



# **A Year of Mental Health Consultation in Early Care and Education Settings: Evaluating Classroom and Child-Level Outcomes**

**CityMatCH Leadership and MCH  
Epidemiology Virtual Conference  
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Hygiene



# Agenda



**New York City  
Early Childhood  
Mental Health  
Network**

**Consultation  
Model**



**Evaluation**

**Methods,  
Results**



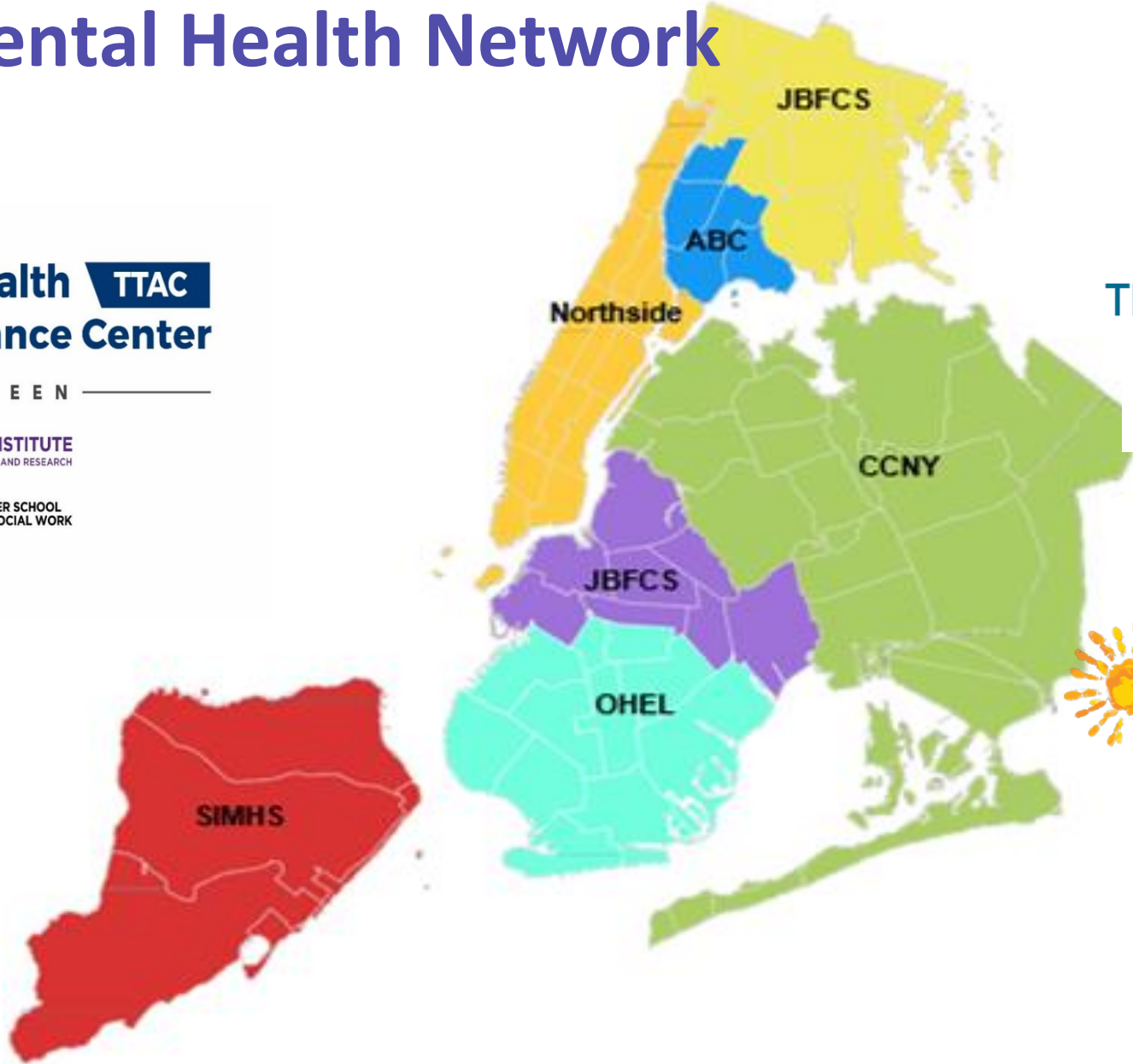
**Conclusion**

**Overview,  
Limitations,  
Next Steps**

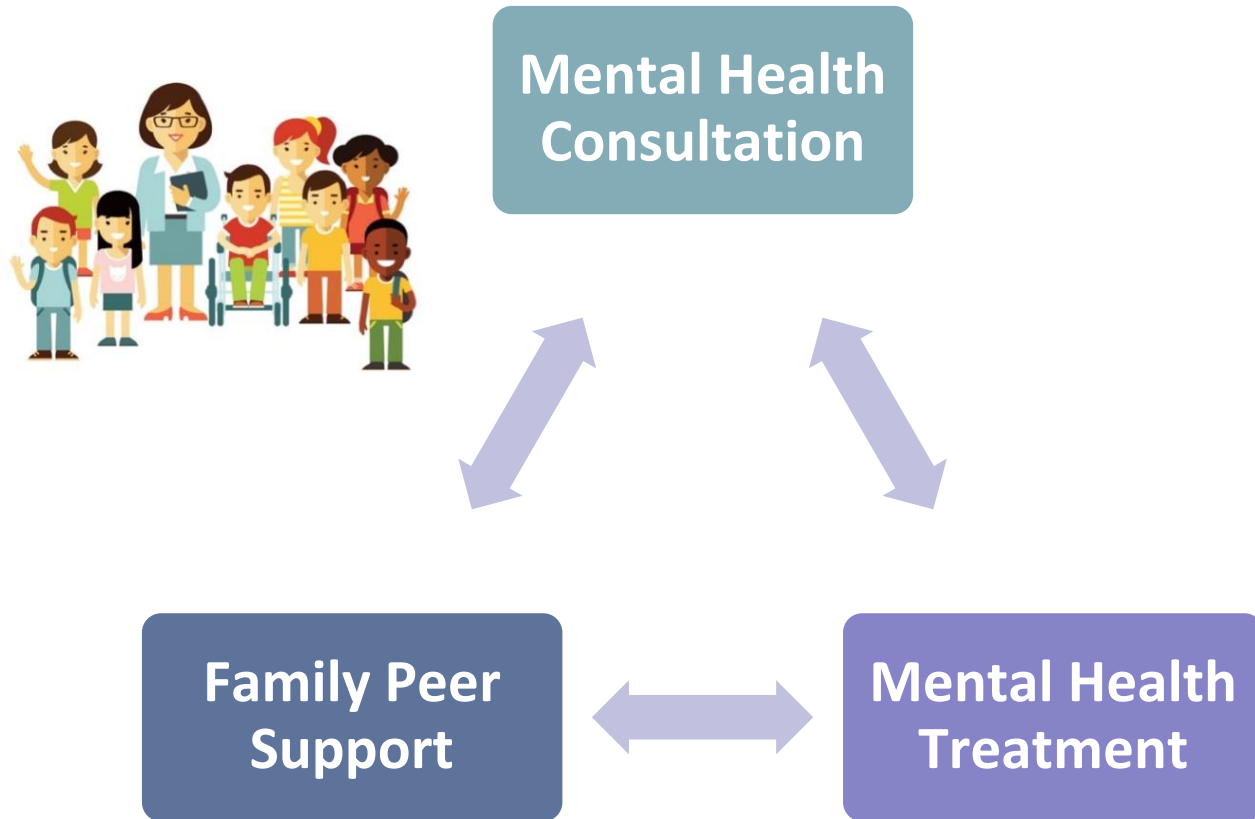
# Early Childhood Mental Health Network

## NYC Early Childhood Mental Health Training and Technical Assistance Center **TTAC**

A COLLABORATION BETWEEN



# Early Childhood Therapeutic Center (ECTC) Services

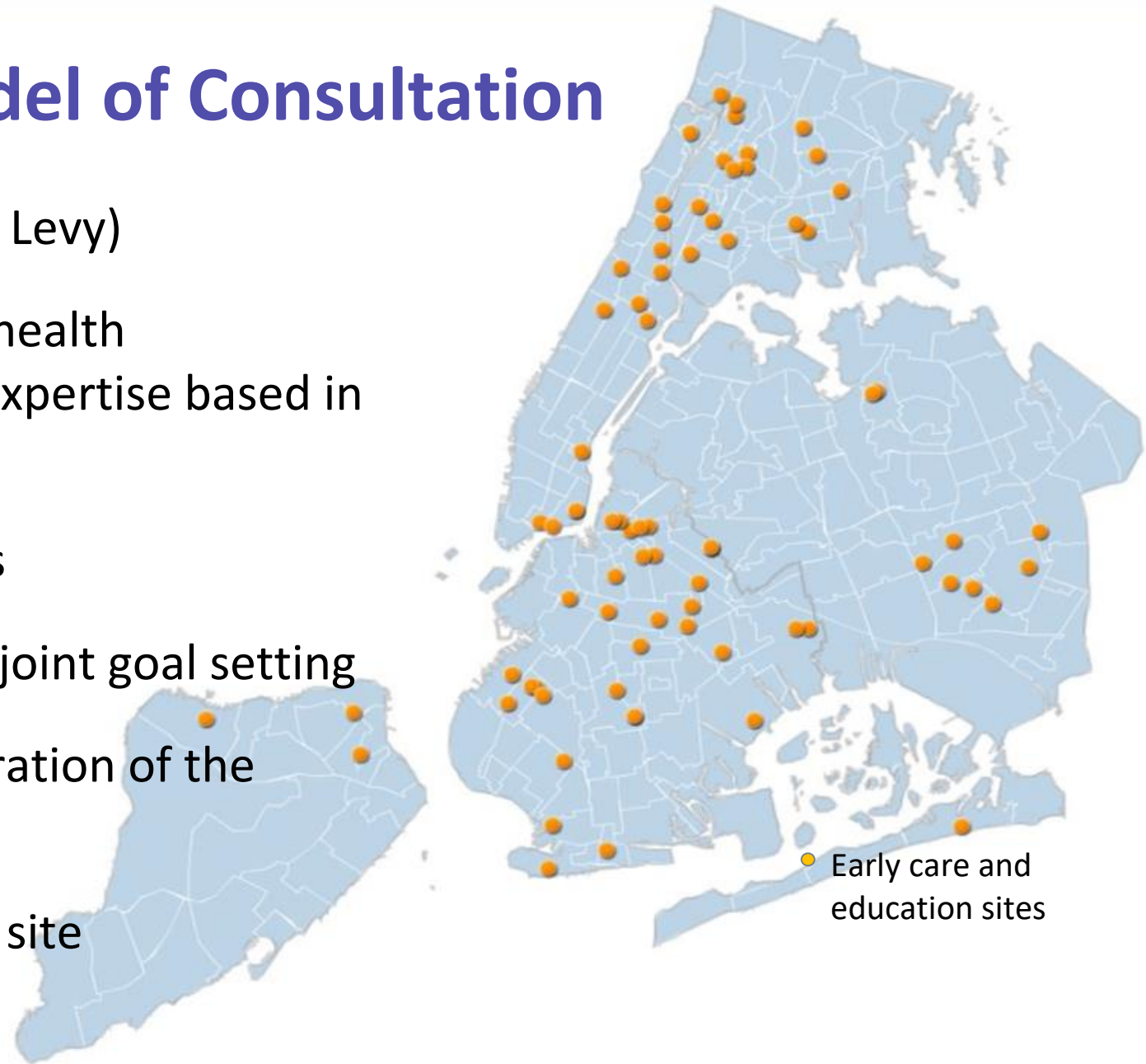


Licensed mental health clinics offer 3 linked services:

- Mental Health Consultation
  - Capacity building support to staff at early care and education (ECE) sites
- Mental Health Treatment
  - To children **birth to five**, their siblings, and parents/caregivers
- Family Peer Support
  - Peers integrated into clinics to support parents and caregivers

# NYC ECMH Network Model of Consultation

- **Funding:** ThriveNYC (100% City Tax Levy)
- **Consultant:** Master's level mental health professional with early childhood expertise based in licensed clinics
- **Site:** Subsidized, center-based ECEs
- **Goals:** Partnership agreement and joint goal setting
- **Dosage:** 1 day per week for the duration of the school year (Sept - June)
- **Caseload:** 5 sites, 3 classrooms per site



# Definition of Infant/Early Childhood MHC

- A multi-level, preventive intervention
  - that partners mental health professionals with early childhood providers (staff/teachers) and with parents/caregivers
    - to build their capacity to support children's social and emotional health and development

*Adapted from Hunter, A., Davis, A.E., Perry, D.F., & Jones, W. (2016)*

# Three Levels of MHC & Theory of Change

## Site/Programmatic (S/P)

- Supports staff in making changes to site's practices and policies that benefit all children and adults in their setting

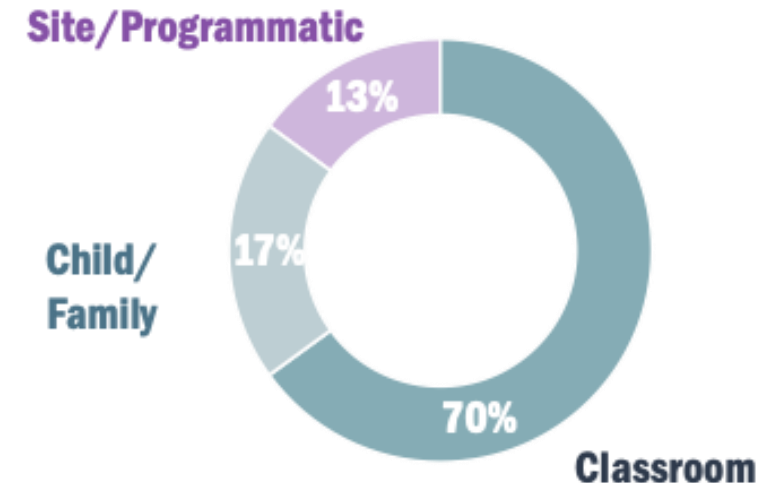
## Classroom (C)

- Conducts classroom observations and works collaboratively with teachers on strategies to respond to the social emotional needs of children in their classroom; Identifies and addresses attitudes, beliefs, practices and conditions

## Child and Family (C/F)

- Helps teachers and parents/caregivers understand and address the individualized needs of children with challenging behaviors

**Consultants' time is spent mainly on classroom consultation** *breakdown of consultation hours by type of consultation, September 2018 – June 2019*





# Evaluation of FY2019 (Sep 2018 - June 2019)

Evaluation Questions	Measurement Tools
Is MHC associated with improved knowledge/skills in teaching staff?	<ul style="list-style-type: none"><li>● Teaching Pyramid Observation Tool Short Form (TPOT-SF) pre/post</li></ul>
Is MHC associated with improved social-emotional and behavioral outcomes in children?	<ul style="list-style-type: none"><li>● Classroom Strengths and Difficulties Questionnaire (C-SDQ) pre/post</li><li>● Devereux Early Childhood Assessment - Clinical (DECA-C) pre/post</li></ul>



- For all measures, the pre/post analysis included a paired samples t-test for significance and Cohen's d for effect size.



# FY2019 Demographics

- 69 Early Care & Education (ECE) Sites
- 207 Classrooms containing 2900 Children for Classroom Level Consultation
  - The average duration of Site & Classroom level consultation services was approx. 8.5 months
  - The range was approx. 6.5 to 10 months
- 138 Children in Child/Family Level Consultation
  - The average duration of Child/Family Level Consultation services was approx 5 months
  - The range was approx. 1 month to 8.5 months



# Greater Proportion of BIPOC Children than NYC as a Whole

FY19 ECMH Consultation Child Demographics	Classroom Level (N=2900)	Child/Family Level (N=138)
<b>Gender</b>	%	%
Female	50.10%	36.90%
Male	49.90%	63.10%
<b>Race/Ethnicity</b>	%	%
American Indian/ Alaskan Native	0.00%	0.00%
Asian	12.10%	19.05%
Black/ AA	35.90%	26.98%
Hispanic	39.30%	47.62%
Middle Eastern/ N African	4.20%	3.20%
Native Hawaiian or Other Pac Islander	0.00%	0.79%
White	1.20%	0.79%
Bi/Multi Racial	3.60%	1.59%
Other	0.60%	0.00%



- Child gender and race/ethnicity was reported by ECE Lead Teachers from 207 classrooms.

# Males were Overrepresented & Females were Underrepresented in C/F Consultation

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Other	0.60%	0.00%



- Reported gender was split relatively evenly in our classroom level population.
- However, children received child/family (C/F) level consultation disproportionately by gender.



# Disproportionate Selection for C/F Consultation by Race/Ethnicity

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Bi/Multi Racial	3.60%	1.59%
Other	0.60%	0.00%



- There were apparent disproportionalities in Asian, Black/AA, and Hispanic children receiving C/F consultation versus those children in Classroom consultation.

# Classroom Strengths & Difficulties Questionnaire (C-SDQ)

- Classroom Difficulties Index (Potential Range: 0.00 to 3.00)
- Percentage of Children in the Classroom Rated as ANY Level of Difficulties
- Percentage of Children in the Classroom Rated as SEVERE Difficulties

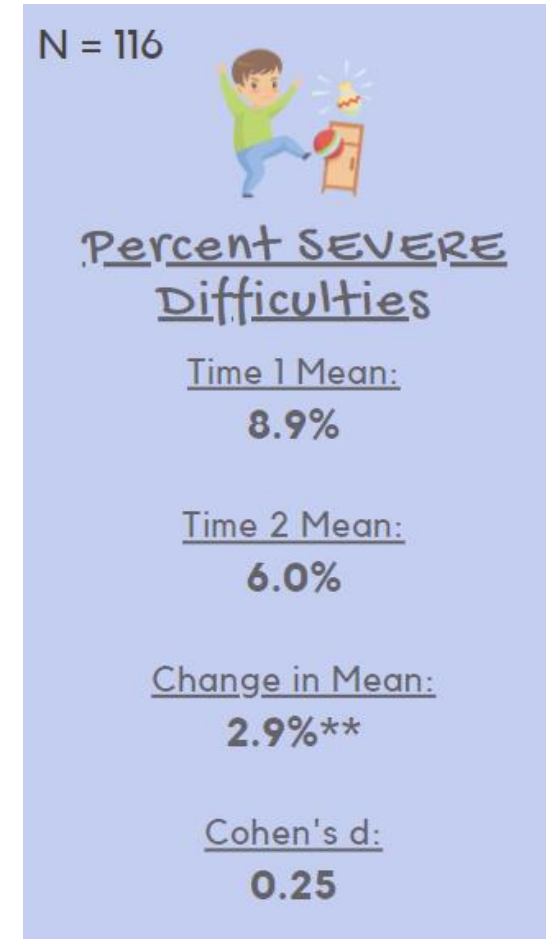
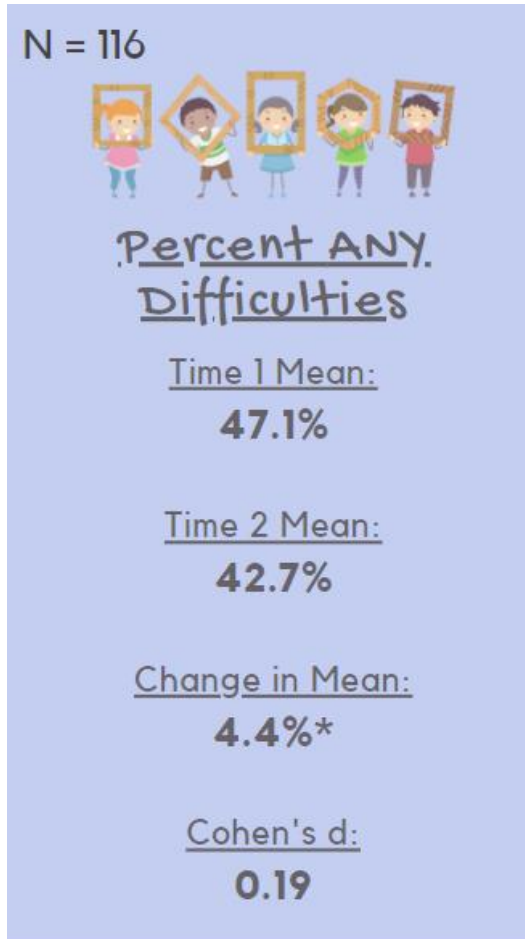
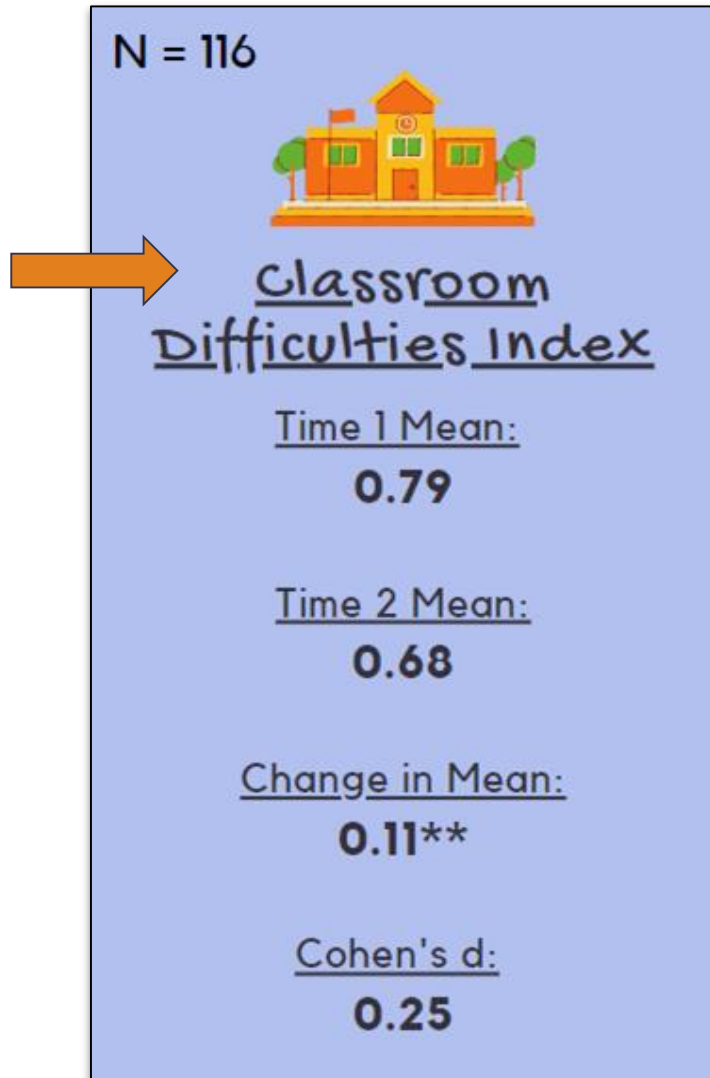
**INFANT/TODDLER STRENGTHS AND DIFFICULTIES CLASSROOM QUESTIONNAIRE**  
**For Teacher**

Please reflect on each of the children in your classroom and answer 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?**

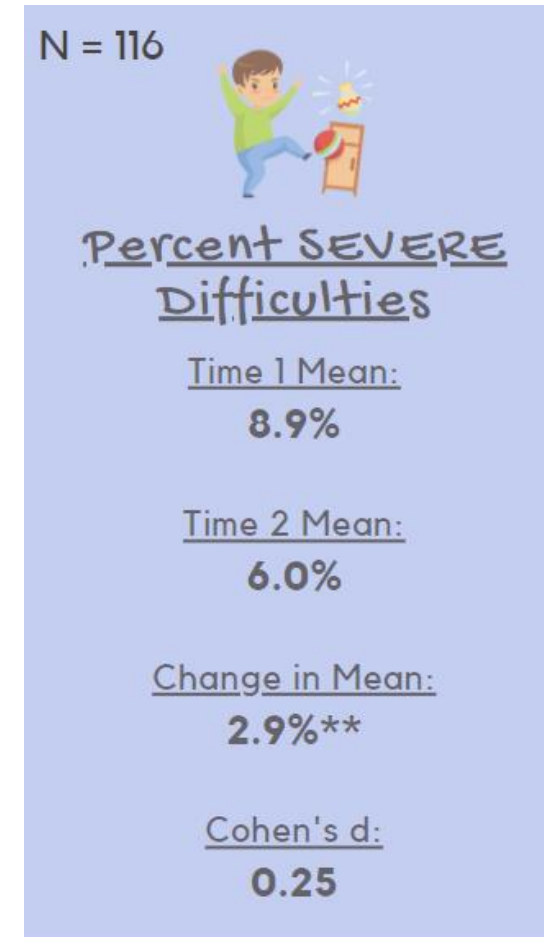
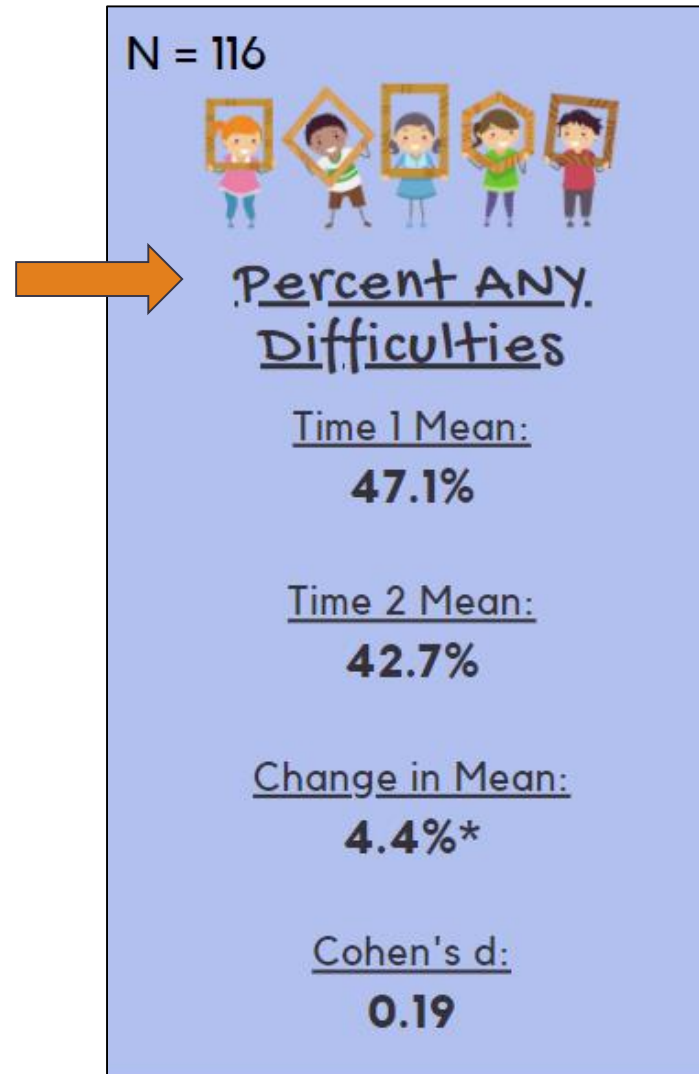
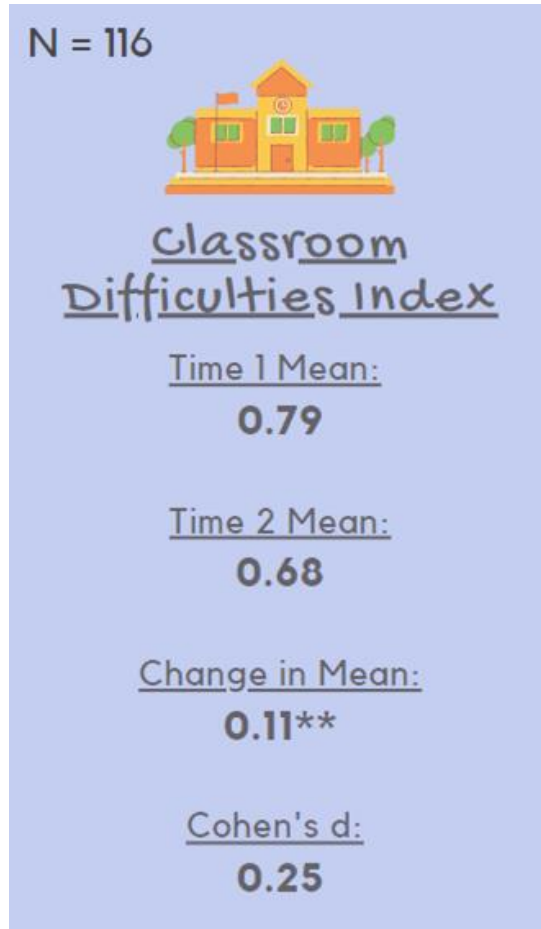
<b>Answer choices:</b>	No	Yes – minor difficulties	Yes – definite difficulties	Yes – severe difficulties
	0	1	2	3

# The Classroom Difficulties Index Score Improved



\*p<.05    \*\*p<.01    \*\*\*p<.001

# Percent of Children Rated as having ANY Difficulties Decreased



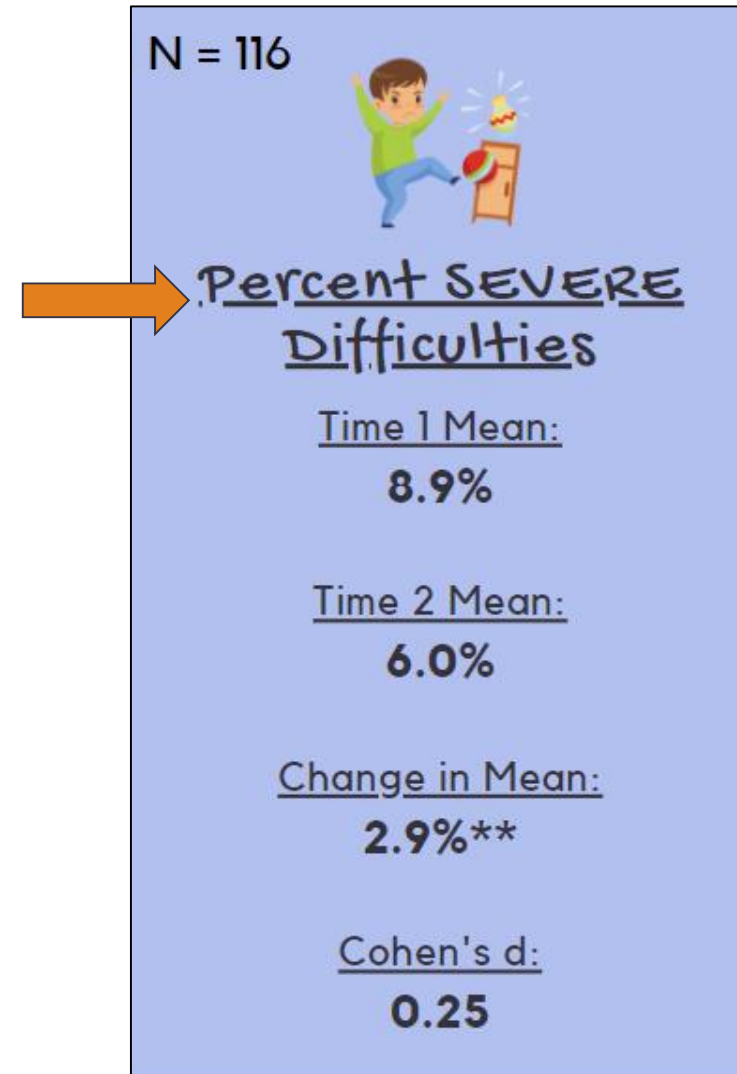
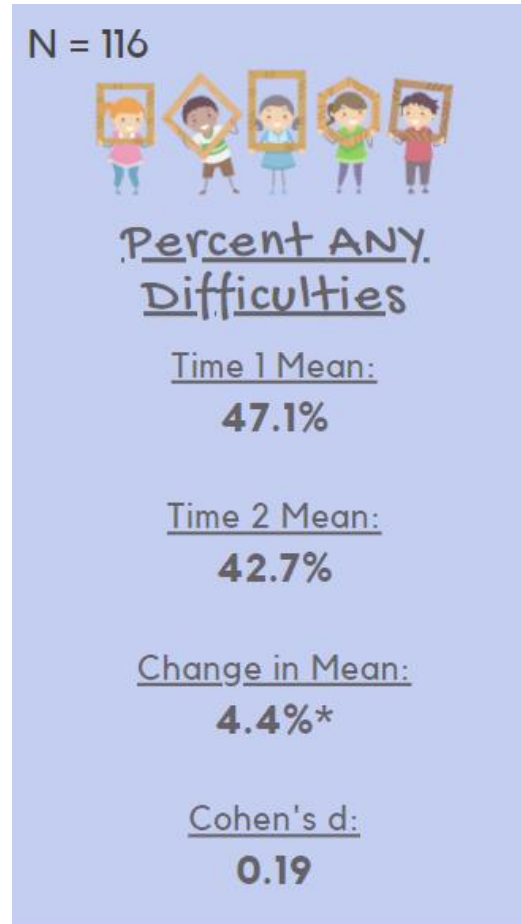
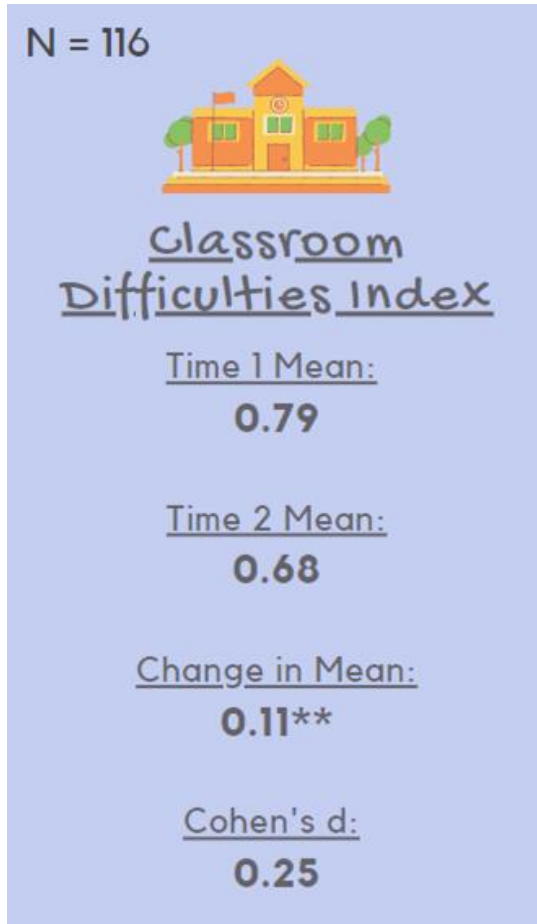
\*p<.05

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\*\*\*p<.001



# The Percent of Children Rated as having SEVERE Difficulties Decreased




\*p<.05    \*\*p<.01    \*\*\*p<.001

# TPOT-SF Methodology & Results:

- Classroom Environment Index (Potential range: 0.00 to 1.00)
  - Comprised of 8 questions regarding the physical conditions in the classroom.
  - Ex. *The classroom is arranged such that all children in the classroom can move easily around the room.*
- Classroom Management Index (Potential range: 1.00 to 4.00)
  - Comprised of 26 questions regarding the behavior and interactions between ECE staff and children.
  - Ex. *Teachers' tone in conversations with children is positive, calm, and supportive.*

# Improvement in Classroom Environment

 Classroom Environment Index

Time 1 Mean:  
**0.90**

Time 2 Mean:  
**0.97**

Change in Mean:  
**0.07\*\*\***

Cohen's d:  
**0.58**

Classroom Management Index

Time 1 Mean:  
**3.28**

Time 2 Mean:  
**3.52**

Change in Mean:  
**0.24\*\*\***

Cohen's d:  
**0.82**



\*p<.05    \*\*p<.01    \*\*\*p<.001

# Improvement in Classroom Management


## Classroom Environment Index

Time 1 Mean:  
**0.90**

Time 2 Mean:  
**0.97**

Change in Mean:  
**0.07\*\*\***

Cohen's d:  
**0.58**



## Classroom Management Index

Time 1 Mean:  
**3.28**

Time 2 Mean:  
**3.52**

Change in Mean:  
**0.24\*\*\***

Cohen's d:  
**0.82**



\*p<.05

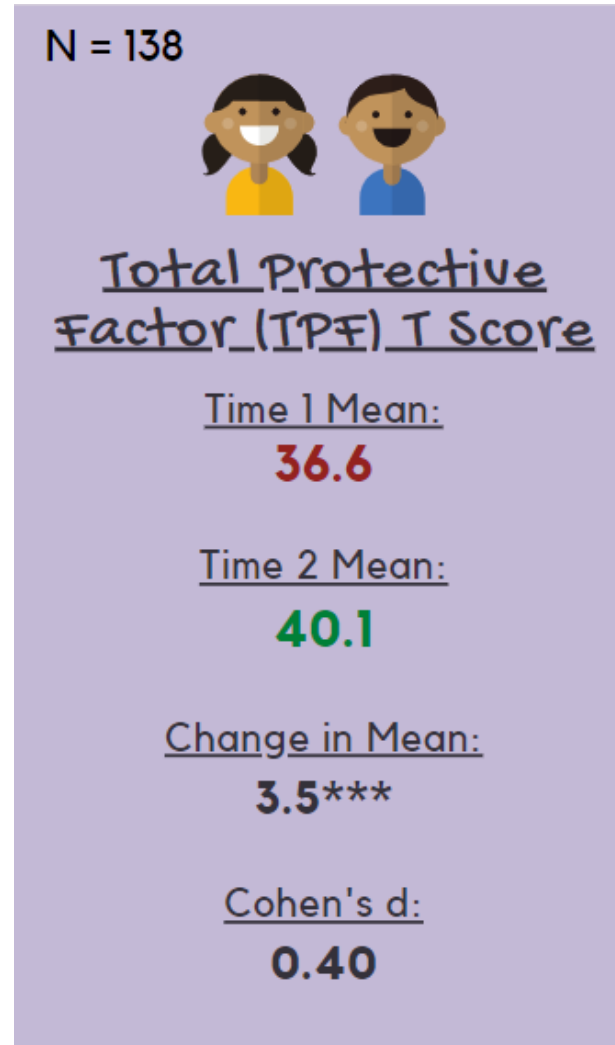
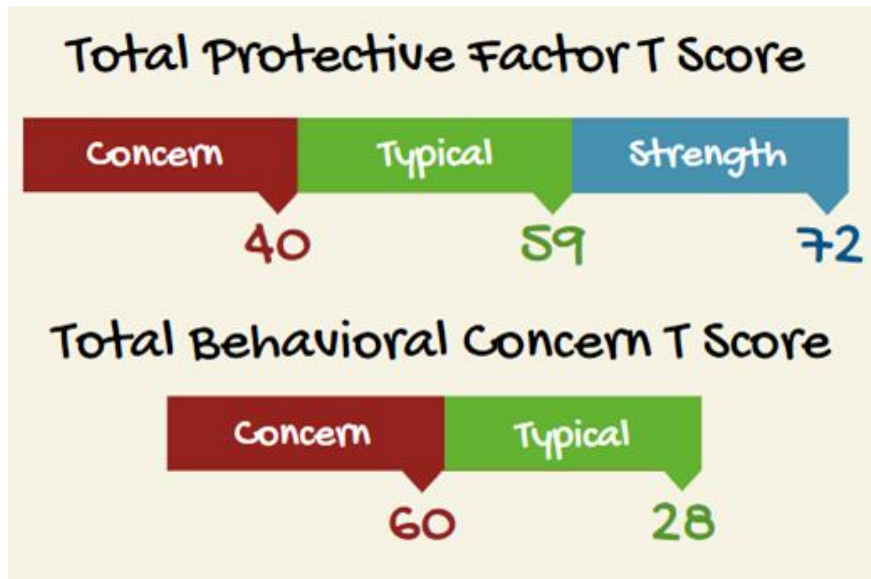
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## Devereux Early Childhood Assessment - Clinical (DECA-C)

- Total Protective Factor (TPF) T Score
  - Ex. *In the past four weeks, how often did the child... try different ways to solve a problem?*
- Total Behavioral Concern (TBC) T Score
  - Ex. *In the past four weeks, how often did the child... act overwhelmed or cry when asked to do simple things?*

## Average Scores Started in Concern Range and Ended in Typical Range

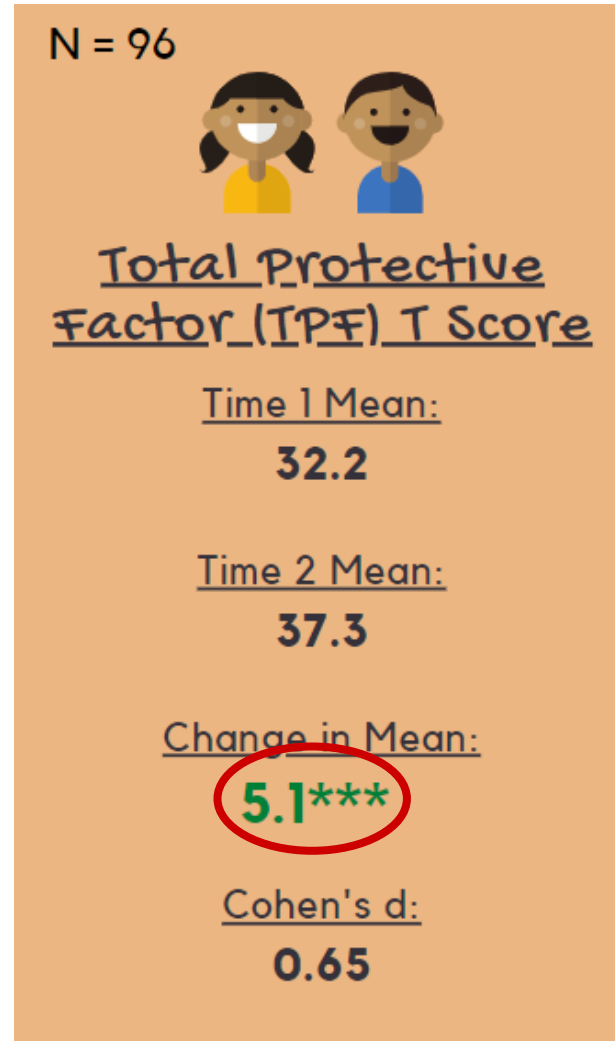


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## Larger Effect Size Among Children Starting in the *Concern* Range

- Children assessed as having *more severe scores* at Time 1 were found to have had a **greater magnitude of improvement** over time in each subscale.



\*p<.05

\*\*p<.01

\*\*\*p<.001



## Disproportionate Impact of C/F Consultation by Child Gender

- Male children had more severe DECA-C scores than female children at Time 1.
- Female children saw greater improvements in TBC T score than male children.
- Male children saw greater improvements in TPF T score than female children.

	N	Mean TPF Time 1	Change in TPF	Mean TBC Time 1	Change in TBC
All Children	138	36.6	3.5***	62.5	2.9***
Gender					
Female	48	38.7	2.9*	58.8	4.1**
Male	82	35.7	3.6***	64.3	1.9^

\*p<.05; \*\*p<.01; \*\*\*p<.001

^ value is close to significance at the p<.05 level

## Disproportionate Impact of C/F Consultation by Child Race/Ethnicity

- Asian and Black/AA children saw greater than average improvements in both subscales
- Asian children had a medium effect size for improvement in TPF T score
- Black/AA children had a medium effect size for improvement in TBC T score

	N	Change in TPF	Change in TBC
All Children	138	3.5***	2.9***
Race/Ethnicity			
Asian	24	4.2*	3.8*
Black/ AA	34	4.7**	4.5**
Hispanic	60	2.7*	2.4^

\*p<.05; \*\*p<.01; \*\*\*p<.001

^ value is close to significance at the p<.05 level

# Results Overview

Evaluation Questions	Results
Is MHC associated with improved knowledge/skills in teaching staff?	<ul style="list-style-type: none"><li>• Significant improvements in classroom environment and management.</li></ul>
Is MHC associated with improved social-emotional and behavioral outcomes in children?	<ul style="list-style-type: none"><li>• Significant improvements in classroom behavioral difficulties, including improvements in severe difficulties.</li><li>• Significant improvements in children’s protective factors and behavioral concerns, with greater improvements in:<ul style="list-style-type: none"><li>- children initially assessed as higher concern</li><li>- children identified as African American/Black or Asian</li><li>- male children protective factors (vs female children)</li><li>- female children behavioral concerns (vs male children)</li></ul></li></ul>

# Evaluation Barriers

- Interruption in consultation services and data collection due to:
  - Staff turnover at the Early Care and Education sites
  - Staff turnover among Network's Mental Health Consultants
  - Service disruption (e.g., site closures or restructuring)
  
- Need for ongoing flexibility in data management system



# Lessons Learned/Next Steps

- Data management protocols should include strategies to mitigate data collection issues related to staff turnover and service disruption.
- Expand individual-level demographic data collection to include:
  - Race/ethnicity of ECE staff and MHCs
  - Primary language spoken of children and families, ECE staff, and MHCs
- Explore findings:
  - Disproportionate selection for child/family consultation by gender and race/ethnicity
  - Differences in impact of child/family consultation by gender and race/ethnicity

# Acknowledgements

- Network team:
  - NYC DOHMH Children, Youth & Families, Shirley Berger
  - NYC ECMH Training and Technical Assistance Center (TTAC)
  - NYC Early Childhood Therapeutic Centers (ECTCs)
- External:
  - ThriveNYC
  - NYC Early Care and Education Sites
  - Center of Excellence for Infant and Early Childhood Mental Health Consultation/Georgetown University Center for Child and Human Development
  - NYC Administration for Children's Services
  - Families across NYC



# References

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# THANK YOU!



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