IMPLEMENTING AND EVALUATING AN EVIDENCE-BASED APPROACH FOR EARLY CHILDHOOD MENTAL HEALTH INTERVENTIONS IN SCHOOLS

November 6, 2015

20th Annual Conference on Advancing School Mental Health

Presenters: Barbara Parks, MSSA, *LICSW,* Shana Bellow, Ph.D., Sherryl Scott Heller, Ph.D., Allison Booth, Ph.D., Jwan Griffin, MSW, LICSW

The Problem

http://www.theounce.org/the-problem

- Inequality of Opportunity
- Six million young children living in poverty
- Without high-quality learning experiences and healthy relationships, at-risk children are less likely to grow into accomplished students, successful workers and engaged citizens.
- Millions of children failing to unlock their true potential affects all of us.

Change the First Five Years

- https://www.youtube.com/watch?v=GbSp88PBe9E

The Achievement Gap

- 3 million words - # of words a three year old with parents living on welfare has heard.
- 11 million words - # of words a three year old parents of higher socio-economic status has heard
- Achievement gap is significant and can be seen as early as nine months
- Starting early can prevent the achievement gap from ever taking root

The Cost of Inaction

http://www.theounce.org/the-problem

- At-risk children who don't receive a high-quality early childhood education are:
  - 25% more likely to drop out of school
  - 40% more likely to become a teen parent
  - 50% more likely to be placed in special education
  - 60% more likely to never attend college
  - 70% more likely to be arrested for a violent crime

Heckman Equation

PRESENTING
THE HECKMAN EQUATION

INVEST in early education for disadvantaged children

+ DEVELOP cognitive skills, social abilities and healthy behaviors early

+ SUSTAIN early development with effective education through to adulthood

= GAIN a more capable and productive workforce
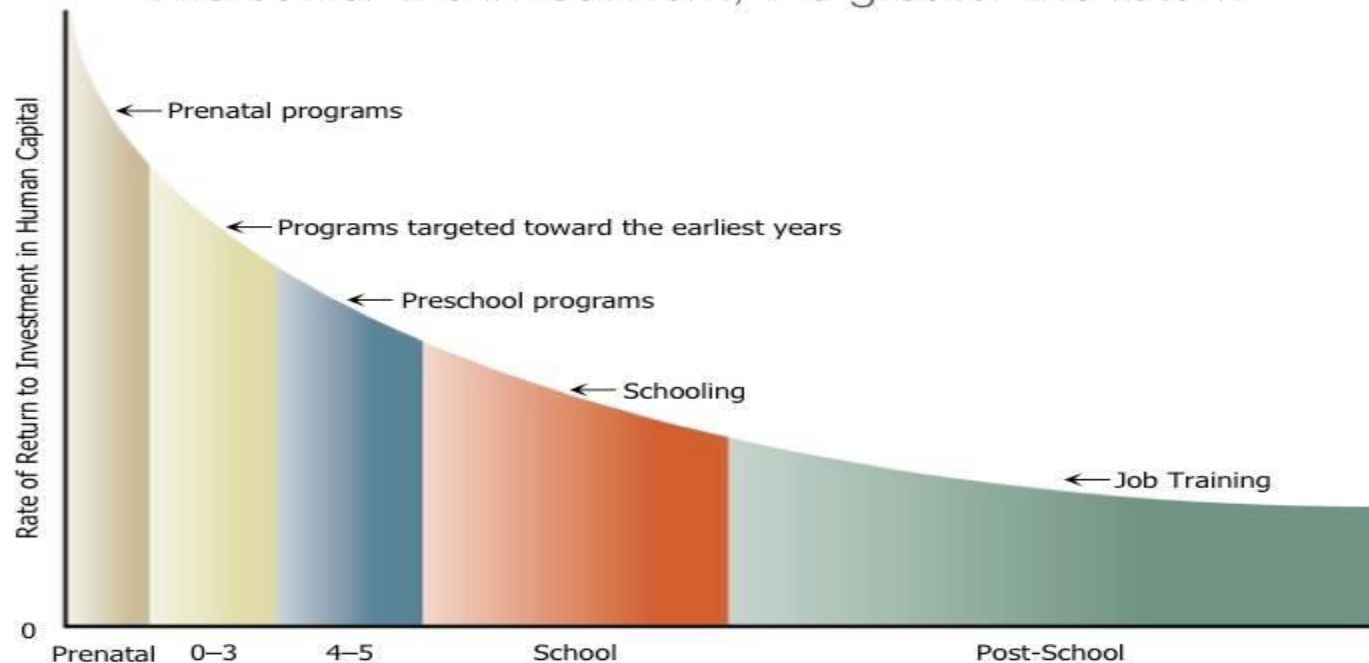
LEARN MORE ABOUT THE BENEFITS OF
QUALITY EARLY CHILDHOOD EDUCATION AT HECKMANEQUATION.ORG

The Investment That Keeps Giving

EARLY CHILDHOOD DEVELOPMENT IS A SMART INVESTMENT

The earlier the investment, the greater the return
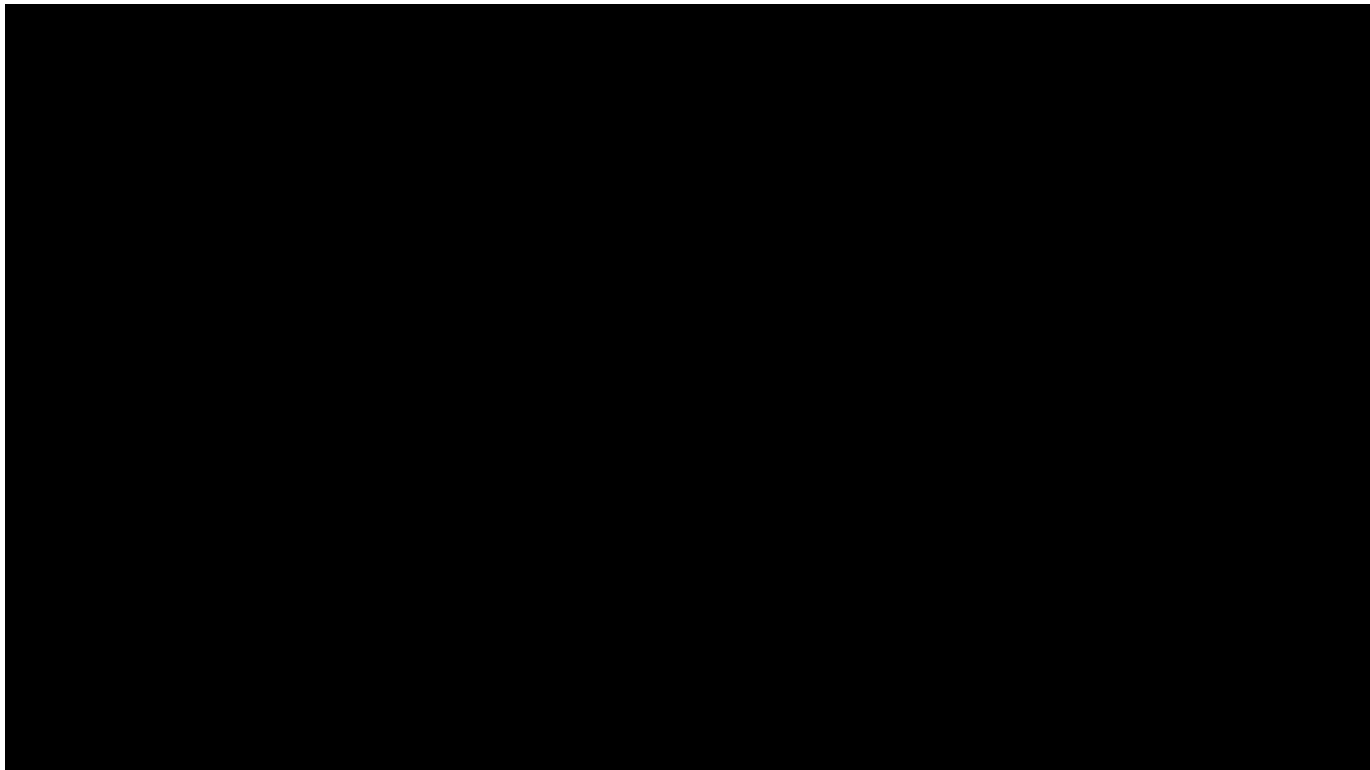
Rate of Return to Investment in Human Capital

- ← Prenatal programs
- ← Programs targeted toward the earliest years
- ← Preschool programs
- ← Schooling
- ← Job Training

Prenatal   0–3   4–5   School   Post-School
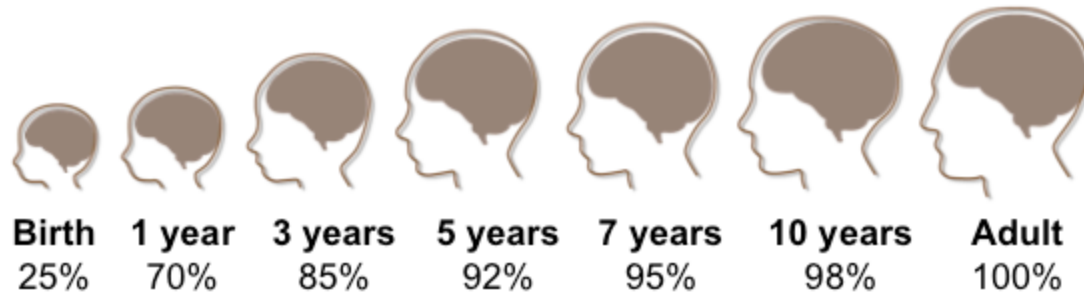
Source: James Heckman, Nobel Laureate in Economics

Heckman Equation Video

Early Brain Development

From the Institute for Learning & Brain Sciences at the University of Washington

Birth	1 year	3 years	5 years	7 years	10 years	Adult
25%	70%	85%	92%	95%	98%	100%

- 85% of brain development occurs during the first 3 years of life

- Experiences prepare children's brains for learning (plasticity)

Did you know? Infant & toddler Teachers help nurture and stimulate my brain as it triples in weight and establishes 1,000 trillion nerve connections during my first 3 years.
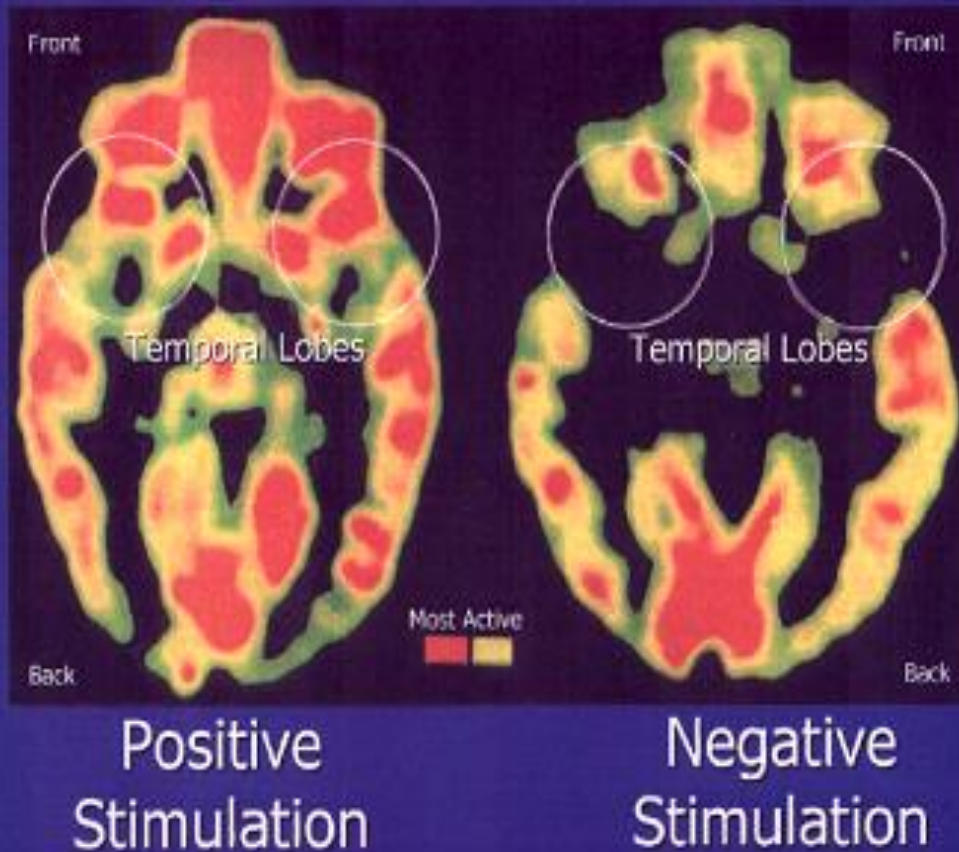
That is one crazy big colossal job

and

Early Childhood Educators

totally

ROCK!

Brain & Toxic Stress

Positive Stimulation — Negative Stimulation

Stressors

• Extreme poverty

• Exposure to severe maternal depression

• Parental substance abuse

• Chronic child abuse and neglect

• Repeated exposure to violence in the community or within the family.

Social Emotional Health and School Readiness

"What, how, and how much a child learns in school will depend in large part on the social emotional competence they have developed as preschoolers… Children who do not begin kindergarten socially and emotionally competent are often not successful in the early years of school and can be plagued by behavioral, emotional, academic and social development problems that follow them into adulthood" (Peth-Pierce, 2000).
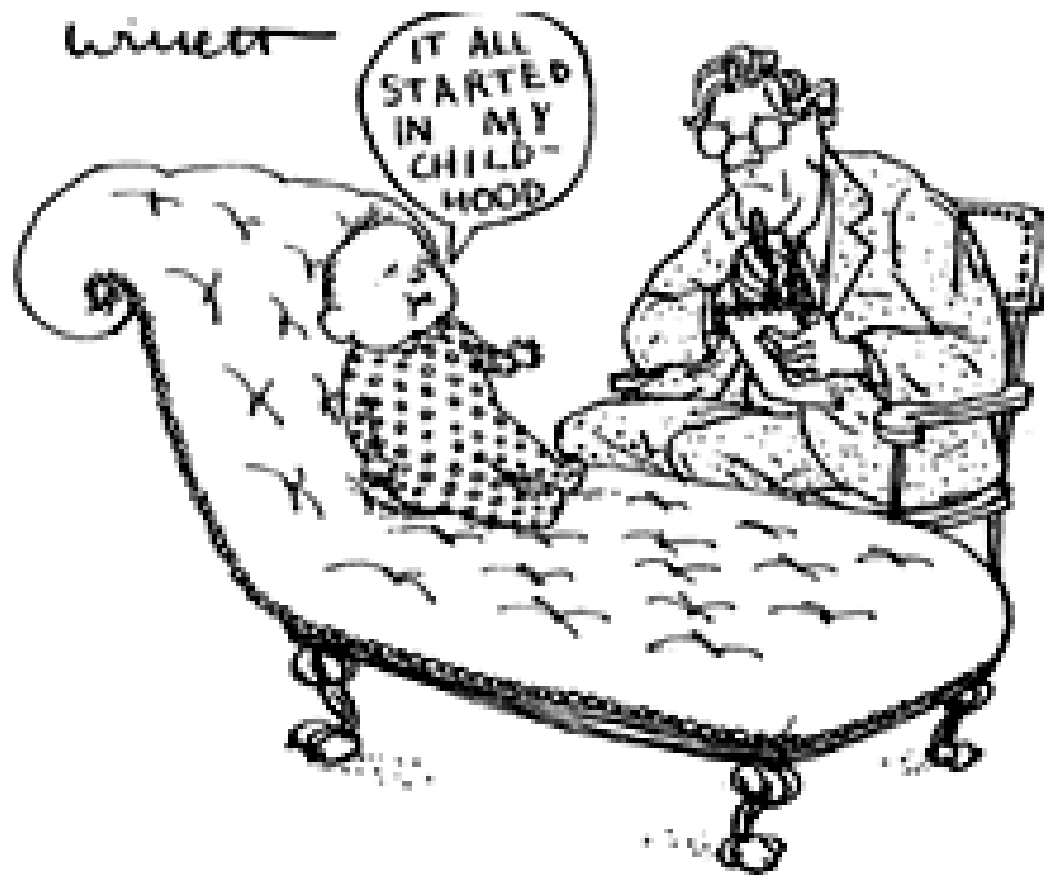
Pre-School Expulsion Research

- Of 4,000 classrooms studied nationally, 10.4% had expulsions within the last year. (Gilliam, 2008)

- Boys were more than 4.5x more likely to be expelled than girls. Rates were highest for older preschoolers and African-Americans.

- 6.7 per 1,000 preschoolers were expelled.

- Overall rate of Pre-K expulsions was more than three times greater than the national rate of expulsion in grades K-12.

- 50% reduction in expulsion rates in classrooms that have access to an early childhood mental health consultant (Gilliam, 2008)

NEW ORLEANS

First sighted as Indian portage to Lake Pontchartrain and Gulf in 1699 by Bienville and Iberville. Founded by Bienville in 1718; named by him in honor of the Duke of Orleans, Regent of France. Called the Crescent City because of location in bend of the Mississippi.

Tulane University's Early Childhood Mental Health Consultation to Child Care Centers

Allison Boothe, Ph.D.

Sherryl Scott Heller, Ph.D.

Tulane University

Acknowledgements

- Geoffrey Nagle, PhD, MPH, LCSW
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- Louisiana Mental Health Consultant team

Combination Model of IEMHC

- 3 types of MHC:
  - <u>Program Centered</u>: designed to improve experience of all individuals involved with center
  - <u>Child Centered</u>: designed to assess and make recommendations about particular children
  - <u>Classroom Centered</u>: designed to improve experience of all individuals in one classroom

Tulane University's Model of IEMHC

- Combination model of MHC
  - Focus is on entire program
  - Available for child-centered consults as needed
- MHC works with center for 10-12 visits over 6 months
  - On-site 5-6 hours for each visit
  - Complete 5 staff trainings
  - Most time spent in rooms with teachers

Components of Statewide IEMCH Program

- All centers participating in Quality Start QRIS or Community Networks are eligible

- Focus on CCAP children (child care assistance program)

- Consultants meet consistently with director and do their best to be flexible to meet the needs of the center.

- All consultants are licensed mental health professionals or are working towards licensure under clinical supervision.

Program Centered Components of our Model

– Relationships between individuals are a focus
  • Relationships are seen as the major catalyst of change
– Interactive trainings are consistently conducted
  • Staff members are eligible to receive clock hours of continuing education credits
  • Staff are encouraged to discuss typical difficulties they encounter in their work
– MHC consistently observes in classrooms
– Consultants are onsite & available to meet individually with staff members
– Parent meetings/workshops are available to support family engagement

Child Centered Components of our Model

- MHC available to complete a child-centered consultation when requested
  - Parent permission necessary & beneficial
  - MHC can:
    - Observe child in classroom
    - Interview parents/teachers/director
    - Parents & teachers complete screening measures
    - Make referrals when needed
    - Assist in designing behavior management program for class and assist teacher in implementing

Benefits of Combined Model

- Centers often request consultation for child-centered reasons.
  - e.g., Challenging behaviors; developmental concerns

- With combined model, they can receive immediate assistance for challenging behavior but are also able to have assistance provided across the center.
- IECMHC is both prevention and intervention.

Consultant Training

- Pre-service:
  - Trained in Tulane Model of IECMHC
  - Shadow current consultants in field
  - Required readings and web-based IECMHC trainings from nationally recognized sources
  - Participate in Tulane Infant Mental Health Training during first year (depending upon hire date).

In-Service Training

- Two times per year consultants participate in a two day training.

- Topics vary and are related to current need in the field and have included:

  – Pervasive developmental disorders, speech and language; goal setting theory; motivational interviewing; designing behavior management plans; cultural considerations; and many more.

Consultant Supervision & Adherence to Model

- Consultants participate in:
  - Individual reflective supervision two times per month (by phone)
  - Group reflective supervision one time per month (by phone)
- A continued & primary focus of supervision and training is the importance of forming relationships and partnering with center staff and using the "consultative stance" within a center.

Reflective Supervision

- An integral component of the program; senior consultants lead supervision and participate monthly in group RS with outside consultant.
- Goal of reflective supervision is to help MHCs focus on their relationships with staff and families & how those relationships support positive change.
- Consultative work is the focus. Administrative concerns are kept to a minimum.
- MHCs are encouraged to discuss challenges; to view challenges from a variety of perspectives; and to "wonder" about methods of supporting change within a center.

Adherence to model

- Supervisors also meet regularly to discuss how consultants are adhering to the model and to determine if extra support is needed

Adherence to Model

- Feedback from center staff
- Yearly shadow visits
  - Each consultant is shadowed at a center by a senior consultant.
  - Consultants complete a shadow visit preparation form to have them determine their goals for growth & a post shadow reflection form.
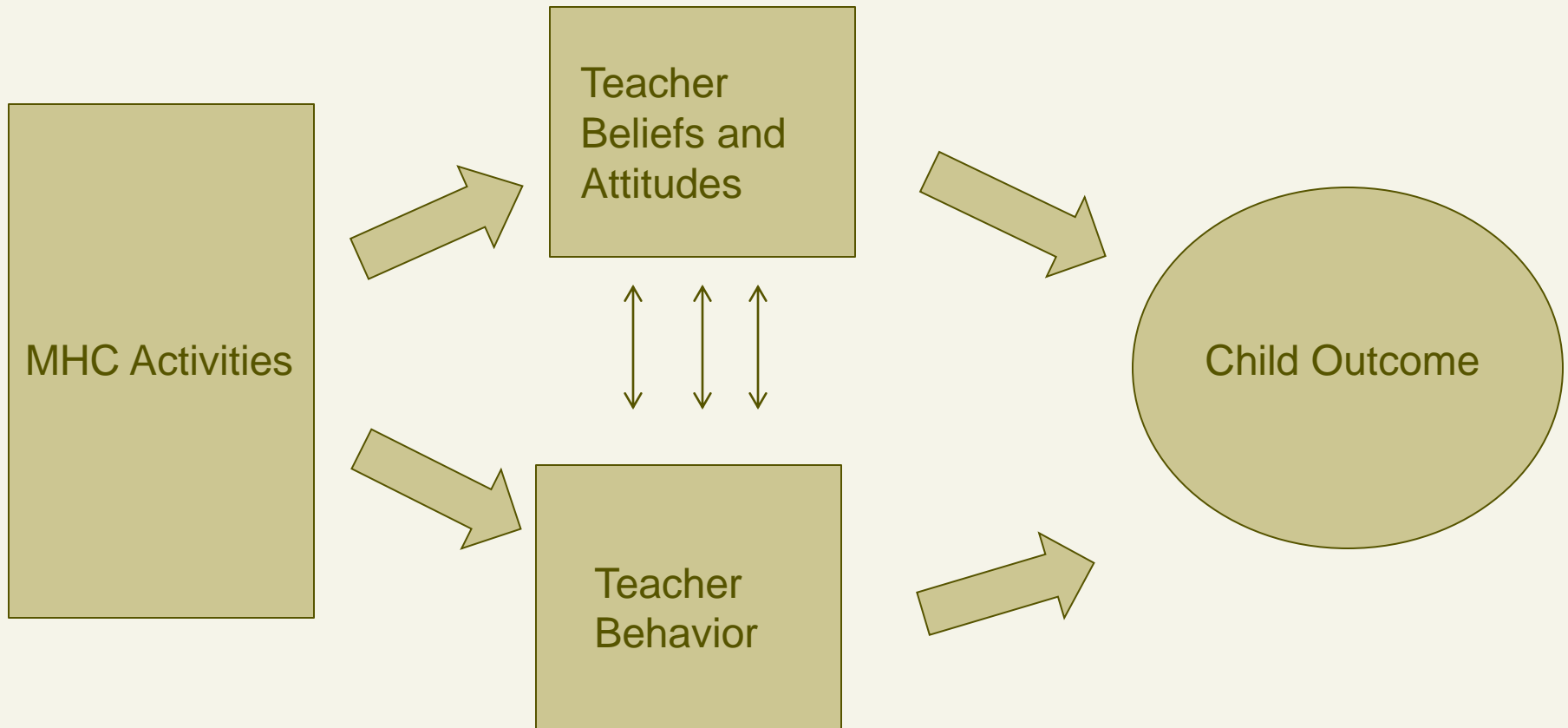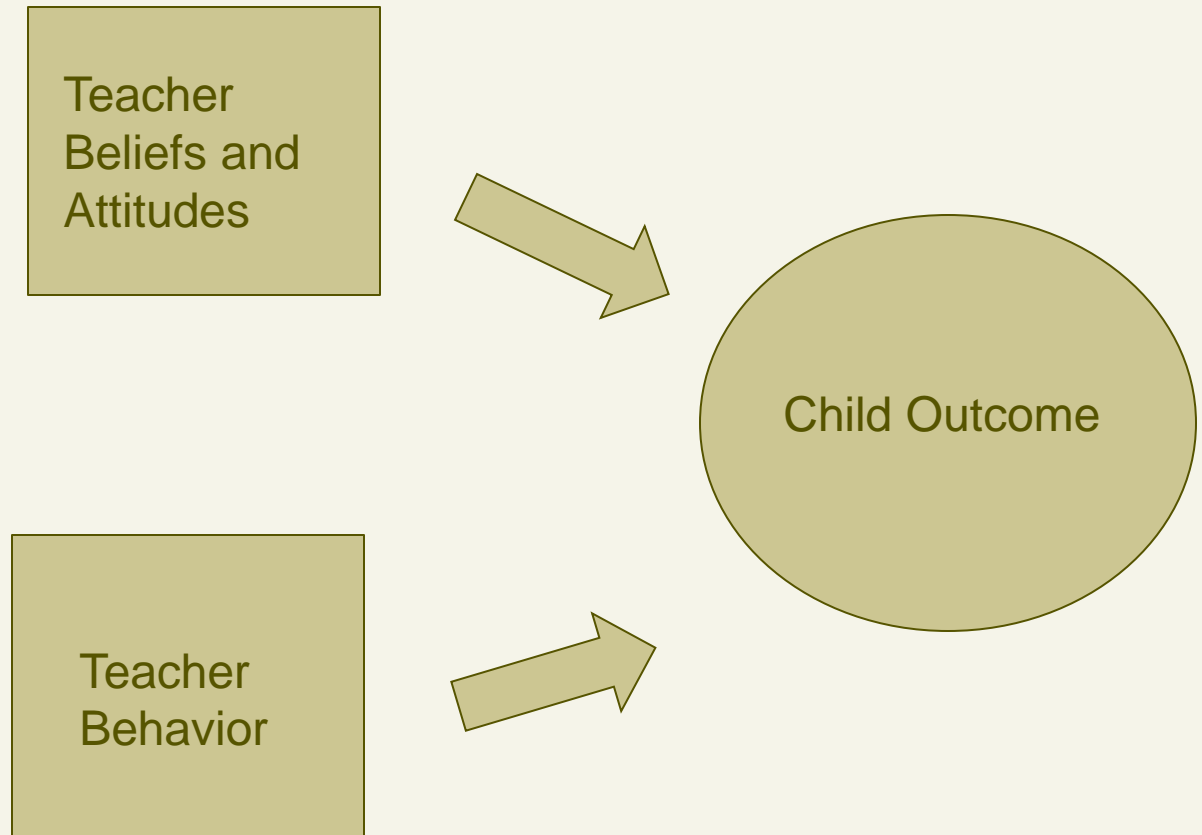 - Consultant, shadow, and supervisor meet for feedback session.

New Directions

- Working with charter schools PK-2nd grade.
- Providing support on social emotional curricula
- Providing social skills groups for children needing extra support
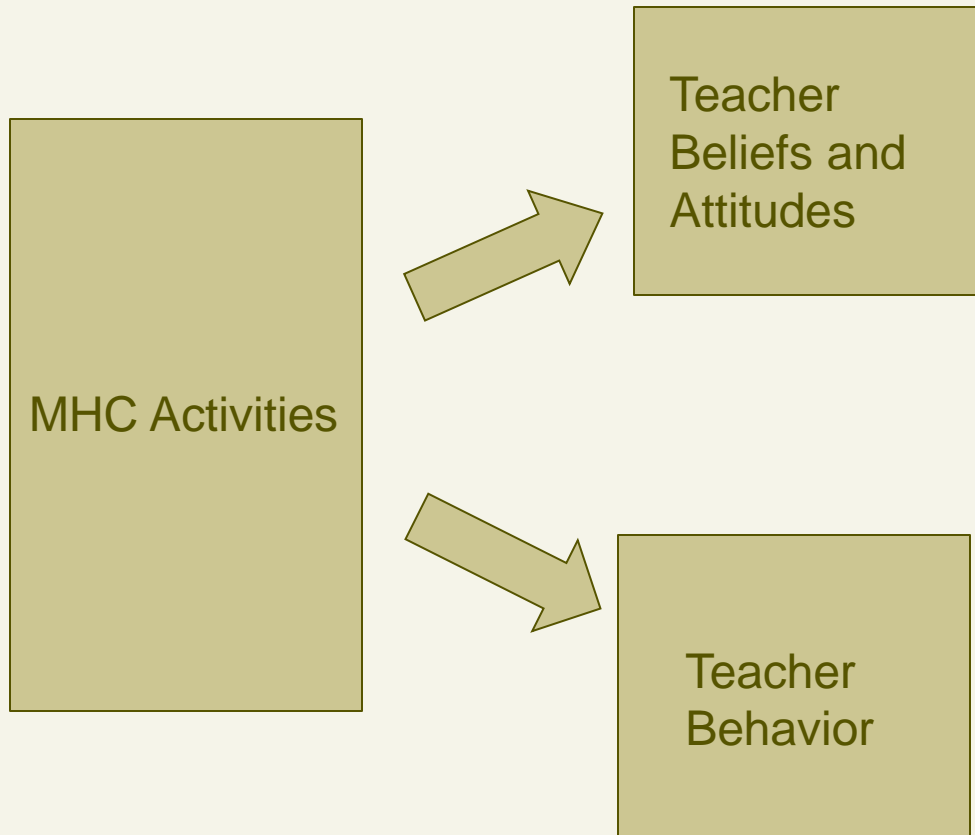- Support to RTI, IEP, and onsite social worker and/or counselor

Logic Model

Prior Research

Teacher Beliefs and Attitudes

Teacher Behavior

Child Outcome

Our Research

MHC Activities

Teacher Beliefs and Attitudes

Teacher Behavior

What we assessed

- MHC-teacher relationship teacher report; post (ECMHC survey)
- **Perceived change in teacher competence; teacher and director report; post (GAS)**
- Changes in level of teacher self-efficacy and competence; teacher report; pre, post, retrospective (TOS)
- **Change in teacher-child interactions in the classroom; observation; pre, post (CLASS)**

Teacher Demographic Data

- Ethnicity
  - African American – 58%
  - Caucasian – 37%
  - Other/not answer – 5%
- Age
  - Mean = 40
  - Median = 38
- Length at center - 5 yrs.

- Education
  - Elementary 5%
  - High School/GED 38%
  - Some college – 28%
  - Assoc or CDA – 14%
  - Bachelors – 10%
  - Graduate – 2%
  - Other – 3%
- Length in childcare – 10 yrs.

GAS - Teacher Findings

- 401 teachers responded
- Mean score = 1.77 (agree)
- Median score range 1 to 2
- Conclusion: **Staff reported positive changes in their own and the center's ability to support children's social and emotional development**

GAS-Director Findings

- 28 directors responded

- Mean score = 1.71 (agree)

- Median range 1 to 2 (6 items less than 2)

- Conclusion: **Directors reported positive changes in the center's ability to support children's social and emotional development**.

What does this mean for the MHC program?

- The behaviors that teachers and directors reported as occurring more often are behaviors that have been associated with increases in children's cognitive, social and emotional development and school readiness.

TOS Data

- 360 teachers returned pre data
- 321 teachers returned post
    - 5 had missing data prevent inclusion
- 168 teachers returned pre AND post surveys
    - 63 cases of missing data (pre to post).
    - Due to:
        - teacher turnover (49)   - not return forms (2)
        - declined (2)   - data error (5)
        - Not at work (3)   - not work with MHC (2)

Teacher Opinion Survey

- 12 items
- 2 forms
  - Infant (6 weeks to 30 months)
  - Preschool (30 months to 60 months)
- 5 point Likert Scale
  - 1 strongly disagree to 5 strongly agree
- Two factors:
  - Teacher self-efficacy
  - Teacher Influence

What Does the CLASS Measure?

Emotional Support	Classroom Organization	Instructional Support
Positive Climate Negative Climate Teacher Sensitivity Regard for Student Perspectives	Behavior Management Productivity Instructional Learning Formats	Concept Development Quality of Feedback Language Modeling

CLASS Observations

- After 6 months
- Significant improvement in all 7 areas

Emotional Support

Positive Climate

Negative Climate

Teacher Sensitivity

Regard for Student Perspective

Classroom Organization

Behavior Management

Productivity

Instructional Learning

Heller et al. (2012)

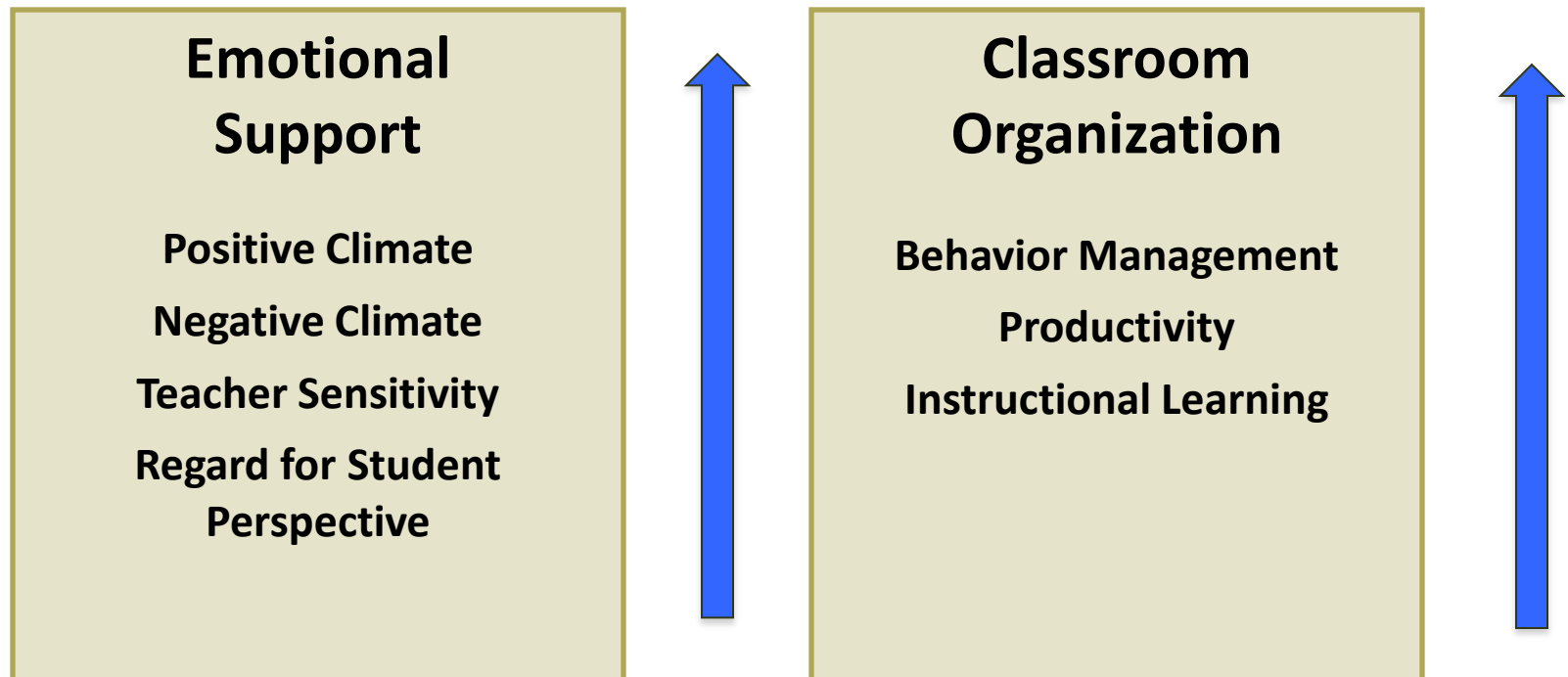| Mean Scores	Pre	Post	F(p)
Positive Climate	4.98	5.39	21.13 (.0001)
Negative Climate	1.37	1.24	3.44 (.065)
Teacher Sensitivity	4.59	5.20	21.13 (.0001)
Regard for Student Perspective	4.57	5.18	24.58 (.0001)
Behavior Management	4.57	5.30	29.62 (.0001)
Productivity	4.53	5.14	16.31 (.0001)
Instructional Learning	4.28	4.82	11.02 (.001)

- Whereas an increase of one point may not seem considerable, research on the CLASS indicates the existence of a quality threshold.

- Research findings from a national sample of preschool classrooms indicate that some child outcome variables did not improve when quality, as assessed by the CLASS, fell below a 4 (Burchinal, Vandergrist, Pianta, and Mashburn, 2010).

- When the quality of the environment reached above a 5, changes in child social behaviors were detected.

- Once the 5 point threshold was reached, improvements in child outcomes did not level off but rather continued to increase as classroom quality increased.

Burchinal, Vandergrist, Pianta, and Mashburn, 2010

- Teachers with more experience and more than a high school degree tended to score higher.
- Centers that were larger or from less dense areas (i.e. non-urban) also tended to score higher.
- Even with a high rate of teacher turnover (35%), significant differences were found.

- Heller, S.S., Rice, J., Boothe, A., Keyes, A., Nagle, G., & Sidell, M. (2013). Mental Health Consultation and Teacher Student Interaction. *Early Education and Development.*

- Heller, S.S., Keyes, A., Boothe, A., Nagle, G., Sidell, M. & Rice, J. (2011)*.* Evaluating the Impact of Mental Health Consultation on Early Childhood Teachers' Efficacy and Competence. *Infant Mental Health Journal , 32* (2), 143-164*.*

- Heller, S.S**.,** Keyes, A., Boothe, A. & Malik, N. (2011). Mental Health Consultation in Early Childhood Classrooms. In *Essential Partners in Infant Mental Health: A Handbook for Early Education and Intervention Programs*. Susan Janko Summers and Rachel Chazan-Cohen (Eds). Baltimore, MD: Brookes Publishing Co.

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Welcome
to
Washington, DC

Insert DC Healthy Futures Slides

- 6 Minute Healthy Futures Video

- Demographics of DC Children and Risks

- 4-5 slides on Healthy Futures – results, highlight any differences from Tulane model

- powerful impact on reducing teacher burden and enhanced by natural control group in year 5

DC Primary Project

Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood.

Fred Rogers

www.afhe.org

DC PRIMARY PROJECT -
Promoting Healthy Social-Emotional Adjustment

Annual Conference on Advancing School Mental Health, New Orleans, Louisiana – 11/6/15
J'Wan Griffin, LICSW, School Primary Project Program Manager
Department of Behavioral Health, School Mental Health Program, Washington, DC

What is "Primary Project"?

- an evidence-based, early intervention/prevention program for children pre-Kindergarten-4 through 3rd grade

- developed over 50 years ago by the Children's Institute, Rochester, New York

- adopted by Department of Behavioral Health in 2008 as part of the "continuum" of school-based mental health services for young children

- For children identified as having "mild" problems with social-emotional adjustment in the classroom, i.e., shy and withdrawn, slightly overactive or distractible, etc.

Six (6) Components of "Primary Project"

- 1)<u>screening</u> for early identification and intervention
- 2) <u>intervention</u> - one-to-one, non-directive (child-led) play sessions with a trained paraprofessional
- 3) <u>collaboration with a mental health professional </u>to implement the "continuum" of mental health service provision, i.e., mental health referral process
- 4) ongoing <u>supervision and training</u>
- 5) <u>program evaluation</u>; and
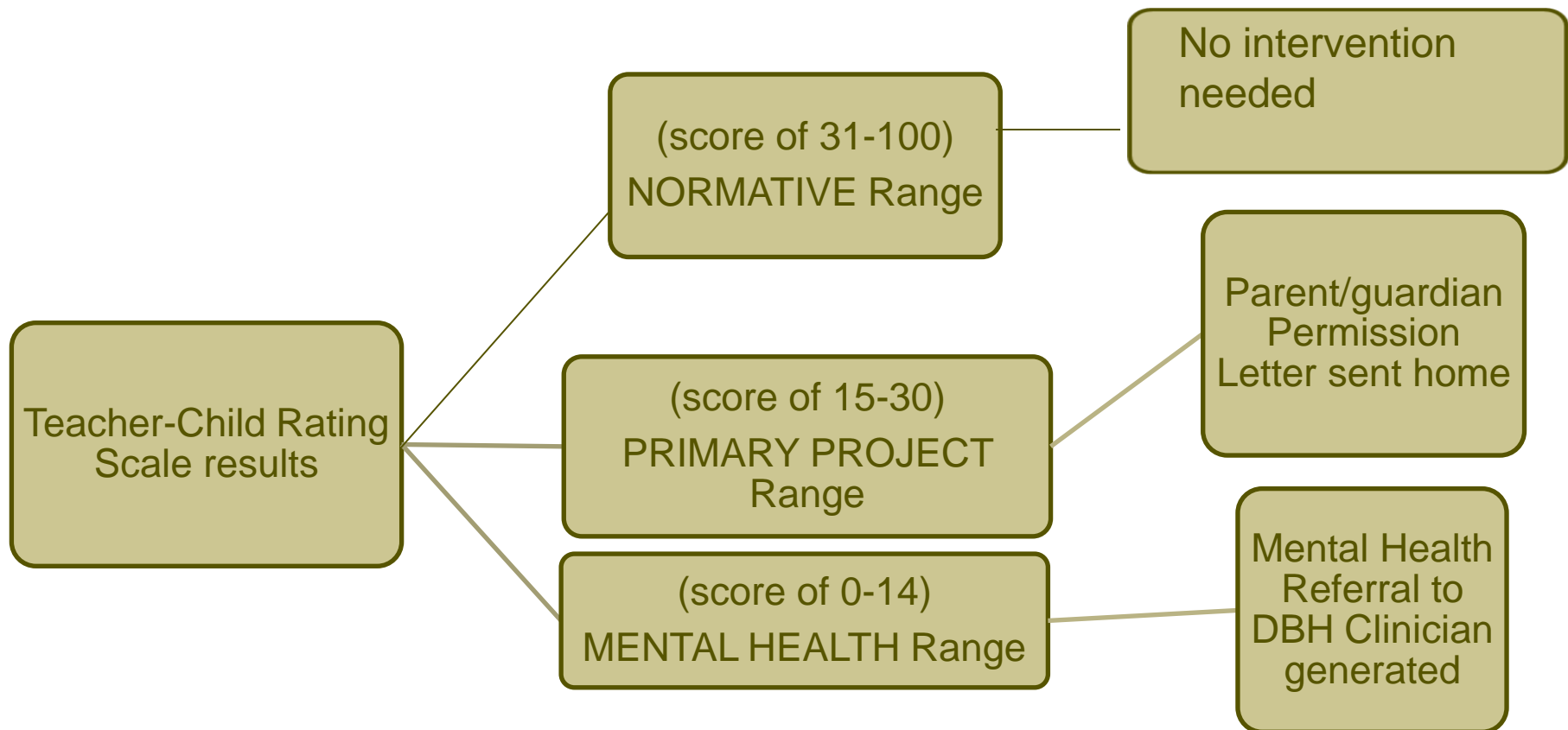- 6) <u>integration</u> into the school community –in-school service

Determining Eligibility –
The Teacher-Child Rating Scale (T-CRS)

- the T-CRS is a valid measure

- consists of 32 questions completed by the teacher

- reflects the 'teacher's perception' of child's classroom performance in the following domains:
  - task orientation
  - behavior control
  - assertiveness
  - peer social skills

- not 'time-consuming' – takes less than 5 minutes

- Assessment Report generates immediately

Primary Project Screening

Teacher-Child Rating Scale results

(score of 31-100) NORMATIVE Range → No intervention needed

(score of 15-30) PRIMARY PROJECT Range → Parent/guardian Permission Letter sent home

(score of 0-14) MENTAL HEALTH Range → Mental Health Referral to DBH Clinician generated

The "Intervention"

- a play room or area consisting of a special arrangement of expressive toys, i.e., playdoh, dolls, cars, trucks, crayons, markers, puppets, etc.
- the play session is one-to-one, and, non-directive ("child-led")

- conducted by a "Child Associate", trained paraprofessional who uses specific communication techniques during the play session in interaction with the child
- 15 or 20-minute play sessions are conducted weekly for 8 to 15 weeks

- The child controls the play session and can play with whatever they want, in almost any way they want
- 3 rules apply during the play session (the Child Associate explains the rules to each student before play sessions begin):
    - 1) you cannot harm yourself
    - 2) you cannot harm the Child Associate; and
    - 3) you cannot destroy the toys

The Child:Child Associate Interaction

- Total 'interaction time' is ONLY 4-8 hours during the SY

- Yet, the relationship has a powerful IMPACT on the child's social-emotional development, i.e., decrease in shy/withdrawn behaviors, increase in verbal responses, improved problem-solving and decision-making, heightened self-confidence, etc.

- Enhances school-related competencies in four (4) domains, i.e., task orientation, behavior control, assertiveness, and, peer social skills

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

Maya Angelou (1928-2014)

Quoted in the local Express newspaper on May 29, 2014

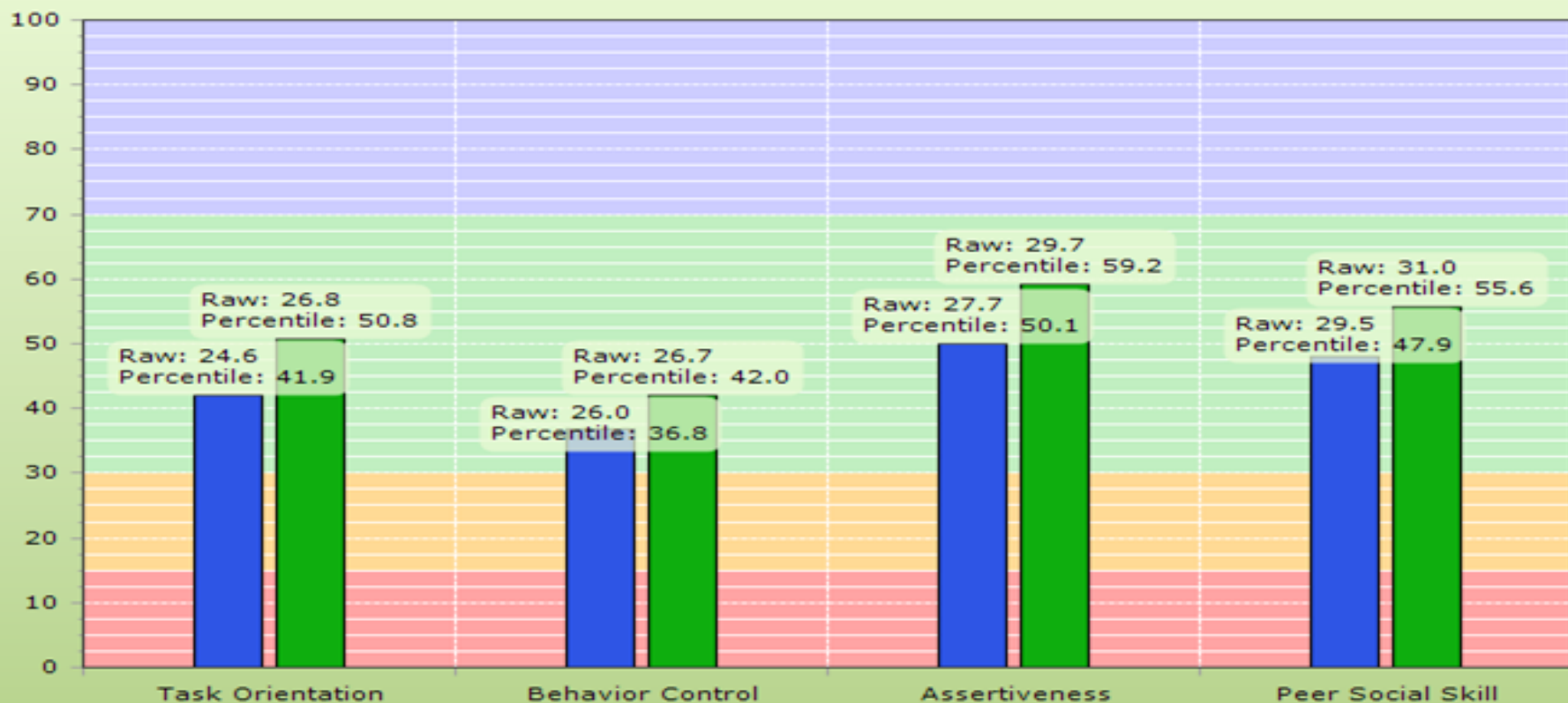Children's Institute (program developer) reports:

- 20% of all children suffer some difficulty with emotional and behavioral challenges in the classroom which impact their learning

- Over 5,500 children receive Primary Project services each year

- More info: contact childrensinstitute.net

In the District of Columbia:

- Screening results (SY2008-2014) indicated that **more** than 20% of children are experiencing "mild" difficulties with social-emotional adjustment in the classroom (19%-39%)

- Positive screening results for mental health services has **exceeded** 20% since SY2011-12

TCRS Group Pre-Post Percentile Assessment

Bar chart showing Pre T-CRS (blue) and Post T-CRS (green) values:

- Task Orientation: Raw: 24.6 Percentile: 41.9 (Pre); Raw: 26.8 Percentile: 50.8 (Post)
- Behavior Control: Raw: 26.0 Percentile: 36.8 (Pre); Raw: 26.7 Percentile: 42.0 (Post)
- Assertiveness: Raw: 27.7 Percentile: 50.1 (Pre); Raw: 29.7 Percentile: 59.2 (Post)
- Peer Social Skill: Raw: 29.5 Percentile: 47.9 (Pre); Raw: 31.0 Percentile: 55.6 (Post)

Legend: ■ Pre T-CRS ■ Post T-CRS

Group	Group Description
Group	**Group Description**
Primary Project Participants 2014-15	381 students (pre-k thru 3rd grade)

Series	From	To	Option
First	8/1/2014	7/16/2015	Earliest
Second	8/1/2014	7/16/2015	Latest

Dimension	Effect Size	Std Dev	Count 1	Count2
Task Orientation	0.38	5.62	381	381
Behavior Control	0.13	4.58	381	381
Assertiveness	0.40	4.92	381	381
Peer Social Skill	0.33	4.63	381	381

Other Significant Data

- Race information for participating children: 395 were African-American (89%); 21 were White (5%); 18 were Hispanic (4%); and 7 were Asian (2%)

- 381 children completed the Project with fidelity

- Parent-guardian "face-to-face" contacts with the Child Associates increased:

  – 292 contacts to obtain consent for participation and conduct "End-of-year Conferences" - met Project goal

- Hundreds of outreach efforts via telephone and paper correspondence

Primary Project Screening Results (2008-June 2015)

SY	08-09	09-10	10-11	11-12	12-13	13-14	14-15
# Sites (schools/ CDC's)	12 schools	16 schools	13 sites 8 sch/ 5 CDC	30 sites 16 sch/ 14 CDC	35 sites 17 sch/ 18 CDC	40 sites 23 sch/ 17 CDC	45 sites 28 sch/ 17 CDC
Number screened	991	1435	835	1445	2664	3031	4775
Positive-Primary Project	355 (36%)	522 (36%)	323 (39%)	497 (34%)	579 (22%)	567 (19%)	1067 (22%)
Number in Project	164	329	206	269	328	247	441
Positive for MH Services	65 (7%)	99 (7%)	105 (13%)	354 (24%)	785 (29%)	868 (28%)	1386 (29%)

The Primary Project "TEAM"

Four (4) Collaborations:

- The child receiving the intervention

- The child's family (parent/ guardian/ others)

- The teacher/staff

- DBH (Child Associate/ DBH Clinician/Healthy Futures Consultant)

Primary Project is
NOT......'just playing'

"Benefits" of Primary Project Services

- It's an evidence-based program, so it's 'data-supported'
- Provides "<u>early</u>":
  - 1) detection of adjustment problems in young children
  - 2) identification of need for mental health intervention
  - 3) intervention to minimize/eliminate adjustment problems
- Provides opportunity for a consistent, positive interaction with an adult
- Promotes pro-social behaviors, i.e., self-regulation, problem-solving and decision-making, positive self-esteem, improved self-confidence, etc.
- Improves school readiness and enhances school-related competencies
- Observable changes at school and home are reported by school staff, clinicians, Child Associates, and, parents/guardians
- School-based intervention – occurs during the school day
- Primary Project enhances the DBH "continuum" of school-based mental health services

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