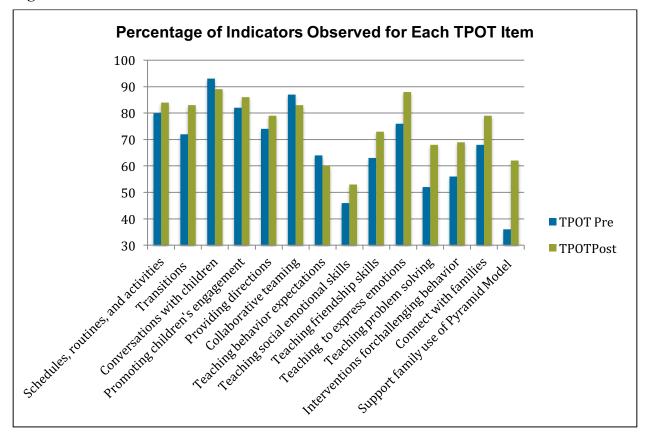


Figure 3. TPOT Pre/Post Key Practices and Red Flags for 8 Teachers Assessed

#### **TPOT:** Indicators of Pyramid Model Practices

- ★ As a group, at pre-assessment, teachers demonstrated competence in implementing universal promotion practices, as illustrated by the first six T-POT indicators, which averaged between 72% and over 93% (see Figure 4.) with the exception of "teaching behavior expectations", whose average score was 64%. At post-evaluation, average scores improved for all indicators except "collaborative teaming" and "conversations with children", whose scores decreased at post, yet averaged above 80%.
- Overall, at pre-evaluation teachers had low scores in preventative practices requiring teaching children social and emotional, friendship and problem solving skills (46% to 63% average scores). Teaching to express emotions had a higher average score (76%) at pre-. At post-evaluation, teachers showed improvement in all preventative practices (average scores from 53% to 88%).
- Teachers' skills in managing challenging behavior improved from pre (56% average score) to post (69% average score).
- Teachers also showed positive changes in their ability to connect with families and facilitate their use of the Pyramid Model strategies at home. (See Figure 4).



#### **Figure 4. TPOT Practices Observed**

### **Universal Social-Emotional Screening**

Almost 400 children were screened for social emotional competencies and risks with the Teacher-Child Rating Scale (T-CRS 2.1) (Hightower & Perkins 2010).

- Twenty-six percent (26%) of children in four-year-old classrooms were rated by their teachers as presenting one or more risk factors with 11% presenting multiple risk factors.
- Fifty-two percent (52%) of children in three-year-old classrooms were rated by their teachers as presenting one or more risk factors, with 20% presenting multiple risk factors (See Table 3).

Percentage of Children at Risk Screened with T-CRS			
Type of Classroom	Risk factor	Percentage of Children	
4-year-old	Task Orientation	12%	
	Behavior Control	10%	
	Assertiveness	7%	
	Peer Social Skills	11%	
	One or more risk factor	26%	
	Multiple factors	11%	
3-year-old	Task Orientation	15%	
	Behavior Control	27%	
	Assertiveness	14%	
	Peer Social Skills	19%	
	One or more risk factor	52%	
	Multiple factors	20%	

#### Table 3. Children at Risk for Social, Emotional and/or Behavioral Problems

# Social Emotional Learning with PATHS Curriculum

To improve children's social-emotional competencies, the direct and systematic teaching of social-emotional skills with PATHS was one of the important components of the BSC project. BSC provided curriculum materials for each classroom as well as group and individual teacher orientations to make it possible for all teachers to deliver PATHS to their students.

All but one teacher in three- and four-year-old classrooms delivered the PATHS curriculum to their students. Teachers in four out of the six centers completed PATHS logs. The majority of four-year-old classroom teachers did not deliver all 44 PATHS Preschool lessons. The number of lessons delivered ranged from 16 to 44 with an average of 29 lessons. This dosage is within the fidelity range.

Every three-year-old classroom teacher delivered all the 17 PATHS lessons for the 3-year-old curriculum; a target that was modified for the age group. It is developmentally appropriate to wait until all children have turned three years of age before teachers begin teaching the modified curriculum to this age group. These teachers begin PATHS in January and February.

### T-CRS Pre- and Post- Results

The T-CRS 2.1 pre- and post- was used to measure changes in children's social-emotional competencies. Three hundred (300) children, 216 in 4-year-old classrooms and 84 in 3-year-old classrooms, had a pre- and post- matching data. Due to late entry to programs or early exit, some children did not have pre-/post- data and were not included in this analysis.

Both groups of children in the 4-year-old and 3-year-old classrooms showed statistically significant positive changes in all social emotional competencies as measured by the T-CRS. (See Figures 5 and 6)

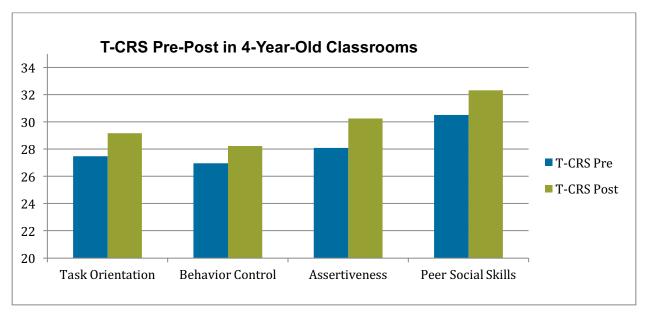


Figure 5. T-CRS Pre and Post for Children in 4-Year-Old Classrooms

Note: All differences are statistically significant at p < .001

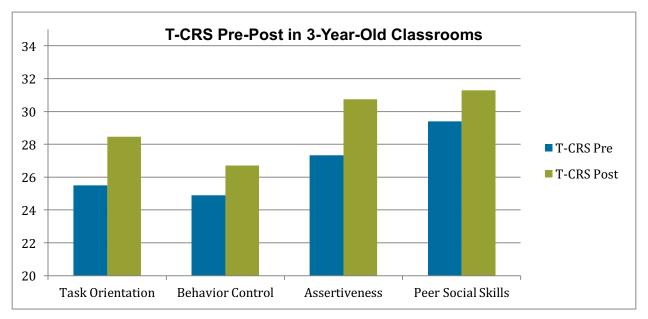


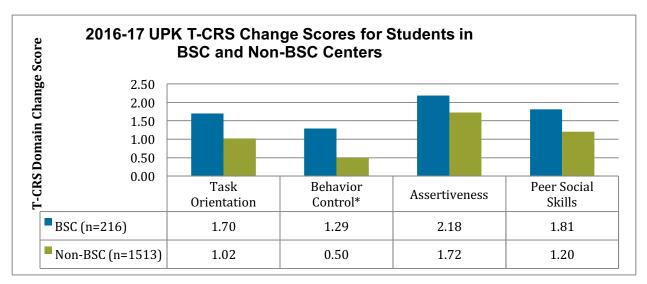
Figure 6. T-CRS Results Pre and Post for Children in 3-Year-Old Classrooms

Note: All differences are statistically significant at p < .01

#### Comparison of T-CRS Outcomes - BSC and non-BSC students

Children attending BSC partner centers were compared on the T-CRS with children attending other Rochester centers participating in Rochester Early Childhood Assessment Partnership (RECAP).

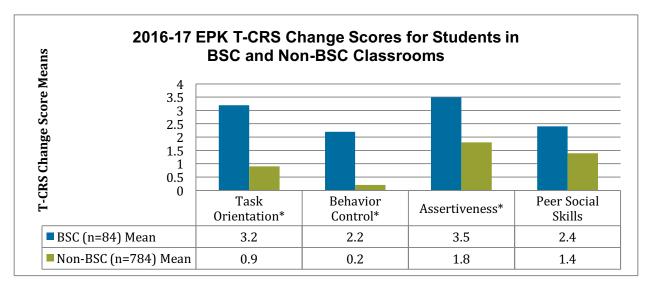
- Children attending BSC partner centers showed greater positive changes on all T-CRS social-emotional competence subscales.
- ✤ For UPK (4-year-old) students, comparison between the BSC and non-BSC group was statistically significant on the Behavior Control subscale (p<.05). (See Figure 7).</p>
- For EPK (3-year-old) students, comparison between the BSC and non-BSC group was statistically significant on the Task Orientation, Behavior Control and Assertiveness subscales (p<.05). (See Figure 8).</li>





Note: \* Statistically significant p < .05





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# **Child-Centered Consultation**

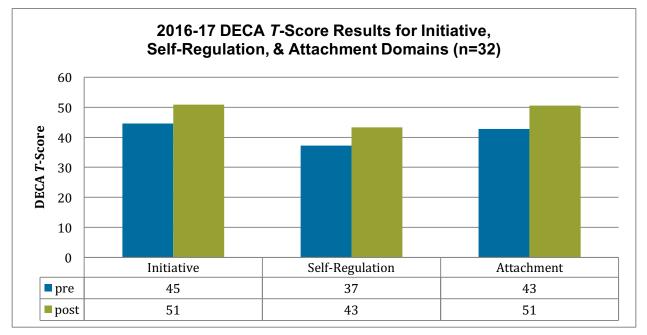
- Thirty-seven (37) children (21 boys and 16 girls) received BHC individualized services.
  - Twenty-four (24) children (15 boys and 9 girls) attended 4-year-old classrooms.
  - Thirteen (13) children (6 boys and 7 girls) attended 3-year-old classrooms.
- Twenty-two (22) children were in homes headed by 1 adult and/ or no biological parent:
   1 child was adopted; 4 children were in the foster care system; 3 children lived with grandparents; 3 children lived with single fathers; 11 children lived with single mothers.
- Many of the 37 children lived in families challenged by poverty, trauma, violence, mental health and other illnesses, drug abuse, homelessness or frequent housing moves and parent incarceration.
- Reasons for referral to BHC varied, but frequently consisted of staff concerns regarding the child's difficulties including: following directions and routines; coping with transitions; aggressive and disruptive behavior, self-regulating; getting along with peers; communicating needs and wants. (See Table 4.)

Most Common Referral Concerns	Percent of Children
Non-compliance / Not following directions	71%
Aggressive behavior toward peers and/ or adults	61%
Difficulty expressing needs with words	55%
Disruptive behavior	53%
Difficulty with transitions	53%
Temper tantrums	42%
Difficulties with peers/ lack of friends	39%
Short attention span/ easily distracted	26%
Excessive screaming and/ or crying	18%

#### **Table 4. Child-Specific Referral Concerns**

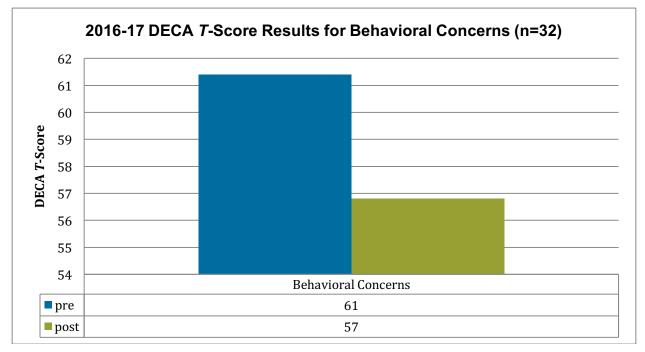
- Consultants facilitated referrals to mental health services for 8 children, and supported referrals or special education services for 13. Some children were referred for both mental and other services.
- ◆ DECA-P2 pre- and post- data was collected for 32 children individually served.
  - Statistically significant improvement was seen on the DECA on all three social emotional competency subscales: Initiative (p <.0001), Self-Regulation (p<.0001) and Attachment/ Relationship (p 0.0003). (See Figure 9).</li>
  - Statistically significant decrease was seen on the DECA Behavioral Concerns subscale (p 0.0011). (See Figure 10).

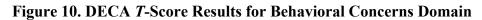
Of the five children with no post-intervention data: two were released from centers because of inappropriate behavior of their family members; one child moved out of the area; another one, after an initial assessment was immediately referred to special education services; and the fifth one rapidly improved her behavior and did not require further BHC services.



#### Figure 9. DECA T-Score Pre/Post Means for All Students

Note: All differences are statistically significant p < .001





**Behavioral Control**: statistically significant p < .001

#### **Directors Satisfaction Survey Results**

At the end of the school year (June 2017), a satisfaction survey was sent via e-mail to participating child-care center directors. All directors of the six centers completed satisfaction surveys, providing a 100 percent return rate. Overall, the responses were very positive. Directors agreed that it is valuable to screen children for social-emotional concerns and that the Behavioral Health Consultant (BHC) helped staff to better address the social and emotional issues presented by children. (See Table 5) One director's comments reflected many of the comments received: "Our BHC has been instrumental in aiding our teachers with the many social and emotional issues that arise in the classroom."

#### Table 5. BSC Directors' Survey Results

Directors were asked to rate the following statements on a scale of 1-5 with 1 as "strongly disagree" and 5 as "strongly agree".

	Statements	Average Score
1.	<b>Social-emotional screening:</b> It is valuable for my center to screen children for social-emotional concerns using the Teacher-Child Rating Scale (T-CRS).	4.8
2.	<b>Promoting Alternative Thinking Strategies (PATHS):</b> It is valuable is for my center to teach young children social- emotional skills using the PATHS curriculum.	4.7
3.	Behavioral health consultation services: Overall, behavioral health consultation helped center staff better address children's social and emotional issues	4.5
4.	Behavioral health consultation services: Overall, behavioral health consultation helped center staff better address children's behavioral challenges.	4.5
5.	Behavioral health consultation services: Overall, the behavioral health consultants were able to positively engage with families.	4.5
6.	Behavioral health consultation services: Overall, consultation helped decrease the frequency/duration/intensity of children's challenging behavior.	3.8
7.	<b>Behavioral health consultation services:</b> Overall, our center was satisfied with behavioral health consultation.	4.8
8.	Monthly directors meetings: It is valuable to meet bimonthly with other center directors and BSC providers.	4.0

Several directors spoke specifically to the connection that the consultant made with families and the positive impact those connections had on children and families. For example, one director commented: "Our consultant was able to connect with several of our families that were in need of social and emotional support for their children. The feedback that we have informally received from these families has been very positive and appreciative. She was able to provide support beyond what we are capable of doing on our own. In addition, our BHC provided support, strategies, and materials to our teachers."

Several also stated that they appreciated that consultants were able to connect children with community supports and services that the child care center staff was not able to provide: "Our consultant is an extremely important resource for our children and their families, our teachers and administration. She is very dedicated and resourceful, eager and helpful."

Several directors noted that modeling of appropriate behavior within the classroom was an important aspect of the program, providing opportunity for classroom staff to observe effective and appropriate social emotional teaching and learning strategies. One director noted that, "It helps our teachers recognize certain behaviors and how to either prevent them or reduce the amount of times the behavior occurred," and, "I feel like if the consultant is in the room, she is able to help with a challenging behavior because she is not emotionally invested like a teacher is. The modeling by the behavioral consultant is so valuable."

Over half of directors indicated that consultants would be more effective if they spent more time at the child care center. Several directors expressed the need for additional training in social emotional learning for their staff persons on social emotional learning, specifically the Pyramid Model. A comment made by a director reflects this, "Keep looking for resources to send staff and directors to Pyramid Model Training. The tools will be very helpful for staff/directors and will build center capacity to address and eliminate some challenging behaviors." All directors indicated that they are interested in having a consultant as a part of their center for the 2017-2018 school year.

# **Analysis of Expulsion Data**

Research shows that suspensions and expulsions during early childhood set the trajectory for negative academic and life outcomes: negative school attitudes, expulsion and suspension in later grades, grade retention, not completing high school, and incarceration (United States Department of Education, 2014).

No child was expelled from a BSC center because of social-emotional difficulties. However, three children were released from centers because of their parents' very inappropriate behavior, reluctance to abide by center policies, or refusal to collaborate with centers staff to meet their child's needs. One director commented that keeping two children with severe behavioral challenges at her center had a negative impact on their teachers and classrooms.

The severity of children's behavior is often the symptom of very complex family environments characterized by instability, lack of a consistent parental figure, mental health issues, an incarcerated parent or violence. These are issues that cannot be solved just by the use of classroom behavioral strategies, but require a more comprehensive approach that responds to families' needs.

# **Lessons Learned and Recommendations**

The Behavioral Supports for Children project was designed to address and strengthen children's social, emotional and behavioral competencies, and decrease challenging behaviors through building preschool staff capacity to teach, support and model social and emotional skills; supporting families and children. To achieve these objectives, and consistent with best practice in New York State and nationally, BSC adopted the Pyramid Model approach.

Overall outcomes suggest that the BSC project met its objectives: Pyramid Model practices and PATHS implementation positively impacted the center climate; children, including the most challenging who were referred for child-centered consultation, showed improvement of social emotional competencies and decrease of behavioral concerns; and center staff felt supported and was highly satisfied with BSC.

However improvement is needed in measuring teacher competencies.

- Originally, BSC included pre- and post- teachers' evaluation using the TPOT. Since many teachers were not trained in the Pyramid Model until the end of the academic year, TPOT evaluation occurred for only eight teachers who were trained earlier.
- More documentation is needed (pre-post evaluations, logs, behavior charts) to more accurately assess program fidelity (Pyramid Model and PATHS), as well as individual intervention progress.
- Due to the generosity of early funders, as well as requests from centers, Behavioral Supports for Children will continue to be implemented for the 2017-18. We will build on the successes of the past year, as well as bolstering Pyramid Model practices and addressing other areas identified for growth—use of the TPOT, more documentation.

# Additional Challenges Faced in 2016-17 to Address in 2017-18

- There was a significant degree of turnover in the child care workforce which is typically low paid, often high stress work. We will develop plans with directors to orient new staff to basic Pyramid Model and PATHS practices.
- It was difficult for directors to attend the BSC Directors meetings. This was attributed to staff absences that require directors to work in classrooms or staff the office. To address this issue, based on director feedback, we will hold meetings quarterly and at more convenient hours.
- Teachers often feel overwhelmed. There can be resistance to teach new curricula, or even following a schedule for implementing PATHS. There is also resistance to new assessment, as teachers can feel that they are constantly observed and judged. Directors' continued

support and collaboration with teachers, as well as their understanding of the purpose behind lessons or data collection, is essential in moving forward with the BSC model.

- Children with special needs often come to preschool and are not yet identified as having a disability but seen as "immature," "willful" or "challenging". Going forward, it will be important to help staff increase awareness of potential developmental delays and begin referral processes earlier.
- The consultants' role needs to be expanded to promote Pyramid Model coaching practices that espouse teacher-identified small steps which are observable within a defined period of time and assessed for positive change. This method will facilitate sustained improvements over time. Implementation takes years and is a constantly evolving process for new and experienced center staff and leadership.
- Sometimes consultants would be approached in centers about concerns for younger children. Consultation should be offered to centers for infants and toddlers. Resources pending, we would expand BSC to include these children. Infant-Early Childhood Mental Health Consultation Credential and Endorsement is an expanding emphasis area nationwide. Our local Early Childhood Development Initiative (ECDI) Social-Emotional Committee is actively seeking these trainings and services for the Rochester community. Service to children infant and toddlers, as well as their families and caregivers, is the next long term goal for BSC.

# **Consultants' Perspective and Reflections**

While the Behavioral Health Consultation is known for observing behaviors, collecting child specific data, convening teams, and identifying strategies and resources, our first step as consultants, is building a positive connection with teaching staff. The work of child care teachers and classroom paraprofessionals is high demand and always lower wage. Additional stress factors are also present, especially for paraprofessionals whose backgrounds and economic challenges often reflect the families they serve. By actively listening to, providing support, and suspending our "agenda", teaching staff becomes more comfortable and more likely to reveal us their concerns, elicit support, and work cooperatively to identify and follow through with strategies.

Administrators who support staff and encourage them to seek BHC for children exhibiting challenging behaviors, rather than expecting that they handle problems alone, are more likely to have staff that feels understood and buoyed. Staff consequently works more effectively with consultants and administrators to address children's needs when they receive administrators' support.

Teachers and paraprofessionals who invest time developing individual relationships with every child and parent/guardian are less likely to have difficulty working collaboratively with families. These teachers tend to be positive, calm, quieter, and give clear directions and are more able to offer supports for individual children and families who need additional time/strategies/

resources/ referrals. Classroom paraprofessionals can sometimes provide a bridge to communication and relationship building.

Young families in BSC face huge challenges. In addition to the overarching poverty and trauma, family challenges included: incarcerations; foster care; homelessness/ frequent moves; fire in the home; custody changes; unreliable transportation; depression and other health problems; violence in the home and neighborhood; and language and literacy barriers. If the BHC first step with teachers is to build a connection, the first step with parents is to build trust. When parents feel respect and lack of judgment, they generally team, share ideas and try new strategies to support their child.

In conclusion, much of our learnings as consultants confirm what the Pyramid Model teaches: relationships are key to supporting young children and families socially and emotionally.

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