



26th Annual Children Come First Conference

Assessing Outcomes in Early Intervention Programs for Young Children with Behavior Problems

*Dr. Robert Fox, Professor of Psychology; Licensed Psychologist
Laurn Besasie, Doctoral Student; M.S. Clinical Mental Health Counseling
Marquette University*



Program Agenda

- **Outcomes: Importance and Use**
- **The Behavior Clinic & Early Pathways Program: A brief overview**
- **Measures**
 - Early Childhood Behavior Screen (ECBS)
 - Parent Behavior Checklist (PBC)
 - Parent-Child Play Assessment
 - Parent-Child Relationship Scale
- **Putting it all together: Case Study**
 - Integrating Measures for Reports
 - Interpreting measures for Treatment Direction
- **Outcome Reports**
 - Use of Measures for Workshops, Articles, etc.



Outcomes

- **Why are outcomes important?**
 - Establish objective evaluation of your services
 - Establish the baseline status of the client, providing a means to quantify change in the client's functioning (monitor client progress)
 - Required to obtain and retain grant funds
- **How are outcomes used?**
 - In treatment planning
 - In grant writing
 - In program evaluation



The Behavior Clinic & Early Pathways Program

- Since beginning in 2003, EP has been used by the Behavior Clinic to serve Milwaukee County families. In 2014, the Behavior Clinic served over 400 families and introduced a trauma informed component to our treatment, New Hope.
- Early Pathways (EP) is an evidence-based program for resolving behavior problems in children five years of age and younger, particularly for families living in poverty.
- Five components to the program:
 - Parent-Child Relationship (Child-led play)
 - Appropriate Expectations (Psychoeducation)
 - Cognitive Strategies (Stop & Think, behavior cycles)
 - Differential attention and positive reinforcement (Ignoring, praise and rewards)
 - Limit setting strategies (Redirection, time-out)

This program is offered online. There is also a printed manual at : marquette.edu/early-pathways



Early Childhood Behavior Screen

Purpose

- To discriminate between typical behavior problems in children and clinical behavior problems (according to age) as well as assess prosocial behaviors and client progress

Description of Measure & Scoring

- 20 item caregiver-report measure
- Two subscales of 10 items each: Positive Behavior Scale (PBS) and a Challenging Behavior Subscale (CBS)
- Items are rated on a 3 point Likert scale: Often = 3 ; Sometimes = 2; Almost Never = 1
- The items are summed in their respective columns and referenced against the age cutoff to determine clinical significance
- Total scores in each subscale from range 10-30 with higher scores indicating a greater frequency of behaviors
- CBS is administered at every treatment session to track progress



Early Childhood Behavior Screen

Interpretation

- Higher scores indicated higher frequency of behaviors. If a raw score exceeds the cutoff for clinical significance, this means that the behaviors present a significant challenge for the parent/caregiver.

Psychometric properties

- This tool was developed for use with children from low-income families and it is written at a 3.9 grade level
- Field-tested with a representative, diverse sample of 439 parents from low socioeconomic status in an urban community.
- The internal consistencies using coefficient alpha was .87 for CBS and .92 for PBS.
- The ECBS demonstrated adequate levels of concurrent validity ($r = .75$) with the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999), as well as adequate levels of sensitivity (82%) and specificity (80%) based on the relationship with the ECBI

References

- Holtz, C.A., & Fox, R.A. (2012). Behavior problems in young children from low-income families: The development of a new screening tool. *Infant Mental Health Journal*, 33, 82-94.



Early Childhood Behavior Screen (ECBS)

Instructions: Listed below are common behaviors of toddlers and preschoolers. Think about your child's behavior over the past week, and rate how often you observed each behavior. Circle "often" if it happened at least daily, circle "sometimes" if it happened several times, and circle "almost never" if it rarely or never happens.

Your Child...	How often does the behavior occur?				
1. Hits others	Often	Sometimes	Almost Never		
2. Eats with a spoon	Often	Sometimes	Almost Never		
3. Throws things at others	Often	Sometimes	Almost Never		
4. Listens to you	Often	Sometimes	Almost Never		
5. Has temper tantrums	Often	Sometimes	Almost Never		
6. Breaks things	Often	Sometimes	Almost Never		
7. Is angry	Often	Sometimes	Almost Never		
8. Hurts others	Often	Sometimes	Almost Never		
9. Understands you	Often	Sometimes	Almost Never		
10. Does what you ask	Often	Sometimes	Almost Never		
11. Plays well with others	Often	Sometimes	Almost Never		
12. Sleeps through the night	Often	Sometimes	Almost Never		
13. Takes toys away from others	Often	Sometimes	Almost Never		
14. Shares toys	Often	Sometimes	Almost Never		
15. Helps others	Often	Sometimes	Almost Never		
16. Bothers others	Often	Sometimes	Almost Never		
17. Eats well	Often	Sometimes	Almost Never		
18. Cooperates in getting dressed	Often	Sometimes	Almost Never		
19. Refuses to go to bed at night	Often	Sometimes	Almost Never		
20. Kicks others	Often	Sometimes	Almost Never		

Clinician Note: Sum each column after scoring each item according to the following scale: Often = 3, Sometimes = 2, Almost Never = 1

Clinical significance is reached if child's raw score meets or exceeds the following cutoff scores:

Age	Cutoff
1 year old	21
2 years old	20
3 years old	19
4 years old	18
5 years old	17

Raw Score Pro-Social		
Raw Score Challenging		
Clinically Significant?	Y	N

Parent Behavior Checklist

Purpose

- Measures caregivers' behaviors and expectations of the child between ages 1-5

Description of Measure

- 32 item measure with three subscales:
 - Expectations (includes 12 items) measures caregiver's developmental expectations
 - Discipline (includes 10 items) measures caregiver's use of verbal and corporal punishment
 - Nurturing (10 items) measures caregiver's behaviors that foster child's social/emotional development

Scoring and Interpretation

- Items are rated using a four-point frequency scale: 4 = almost always/always; 3 = frequently; 2 = sometimes; 1 = almost never/never
- Total scores for expectations range from 12-48, with higher scores suggesting higher expectations of child's behaviors compared to their developmental level
- Total scores for discipline range from 10-40, with higher scores indicating more frequent use of verbal and corporeal punishment
- Total scores for nurturing range from 10-40, with higher scores suggesting more frequent use of positive nurturing activities

Parent Behavior Checklist

Psychometric properties

- Internal consistency was determined from a representative sample of 1,140 mothers, and the following coefficient alphas were reported: Expectations = .97, Discipline = .91, and Nurturing = .82.
- Test-retest reliabilities for each of the three subscales were: Expectations = .98, Discipline = .87, and Nurturing = .81.

References

Fox, R. A. (1994). *Parent behavior checklist*. Austin, TX: ProEd (Currently available from the author, Marquette University, School of Education, P.O. Box 1881, Milwaukee, WI 53201-1881; Email: robert.fox@marquette.edu).



Child's Name _____ Parent's Name _____ Date _____ Therapist _____

Parent Behavior Checklist – Short Form

Instructions: The *Parent Behavior Checklist* includes statements about how parents raise young children. For each statement, circle the letter A if the statement ALMOST ALWAYS OR ALWAYS applies to how you raise your child. Circle the letter F if the statement FREQUENTLY applies. Circle the letter S if the statement SOMETIMES applies. Circle the letter N if the statement ALMOST NEVER OR NEVER applies. Mark only one letter for each statement. If you feel a statement does not apply, mark N (Never). **Do not skip any items.** Please begin with the first item.

	A = Almost Always/Always				F = Frequently				S = Sometimes				N=Almost Never/Never			
	A	F	S	N	E	D	N	V	A	F	S	N	E	D	N	V
1. I praise my child for learning new things																
2. My child and I play together on the floor																
3. If my child would hit, kick, bite, or scratch someone, I would spank him/her																
4. I get books for my child (from the library or store) at least once a month																
5. When my child doesn't do what I tell him/her to do I spank him/her																
6. If my child is overactive, I involve him/her in activities																
7. I yell at my child for whining																
8. My child should be able to understand taking turns during games																
9. I tell my child that he/she is bad																
10. I send my child to a room or corner in the house as punishment																
11. I would spank my child in public for bad behavior																
12. My child should be able to ride a tricycle																
13. My child should be quiet when I'm on the phone																
14. I spend at least one hour a day playing with or reading to my child																
15. I yell at my child for being too noisy at home																
16. I scold my child for soiling his/her pants																
17. My child should be old enough to share toys																
18. I allow messy play																
19. My child should be able to draw a circle																

	A = Almost Always/Always	F = Frequently	S = Sometimes	N = Almost Never/Never	E	D	N	V
20. I take walks with my child once a week	A	F	S	N				
21. My child should be able to say his/her first name when asked	A	F	S	N				
22. I get so angry with my child that I spank him/her on the bottom	A	F	S	N				
23. My child should be able to understand what I tell him/her to do	A	F	S	N				
24. I arrange activities for my child to play such as coloring, painting, or toy play	A	F	S	N				
25. My child should be able to put away his/her toys	A	F	S	N				
26. I spank my child at least once a week	A	F	S	N				
27. My child should be old enough to speak in clear sentences	A	F	S	N				
28. My child has a regular bedtime routine (such as washup, put on pajamas, read a story, say prayers)	A	F	S	N				
29. I take my child to the park, playground, movies, library, or ball games	A	F	S	N				
30. My child should be able to wash and dry his/her own hands	A	F	S	N				
31. When my child has a temper tantrum, I spank him/her	A	F	S	N				
32. My child should be able to stay dry during the day	A	F	S	N				
Page 2 Subscale Raw Scores								
Page 1 Subscale Raw Scores								
Total Subscale Raw Scores								
					E	D	N	V

	Total Raw Score	T-Score	Interpretation (average, below average, etc.)
Expectations			
Discipline			
Nurturing			

Note: A=4, F=3, S=2, N=1; T-Scores: <25=lower extreme; 25-34=well below avg; 35-65=average; 66-75=well above avg; >75=upper extreme

Parent-Child Play Assessment

Purpose

- A direct behavioral observation measure of the parent/caregiver and child play interaction
- Used to gauge the relationship between the parent and child

Description of Measure and Scoring

- Parents/caregivers are asked to play with their child, while the clinician rates five dimensions of the child's behavior and six dimensions of the parent/caregiver's behavior using a three-point frequency scale (1 = poor, 2 = fair, 3 = good)

Interpretation

- Higher scores for both parents/caregivers and children indicate more interactive, reciprocal, sensitive, and positive play between the parent/caregiver and child

Psychometric properties

Two clinicians independently completed the play assessment for 66 children and parents. Kappa coefficients ranged between .63 to .92 for the individual child and parent items; average Kappas for the child items was .76 and .80 for the parent items (Harris et al., 2015) which reflects good inter-rater reliability

Separate total scores were computed for the six dimensions of the parents' behaviors and the five dimensions of the children's behaviors, and coefficient alphas were computed for the child behavior scale (.85) and the parent behavior scale (.82)

Reference

Harris, S. E., Fox, R.A., & Love, J.R. (2015). Early Pathways therapy for young children in poverty: A randomized controlled trial. *Counseling Outcome Research and Evaluation*, 6, 3-17. doi: 10.1177/2150137815573628



Parent-Child Play Assessment

Child's Name: _____ Date: _____ Therapist: _____
Session: _____

Child Ratings

1. *Positive Affect* Poor Fair Good

Poor = little or no expression of positive feelings (no smiles or laughter; flat affect)
Fair = some expression of positive feelings (intermittent smiles and pleasant reactions)
Good = persistent expression of positive feelings (smiles, laughs, hugs, appears happy)

2. *Negative Affect* Poor Fair Good

Poor = persistent expression of negative feelings (frowns, cries, hits, says "no")
Fair = some expression of negative feelings (occasional frowns, cries, etc.)
Good = no expression of negative feelings (smiles, laughs, appears happy)

3. *Interest in Play* Poor Fair Good

Poor = low interest (stares into space, moves away from toy/activity)
Fair = moderate interest (plays sporadically and ignores from time to time)
Good = high interest (consistently focuses on toy/activity, watches others play)

4. *Initiates Interactions* Poor Fair Good

Poor = no initiations (child makes no attempt at initiating play; ignores, avoids)
Fair = periodic initiation (occasionally leads but also avoids play at times)
Good = predominately initiates (points, offers objects, talks, visually checks, touches)

5. *Socially Responsive* Poor Fair Good

Poor = non-responsive (consistently ignores, actively resists initiations by others)
Fair = sporadically responsive (attends at times and ignores prompts at other times)
Good = eagerly responsive (visually attentive, attempts compliance, actively complies)

Parent Ratings

6. *Parent Leads* Poor Fair Good

Poor = predominant use of commands, gestures and/or physical guidance for child compliance
Fair = frequent use of suggestions and requests for child response
Good = occasional use of indirect requests or suggestions

7. *Parent Engagement* Poor Fair Good

Poor = little or no engagement in play with child
Fair = somewhat engaged in play; occasionally responds to child
Good = fully engaged in play; consistent interaction with child

8. *Sensitivity* Poor Fair Good

Poor = low sensitivity (extreme form/combination of intrusiveness, rejection of child leads, developmental inappropriateness, disorganized or rapid pace)
Fair = moderate sensitivity (alternation between positive elaboration of child's behavior and rejection of child leads, responds appropriately but is also intrusive at times)
Good = high sensitivity (elaborates on child's behavior, shows awareness of child's activity, developmental capacity and affective state; responds appropriately)

9. *Expectations* Poor Fair Good

Poor = inappropriate (moves too quickly for child to keep up, starts activities above child's capabilities, disorganized and scattered in play; hard to follow)
Fair = occasionally appropriate (allows child time to perform activities but may move too quickly at times, somewhat scattered in play, behaviors tend to make sense but may be confusing at times)
Good = appropriate (gives child time to perform activity/request, starts activities at or just above child's capabilities, clear in intentions, uses behaviors that make sense in the context)

10. *Limit Setting* Poor Fair Good

Poor = inappropriate (has no limits, lets child do what he/she wants, gives in to child's demands, yells or hits child)
Fair = occasionally appropriate (sets limits and follows through sporadically, firm at times but inconsistent)
Good = appropriate (sets appropriate limits, remains firm with limits, no yelling/hitting, no need to set limits)

11. *Reciprocity* Poor Fair Good

Poor = low reciprocity (child and parent do not share same goal, engage in parallel play)
Fair = moderate reciprocity (child and parent interact at times but engage in parallel play at others)
Good = high reciprocity (parent and child seem in harmony, share same goal, play interactively)

Total Child Rating (items 1-5)	
(Poor = 0, Fair = 1, Good = 2)	
Total Parent Rating (items 6-11)	
(Poor = 0, Fair = 1, Good = 2)	

Parent-Child Relationship Scale

Purpose

- Measures the clinician's subjective assessment of the quality of the caregiver-child relationship
- Provides a baseline for clinician to compare pre-treatment and post-treatment scores

Description of Measure and Scoring

- The PCRS uses a scale of 0-100 with five anchors at 20-point intervals:
 - poor (ranging from 0-20)
 - below average (ranging from 20-40)
 - average (ranging from 40-60)
 - good (ranging from 60-80)
 - exceptional (ranging from 80-100)
- Multiple descriptive markers are provided for each interval to improve interrater reliability
 - (e.g., "Parent is often thoughtful when interacting with child")

Psychometric Properties

- Two clinicians independently completed the parent-child relationship scale for 101 children and parents; the resulting Kappa coefficient was .57 indicating moderate inter-rater reliability.

Interpretation

- Higher scores suggested a higher quality relationship between the caregiver and child

Reference

Fung, M.P., & Fox, R.A. (2014). The culturally-adapted early pathways program for young Latino children in poverty: A randomized controlled trial. *Journal of Latina/o Psychology, 2*, 131-145.



Parent-Child Relationship Scale

Circle the number that best applies to this parent's current relationship with their child.

100	Exceptional Relationship
95	Parent is consistently thoughtful when interacting with child. Parental expectations are appropriate. Parent is responsive to child's needs and sets appropriate limits on child's behavior. Minimal or no evidence of verbal or corporal punishment. The parent-child relationship is excellent.
90	
85	
80	Good Relationship
75	Parent is often thoughtful when interacting with child. Parental expectations are usually appropriate. Parent normally is responsive to child's needs and usually sets appropriate limits on child's behavior. Minimal evidence of verbal or corporal punishment. The parent-child relationship is very good.
70	
65	
60	Average Relationship
55	Parent is thoughtful at times when interacting with child. Parental expectations are appropriate at certain times but not others. Parent can be responsive to child's needs and set appropriate limits on child's behavior but not consistently. Some evidence of verbal or corporal punishment. The parent-child relationship is good.
50	
45	
40	Below Average Relationship
35	Parent is less thoughtful when interacting with child. Parental expectations are often too high or too low.
30	Parent is less responsive to child's needs and sets inconsistent limits on child's behavior. Consistent evidence of verbal or corporal punishment. The parent-child relationship is fair.
25	
20	Poor Relationship
15	Parent is usually not thoughtful when interacting with child. Parental expectations are often inappropriate.
10	Parent often is not responsive to child's needs and usually does not set appropriate limits on child's behavior.
5	Ample evidence of verbal or corporal punishment. The parent-child relationship is weak.
0	

Family Satisfaction Survey

BEHAVIOR CLINIC SURVEY: FAMILY

This questionnaire will help us to evaluate and continually improve the program we offer. We are interested in your *honest opinion* about the services you have received, whether they were positive or negative. Please answer all the questions.

Please circle the response that best describes how you honestly feel.

1. How would you rate the quality of the service you and your child received at the Behavior Clinic?

7 6 5 4 3 2 1
Excellent Good Fair Poor

2. To what extent has the Behavior Clinic helped improve your child's behavior?

7 6 5 4 3 2 1
A lot Quite a Bit A little Not at All

3. To what extent has the Behavior Clinic helped you improve how you manage your child's behavior?

7 6 5 4 3 2 1
A lot Quite a Bit A little Not at All

4. If you were to seek help again, would you come back to the Behavior Clinic?

1 2 3 4 5 6 7
No, definitely not No, I don't think so Yes, I think so Yes, definitely

5. In your opinion, how is your child's behavior at this point?

1 2 3 4 5 6 7
Considerably worse Worse Slightly worse The same Slightly improved Improved Greatly improved

6. Would you tell others about the Behavior Clinic if their child had behavior problems?

1 2 3 4 5 6 7
No, definitely not No, I don't think so Yes, I think so Yes, definitely

7. How confident are you in managing your child's behavior in the future?

1 2 3 4 5 6 7
Not at all confident Somewhat confident More Confident Very Confident

8. What does caregiver feel contributed most to their child's overall improvement?

9. Now ask the caregiver to put themselves in their child's shoes and ask, what would the child say was the most important reason that they improved their behavior/stress?

Intake Form

Intake Form

*Date

Clinician(s): _____ Child's Medicaid Provider: _____

Interpreter: _____ Child's Medicaid Number: _____

Spanish-speaking family: Y N Child's Physician: _____

Child & Family Information

*Child: _____ *M F *Date of Birth: _____ *Age: _____

*Race: _____ School/Childcare name: _____ Days/Times attend: _____

Mother: _____ Age: _____ Race: _____

*Highest Education Obtained: _____ Time spent with child: _____ *Primary caregiver? Y N

Employer: _____ Health: _____

Father: _____ Age: _____ Race: _____

*Highest Education Obtained: _____ Time spent with child: _____ *Primary caregiver? Y N

Employer: _____ Health: _____

Additional Caregiver: _____ Age: _____ Race: _____

Relationship to child: _____ Time spent with child: _____ *Primary caregiver? Y N

Employer: _____ Health: _____

*Primary Caregiver marital status: married never married divorced separated widowed

Does family/child receive public assistance: (WIC, rent assistance, SSI, W2, food stamps, medical) Y N

Household Income (circle one) \$0-\$9,999 \$10,000-\$14,999 \$15,000-\$22,999

\$23,000-\$33,999 \$34,000-\$49,999 \$50,000-\$74,999 \$75,000 or more Unknown

Who lives in the home (names, ages, relationship): _____

*Total # children under 18 in the home: _____

*My school aged child(ren) qualify for: free lunch reduced lunch pay full price not-applicable

Significant family mental health history: _____

Any current or past involvement with the Bureau of Milwaukee Child Welfare (BMCW)? Y N

Notes: _____

Child Health

Birth weight: _____ Weeks gestation: _____ Complications: _____

During pregnancy: Drug use: Y N Tobacco use: Y N Alcohol use: Y N Medication use: Y N

If yes, please describe: _____

Past health problems: _____

Current health concerns: _____

Areas of concern: Hearing: Y N Vision: Y N Dental: Y N Activity Level: Y N

Comments: _____ Referred for an Evaluation/Test: Y N

Medications: _____ Lead tested: Y N Date: _____ Level: _____

*Assessed for developmental delay: Y N If no, concerns: _____

Agency: _____ Date: _____

*Results: No Delays Cognitive Delay Language Delay Motor Delay

Type of services: ST PT OT Spec. Ed Other: _____

Frequency of services: _____ Location: Home Center

Referred for a developmental evaluation? Y N Evaluation Source: _____

Child's Daily Routine

Eating (Good/Picky Eater; # Meals/Snacks/ Meals/Meals; Sugar/Caffeine): _____

Bedtime: _____ What time does child fall asleep: _____ Wakes up? _____

Nap: Y N Time put down for nap: _____ Total nap time: _____ Total hour's sleep/day (24 hours): _____

Where does child sleep and with whom: _____

Bedtime routine: _____ Problems: _____

Toilet Trained: Y N In process Problems: _____

What does a typical day look like for you and your child? _____

Notes: _____ 2

Referral Concerns

Challenging Behavior 1: _____

How long has it been occurring? _____ How often does it occur? _____

Where does it occur? _____ How long does it last? _____

Antecedents? _____

How do you respond? _____

How does other caregiver respond? _____

How do daycare/teachers respond? _____

Challenging Behavior 2: _____

How long has it been occurring? _____ How often does it occur? _____

Where does it occur? _____ How long does it last? _____

Antecedents? _____

How do you respond? _____

How do other caregivers respond? _____

How do daycare/teachers respond? _____

Do these behaviors present a danger to him/ herself or others at this time? Y N

Prosocial Behaviors

What behaviors do you want to see more of? _____

How often does this behavior occur? _____ How often would you like to see this behavior occur? _____

What do you do when your child does this behavior? _____

What do you do when your child does not do this behavior? _____

Why do you think your child does not display this behavior as much as you would like? _____

Notes: _____

3

Treatment Goals

Why do you think your child does these behaviors? _____

What do you think will happen if you don't address your concerns? _____

What do you think you will have to change to improve your child's behavior? _____

What are your child's strengths? _____

What are your families' strengths? _____

Is there anything that I did not ask that would be important for us to know? _____

Additional Contacts:

Name: _____ Phone # _____

Name: _____ Phone # _____

Additional Notes

Trauma Questionnaire

Describe incident(s): _____

Frequency of Abuse (how many times): _____

Duration (time frame): _____

Was abuse by family member/stranger /isolated event? Explain: _____

Please list trauma stress symptoms (affect regulation, re-experiencing, avoidance, numbing, or increased arousal):

1. Does the child speak about it? _____
2. Does the child ask questions? _____
3. What is his/her affect like when discussing/asking? _____
4. Do you see these events in their play? Rough play? Refusal to play? _____
5. Does the child have nightmares? How many a night? How many nights a week? How do you respond? What does the child do (run to caregiver, hide under bed, etc.)? _____
6. Do you see blank stares? How often? How long do they last? How do they stop? _____
7. Any changes to eating habits, sleeping habits, toilet training problems? _____
8. How do they respond when the topic is brought up? Avoidance? No reaction? Anger? Sadness? _____
9. For visitation: How does the child behave before the visit? After the visit? Does your child talk about their visits and if so, what do they say? _____
10. Hypervigilance? Does she/he become scared easily? What scares him/her? _____

Notes: _____

5

Case Study: Zoey

Age: 2 years, 4 months

Race/Ethnicity: African American

Family: Great-grandma (72), Grandma (55), Mom (38), Dad (35), older half-sister (13) older half-brother (17). Both parents work, trade off taking care of Zoey with her Great-grandmother

Reason for referral: Temper tantrums, oppositional behaviors, aggression, short attention span/impulsivity. Behaviors worse in public, occur most frequently with Dad, least frequently with G-grandma

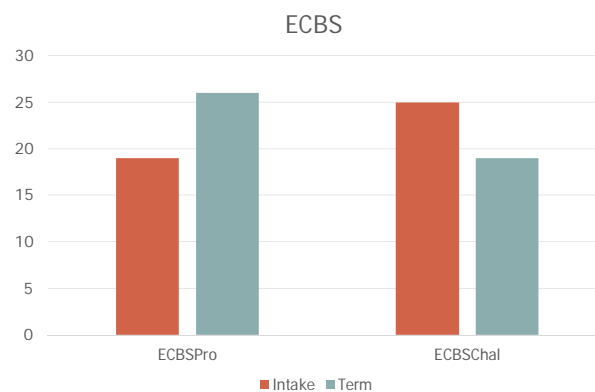
Treatment: 9 sessions (1 hour/week): 2 intake, 6 treatment, 1 termination/post-test session

Treatment challenges: Inconsistent responses to behaviors between Mom, Dad, and G-grandma; psycho-education for mom about developmentally appropriate expectations; Mom & Dad guilt over job/time away from Zoey; Zoey's speech delay

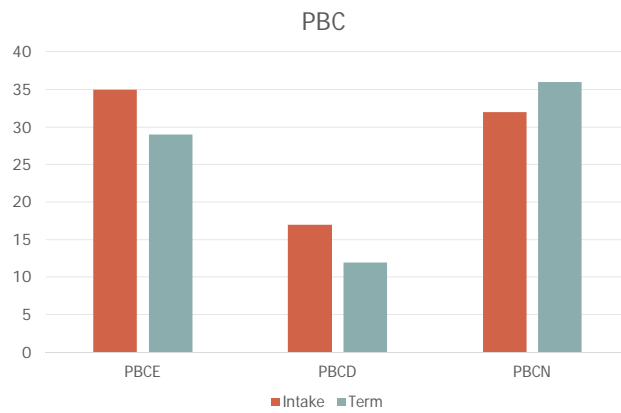
Treatment Plan: Psychoeducation about developmentally appropriate expectations, behavior cycles, consistent responses, following through; child-led play; Birth-3 services for speech



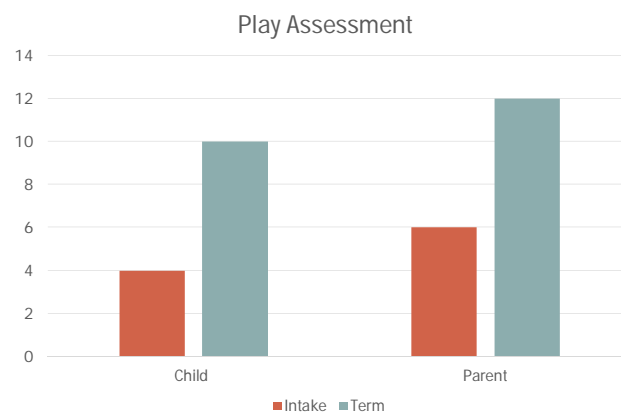
Case Study: Zoey



Case Study: Zoey

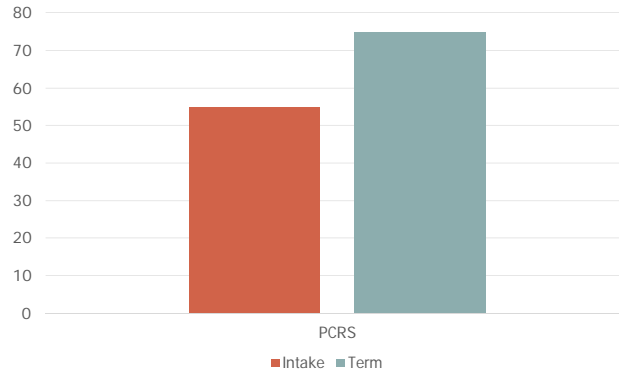


Case Study: Zoey



Case Study: Zoey

Parent-Child Relationship Scale



Reporting Outcomes: Termination Report

1

Termination Report

Name: Zoey
Age: 2; 5 months
Date of Termination: xx/xx/xx
Agency: Behavior Clinic
Case Clinician: Lauryn Besaisie, M.S.

Parents: Trisha, Dan
Address: xxxxx N. xx St.
Milwaukee, WI 532xx
Phone: 414-xxx-xxxx

Referral and Background Information

Zoey, a 2 year, 4 month old African American female, was referred to the Behavior Clinic by her parents, Trisha and Dan, due to concerns with temper tantrums, aggression and short-attention/impulsive behaviors. These behaviors have become increasingly challenging for both Dan and Trisha, especially as they occur more often in public places such as the playground and at church. An intake evaluation was completed on xx/xx/xx. Based on parental report and clinical observation, Zoey met criteria for a diagnosis of Unspecified Disruptive, Impulse Control, and Conduct Disorder.

Treatment Progress and Summary

A total of six treatment sessions occurred in the family's home. During treatment, the clinician provided psychoeducation to Trisha and Dan regarding developmentally appropriate expectations of young children, behavior cycles, consistent responses, and following through. The clinician introduced strategies for decreasing challenging behaviors, including ignoring, time-out, and natural consequences. In addition, the clinician introduced child-led play and rewards for increasing positive behaviors. Treatment also included establishing consistent routines, and preparing Zoey for church (church bag). Trisha reported using the treatment strategies somewhat consistently, while Dan reported using the treatment strategies somewhat inconsistently. The need for consistent responses was addressed with both Dan and Trisha. Subsequently, Trisha reported that Zoey's challenging behaviors decreased, and her confidence in managing challenging behaviors increased. In addition, Trisha reported fewer challenging behaviors surrounding doctor's appointments and medical procedures. Behavior Clinic services were terminated on xx/xx/xx as all treatment goals had been met. At termination, Zoey no longer met criteria for Unspecified Disruptive, Impulse Control, and Conduct Disorder.

Recommendations

Trisha and Dan should continue to stop and think before responding to Zoey. Dan and Trisha should continue to implement treatment strategies with Zoey, including time-outs, natural consequences, rewards, and child-led play. Trisha and Dan should continue to seek services for Zoey's speech concerns and monitor her progress. If Trisha or Dan have difficulty managing Zoey's behaviors in the future, they should contact the Behavior Clinic to re-engage in services.

DSM-5 Evaluation

Possible speech delay

Grants

Sample Portion of Mid-Year Grant Report

Organization Name	ProEd's Children's Center Behavior Clinic
Address	411 North 38 th Street Milwaukee WI 53213
Director Name	Kathie Pitt
Director Email	kathie.pitt@proed.org
Project's Focuses/Project Name	Home-based mental health services for young children living in poverty. Prevention of child abuse
Project's Focuses/Project Lead (last, first, middle)	
Project's Focuses/Project Lead (last, first, middle)	

Reporting Period: January 1, 2013 to June 30, 2013

- 1. Breakdown:**
 - a. Child Abuse and Neglect:** This is the primary legislative benchmark addressed by our program. The number one cause of child abuse is a young child with significant behavior problems (e.g., constant whining, frequent crying episodes, tantrums, aggression, destructions, and hitting). Parents who are not prepared to understand or manage their children's challenging behaviors often resort to abusive methods (use of a belt, physically striking the child, occasionally shaking the child, or being sent to bed by being left alone in a child's bedroom). This can lead to neglect, which in turn results in harm to the child. We are children with a history of violent acts and children very vulnerable to harm. Our control of children who have already experienced trauma in their young lives has increased during the past few years (i.e. physical and sexual abuse, neglect, witnessing domestic violence, and community violence). Some parents whose children play with their children because they are afraid they are being hurt or abused. Other parents afraid to not let their children. Our home-based parent and child therapy (PCT) program, *Early Pathways: Home-Based Mental Health Services for Young Children in Poverty*, directly addresses the behavior problems in children that may lead to abuse and neglect. We encourage parents and other caregivers to become treatment partners and, over time, they learn new methods for successfully managing and reducing their children's behavior problems. They also gain confidence through their newfound knowledge and skills. As part of this program review, we created a 3-hour online training program to teach other professionals how to implement the program, along with an in-person training manual. This year, we are testing a new trauma-informed program called *Low-Risk Trauma-Informed Strategies for the At-Risk Professional Serving Young Children and Families Living in Poverty*. We are hopeful this new program, along with our ongoing program for addressing behavior problems (*Early Pathways*), will provide a more comprehensive approach to treating the children we serve.
 - 2. Participants:** We have served the target population defined in our original application, namely, children 1 year of age and younger with significant emotional and behavioral problems, including trauma, the majority of whom live in poverty. In our original application, we indicated we would serve 100 children in the first six months of the program. From January 1, through June 30, 2013, we served 104 children. We have been able to serve all of the target population. Please Note: These 104 children also include children who started treatment in 2012 and continued to receive services in 2013, as well as children who completed a referral, but were not available for an intake. Each referral takes about 1/2 hour of staff time, so we just do it in person to include these children as well.

Sample Portion of Mid-Year Grant Report

At the beginning of treatment, the therapist and Aanya's mother discussed and developed a plan that would allow Aanya to take small steps that would lead to the bigger goal of being able to separate from her mother (i.e., desensitization). The ultimate goal was to have Aanya attend a day care setting, which would allow Aanya's mother to return to work. The first step the therapist and Aanya's mother worked on was setting limits regarding the center. Aanya and her mother would have while in the same area together – such as having Aanya sit next to her mother while playing with toys instead of sitting on her mother's lap. The therapist assisted Aanya's mother in setting limits during sessions, and Aanya's mother practiced setting these limits between sessions. The therapist also recommended Aanya's mother use positive praise when Aanya was able to follow the limits that were set. Aanya's mother also used a weekly separation schedule of times Aanya needed to be independent, and times she could sit with her mother.

After practicing setting limits and using the separation schedule, the therapist assisted Aanya's mother in developing separation rituals and routines to help Aanya transition from her mother to another caregiver. Aanya's mother practiced phrases to communicate to Aanya that she would be leaving, but that she would also be coming back to get her. A method today here was used as an object that was given to Aanya during transition. Aanya could also use this transitional item for crying, and in giving her a hug while she was separated from her mother. Aanya and her mother practiced giving her a hug when she was calm in order to make this a familiar activity when Aanya was emotionally dysregulated. Aanya's mother communicated and showed other caregivers how to help Aanya use the transitional object as a way to help Aanya cope and calm down. To practice these skills, the therapist simulated Aanya's mother leaving using the separation rituals and routines, in which Aanya's mother would go to another room in the home and Aanya would play with the therapist. After communicating to Aanya's mother to use the separation rituals and routines, the therapist began using the same techniques and strategies, and would leave Aanya with family members while she would complete sessions.

After Aanya began to progress and come some tolerance for being separated from her mother, the therapist arranged for Aanya to attend a day care program with the therapist, which would allow Aanya's mother the opportunity to practice transitioning Aanya to caregivers other than family members. The day care program was outside Aanya's home, and directly simulated the type of setting Aanya would attend when her mother returned to work. At first, Aanya became distressed when separating from her mother to attend this type of setting; however, the therapist continued to emphasize the techniques and strategies that had been established in the home, in the classroom setting. Week by week, Aanya began to tolerate separation from her mother and adjust to the classroom setting. She also began to interact with toys and other children in the classroom. After attending the classroom setting with the therapist several times, Aanya's mother obtained employment and Aanya began to attend a day care program without the therapist. Aanya did well transitioning to her day care, and her mother was able to go to work knowing that Aanya would feel comfortable and participate in the day care's program and activities.

When treatment concluded, Aanya was able to attend a day care program, and her mother was confident sending her to day care. Aanya's mother was able to obtain employment and regain her ability to provide for her family. Thanks to the Behavior Clinic, both Aanya and her mother felt comfortable and confident spending quality time together, but also spending time apart! A total of 12 sessions were provided for Aanya during a four-month period.

Sample Portion of Mid-Year Grant Report

(families are receiving some of our services). For the OPTS data system, we only included children who had completed an intake in 2013, so this total number will be less than the 104 we reported previously. The total number of children completing an intake in 2013 was 118. The average age of our population who completed an intake in 2013 was 2.72 years, with a range of 1 to 5 years of age with 67% boys and 33% girls. Of these children, 50% were African American, 23% were Latino, 9% were Caucasian, and 18% were multi-racial. We also collect data on whether or not our families receive public assistance, which is how we determine if they live below the federally-defined poverty level. Based on our data, 88.4% of the children served come from families living in poverty.

3. Program Activity: Please provide the total number of participant services hours provided between January 1, 2013 and June 30, 2013.

Total number of participant services hours = 1,704

These service hours include: 180 referrals (1 hour per referral), 132 intake sessions (2 hours per session with some families requiring 2 or 3 intake sessions to collect all of the required information), 740 treatment sessions (1.25 hours per session), 18 post-treatment sessions (1 hour session), 174 in 6-week follow-up sessions for participants enrolled in the New Hope Program (1 hour session), and 14 ethical-advocacy sessions – which included getting families needed resources, arranging medical appointments, and scheduling parent counseling to name a few. These advocacy hours are not reflected in the service hours above, though some of these have occurred when we were working with a family (e.g., making an appointment with a pediatrician, calling a school for an IEP evaluation). Also significant staff time is spent advocating for children and their families and some of this time is non-billable.

4. Project Outcomes: A project outcome is the project's results, in other words, the impact of the program on people between January 1, 2013 and June 30, 2013.

- a. Project Outcomes:** At intake, a number of measures are used to assess the child's (behavioral and emotional problems, as well as the parent's parenting skills). For children who completed our *Early Pathways* program, the *Early Childhood Behavior Screen* indicated that 80% reduced their challenging behaviors (aggression, tantrums, etc.) and 70% increased their prosocial behaviors (sharing, following parent requests, etc.). In addition, based on the *Parent Behavior Checklist*, improvements in parent management strategies were also observed. Parents were more nurturing (71%) and stated significantly less or verbal and corporal punishment for discipline (70%). Parents also changed their monitoring style or how experienced the their children to more reasonable ones (64%). Based on a direct observation of the parents and children playing together, 80% of parents and children reported the quality of their play (dividing participation in the *Early Pathways* Program). The quality of the parent-child relationship improved following the completion of the program (80%), based on the *Parent-Child Relationship Scale*. Finally, 10% of children with a psychiatric diagnosis at intake no longer met the criteria for a diagnosis at post-treatment.
- a. Participant Success Stories:** Please share one story of success achieved by a participant during this reporting period. Please use initials or a fictitious name to ensure confidentiality.

Aanya, a multi-racial child, was referred to the Behavior Clinic when she was 1 year, 7 months old by her service coordinator at a Birth-to-3 agency. She is concerned with Aanya's inability to separate from her mother. When separated from her mother, Aanya's behavior becomes very extreme and included crying, screaming, difficulty breathing, vomiting and difficulty or refusing to eat, which Aanya's mother reported happening from the time Aanya was a young infant. Due to Aanya's difficulty in separating from her mother, her mother was unable to return to work, which put a financial strain on the family. Aanya's mother was a single mom with five children (siblings: ages 3, 5, 6 and 8) living in poverty.

Recent Publications

1. Fox, R.A. (1994). *Parent Behavior Checklist*. Formerly published by Clinical Psychology Publishing, Brandon VT and ProEd Publishers, Austin, TX; currently available from the author.
2. Fox, R.A., Keller, K. Grede, P., & Bartosz, A. (2007). A mental health clinic for toddlers with developmental delays and behavior problems, *Research in Developmental Disabilities*, 28, 119-129.
3. Fox, R.A., & Holtz, C.A. (2009). Treatment outcomes for toddlers with behavior problems from families in poverty. *Child and Adolescent Mental Health*, 14, 183-189.
4. Holtz, C.A., Carrasco, J.M., Mattek, R.J., & Fox, R.A. (2009). Behavior problems in toddlers with and without developmental delays: Comparison of treatment outcomes. *Child & Family Behavior Therapy*, 31, 292-311.
5. Mattek, R. J., Jorgenson, E.T., & Fox, R.A. (2010). Home-based therapy for young children in low-income families: A student training program. *The Family Journal: Counseling and Therapy for Couples and Families*, 18, 189-194.
6. Holtz, C.A., & Fox, R.A. (2012). Behavior problems in young children from low-income families: The development of a new screening tool. *Infant Mental Health Journal*, 33, 82-94.
7. Carrasco, J. M. & Fox, R. (2012). Varying Treatment Intensity in a Home-Based Parent and Child Therapy Program for Families Living in Poverty: A Randomized Clinic Trial. *Journal of Community Psychology*, 40, 621-630.
8. Fox, R.A., Mattek, R., & Gresi, (2013). Evaluation of a university-community partnership to provide home-based, mental health services for children from families living in poverty. *Community Mental Health Journal*, 49, 599-610.
9. Solis, P.S., Fung, M. P., & Fox, R.A. (2014). Parenting in Mexico: Relationships by love and obedience. In Helaine Selin (Ed.) *Parenting across cultures: Childrearing, motherhood and fatherhood in non-western cultures*. The Netherlands: Springer Publishing.
10. Gresi, B.L., Fox, R.A. & Fleischmann, A. (2014). Home-based parent-child therapy in low-income African American, Caucasian, and Latino Families: A comparative examination of treatment outcomes, *Child & Family Behavior Therapy*, 36 (1), 33-50, DOI:10.1080/07317107.2014
11. Fung, M.P., & Fox, R.A. (2014). The culturally-adapted early pathways program for young Latino children in poverty: A randomized controlled trial. *Journal of Latina/o Psychology*, 2, 131-145. DOI-10.1037/lat0000019.
12. Tate, K. A., Lopez, C., Fox, R., Love, J. R., McKinney, E. (2014). In-home counseling for young children living in poverty: An exploration of counseling competencies. *The Family Journal*, 22, 371-381. DOI: 10.1177/1066489714530268
13. Fung, M., P., Fox, R. A., & Harris, S. E. (2014). Treatment outcomes for at-risk young children with behavior problems: Toward a new definition of success. *Journal of Social Service Research*, 40, 623-641. <http://dx.doi.org/10.1080/01488376.2014.915263>
14. Harris, S. E., Fox, R.A., & Love, J.R. (2015). Early Pathways therapy for young children in poverty: A randomized controlled trial. *Counseling Outcome Research and Evaluation*, 6, 3-17, doi: 10.1177/2150137815573628

Presentations

1. Holtz, C. A., Carrasco, J. M., & Fox, R. A. (2008). Development of a screening measure for behavior problems in young children. Paper presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando FL.
2. Mattek, R. J., Carrasco, J. M., Holtz, C. A., Fox, R. A. (2009). Treatment outcomes for toddlers with developmental delays and behavior problems receiving in-home, family behavioral therapy. Paper presented at the 2nd Annual Pediatric Behavioral Health Research Conference: Existing Projects and Promising Innovations in Southeastern Wisconsin. Children's Hospital Research Institute, Milwaukee WI.
3. Gresl, B., Mattek, R.J., & Fox, R.A. (2010). In-Home Treatment for Toddlers with Developmental Delays and Behavioral Problems. Wisconsin Infant and Early Childhood Mental Health, Early Relationships Matter Conference, Lake Geneva, Wisconsin.
4. Holtz, C.A., Carrasco, J.M., Mattek, R.J., & Fox, R.A. (2010). Behavior problems in toddlers with developmental delays: Treatment outcomes. Paper presented at Head Start's 10th National Research Conference, Washington D.C.
5. McCormick, K., & Fleischmann, A. (March 2012). In-home parent-child therapy for toddlers. Workshop presented at the annual Fulfilling the Promise conference, Stevens Point, WI.
6. Gresl, B. L., & Fox, R. A. (March, 2014). *Barriers to treatment in a pediatric population from families in poverty*. Paper presented at The Society of Pediatric Psychology Annual Conference. Philadelphia, PA.
7. Fung, M. P., & Fox, R. A. (May, 2014). The Early Pathways Program for Young Latino Children in Poverty. Paper presented at the Midwestern Psychological Association Annual Conference, Chicago, IL.
8. Harris, S. E., Fox, R. A., Love, J. & Stocker, A. (2014, May) Early Pathways: Home-Based Therapy for Young Children in Poverty. Paper presented at the Midwestern Psychological Association, Chicago, IL.
9. Harris, S. E., & Fox, R. A. (2014, August). Validation of a First Line Screener for Early Childhood Behavior Problems. Poster session presented at the American Psychological Association, Washington, DC.
10. Love, J. R., Harris, S.E., Fox, R.A., Scheunemann, J.L. & Besasie, L. A. (2015, May) Imaginative play in children's academic school readiness: Preliminary findings for a Latino sample of young children living in poverty. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.
11. Love, J. R., Scheunemann, J. L., & Fox, R.A. (2015, May). New Hope for very young children exposed to trauma: Two case studies. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.



Questions? Comments?

BEHAVIOR CLINIC SURVEY: FAMILY

This questionnaire will help us to evaluate and continually improve the program we offer. We are interested in your *honest opinions* about the services you have received, whether they were positive or negative. Please answer all the questions.

Please circle the response that best describes how you honestly feel.

1. How would you rate the quality of the service you and your child received at the Behavior Clinic?

7	6	5	4	3	2	1
Excellent		Good		Fair		Poor

2. To what extent has the Behavior Clinic helped improve your child's behavior?

7	6	5	4	3	2	1
A lot		Quite a Bit		A little		Not at All

3. To what extent has the Behavior Clinic helped you improve how you manage your child's behavior?

7	6	5	4	3	2	1
A lot		Quite a Bit		A little		Not at All

4. If you were to seek help again, would you come back to the Behavior Clinic?

1	2	3	4	5	6	7
No, definitely not		No, I don't think so		Yes, I think so		Yes, definitely

5. In your opinion, how is your child's behavior at this point?

1	2	3	4	5	6	7
Considerably worse	Worse	Slightly worse	The same	Slightly improved	Improved	Greatly improved

6. Would you tell others about the Behavior Clinic if their child had behavior problems?

1	2	3	4	5	6	7
No, definitely not		No, I don't think so		Yes, I think so		Yes, definitely

7. How confident are you in managing your child's behavior in the future?

1	2	3	4	5	6	7
Not at all confident		Somewhat confident		More Confident		Very Confident

8. What does caregiver feel contributed most to their child's overall improvement?

9. Now ask the caregiver to put themselves in their child's shoes and ask, what would the child say was the most important reason that they improved their behavior/stress?

Early Pathways Therapy for Young Children in Poverty: A Randomized Controlled Trial

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Sara E. Harris¹, Robert A. Fox¹,
and Joanna R. Love¹

Abstract

Early Pathways is a home-based, parent and child therapy program for the treatment of disruptive behaviors among young children living in poverty. In this study, 199 clinically referred children were randomly assigned to an immediate treatment (IT) or wait-list control (WL) conditions. Results indicated that parents in the IT condition reported significant improvements in their child's disruptive and prosocial behaviors and increased nurturing and decreased use of corporal and verbal punishment by their parents compared to the WL families. Gains were maintained for children in both the IT and WL conditions at 3-month follow-up.

Keywords

behavior problems, young children, poverty, home-based, efficacy, treatment, speciality

Research has shown that psychopathology in early childhood is comparable to that found in school-age children (Egger & Angold, 2006). Approximately 9–15% of preschool aged children exhibit symptoms severe enough to qualify for an externalizing disorder and 11–15% of preschoolers exhibit symptoms severe enough to qualify for an internalizing disorder (Egger & Angold, 2006; Keenan, Shaw, Walsh, Delliquadri, & Giovannelli, 1997). Externalizing problems include behaviors such as physical aggression, verbal aggression, oppositional behaviors, hyperactivity, impulsivity, and weak attentional control (Qi & Kaiser, 2004), while internalizing problems have been defined as including symptoms of anxiety or depression such as withdrawal, fearfulness, or loss of interest in activities that were previously enjoyed (Eisenberg et al., 2001). Externalizing behaviors concerns are often not transient and

demonstrate evidence of longitudinal stability even when their presentation occurs at young ages. Longitudinal research tracking children from preschool age to early adolescence suggests that 17–27% of children experience persistent externalizing behavioral concerns (Cote, Vaillancourt, LeBlanc, Nagin, & Tremblay, 2006; Fanti & Henrich, 2010). For a more

¹ Department of Counselor Education and Counseling Psychology, Marquette University, Milwaukee, WI, USA

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Corresponding Author:

Robert A. Fox, Department of Counselor Education and Counseling Psychology, College of Education, Marquette University, Schroeder Complex, P.O. Box 1881, Milwaukee, WI 53201, USA.

Email: robert.fox@marquette.edu

complete review on the research on common externalizing and internalizing behavior disorders in preschoolers, please see Egger and Angold (2006).

Externalizing Behaviors in Children Living in Poverty

Children in poverty are at particular risk for both developing and maintaining externalizing behavior problems (Cote et al., 2006; Fanti & Henrich, 2010; Qi & Kaiser, 2003). Psychopathology rates are higher among preschool children from families living in poverty (Keenan et al., 1997), with prevalence rates of externalizing behavior problems in low-income preschoolers enrolled in Head Start programs range from 16% to 30% (Qi & Kaiser, 2003). Moreover, low-income children have disproportionally more unmet mental health needs than their higher socioeconomic status (SES) counterparts, particularly those who are of minority status (Santiago, Kaltman, & Miranda, 2013). Low family income is associated with multiple environmental risk factors, such as exposure to violence, unsafe physical environments, reduced psychosocial stimulation, and family instability (Evans, 2004). These environmental factors create a developmental context that can interfere with a developing child's self-regulation, negatively bias social information processing, or model antisocial behavior, placing children at increased risk of developing externalizing behavior problems (Dearing, McCartney, & Taylor, 2006; Dodge & Pettit, 2003; Hinshaw, 2002). The harmful effect of poverty on the development of externalizing behaviors has been found to be most significant when children are chronically poor (Dearing et al., 2006).

Poverty is also cited as a risk factor for the stability of high-intensity externalizing behavioral problems (Cote et al., 2006; Fanti & Henrich, 2010). The quality of the parent-child relationship may contribute to the stability of the externalizing behaviors in children. Families living in poverty have been found to use more punitive and less responsive parenting practices, and a poor parent-infant relationship

(characterized by high negative regard, low positive regard, and low sensitivity) is a risk factor for increased externalizing behaviors in early childhood and later in adulthood (Evans, 2004; Lorber & Egeland, 2009). Given the heightened risk for children in poverty developing externalizing behavior problems that can persist throughout childhood and into adulthood, empirically validated programs that are specifically developed for very young children with significant behavior problems living in poverty are needed.

Interventions for Young Children With Externalizing Behaviors

Available parent-child therapy (PCT) programs have been proven to be efficacious for the treatment of externalizing behaviors in early childhood. Programs such as Parent Child Interaction Therapy (PCIT; Eyberg & Boggs, 1989) and the Incredible Years Parenting Program (IYP; Webster-Stratton, 1992) have strong empirical support for the treatment of behavioral problems in younger children. Researchers have completed some preliminary work on their treatment effectiveness with lower SES and racially/ethnically diverse groups of children with promising results (e.g., Fernandez, Butler, & Eyberg, 2011; Reid, Webster-Stratton, & Beauchaine, 2001). Additionally, the Child FIRST program has demonstrated efficacy in reducing externalizing behaviors in a diverse sample of young children from low-income families (Lowell, Carter, Godoy, Paulicin, & Briggs-Gowan, 2011). However, there is a need for more intervention research with this underserved population.

The *Early Pathways (EP) Program: Home-Based Therapy for Young Children in Poverty* was developed specifically to address externalizing behaviors in young children living in impoverished backgrounds. This program has been field tested in two large-scale, community-studies with diverse families living in poverty (Fox, Mattek, & Gresl, 2013; Gresl, Fox, & Fleischmann, 2014) and the initial outcomes were positive for the children and their caregivers. Additionally, a culturally adapted

version of the EP program was implemented with successful outcomes with an all Latino sample using a randomized control methodology (Fung & Fox, 2014). However, the original EP program has not been studied with a diverse population of young children from families in poverty using a rigorous randomized control methodology, which would strengthen its potential as an evidence-based program and its use with a wider population of children. Randomized controlled studies are considered the most rigorous means of detecting a causal relationship between the treatment and the outcome (Sibbald & Roland, 1998). Thus, the inclusion of such a study will serve to critically examine the effect that EP has on treatment outcomes with a diverse sample of children.

Attrition

Although the need for such a study is clear, there are inherent challenges associated with treatment of toddlers and preschoolers living in poverty, particularly problems surrounding attrition. Research has found that poverty is positively related to higher drop-out rates (Armbruster & Fallon, 1994; Fox & Holtz, 2009; Kazdin & Mazurick, 1994). For example, when PCIT was implemented with predominantly low-income African American families, the drop-out rate was 56–67%; however, the sample sizes (ranging from 14 to 18 participants) were relatively small (Fernandez et al., 2011). Contextual factors, such as lack of reliable transportation, loss of phone services, distance from service providers, difficulty keeping appointments, and frequent relocation, most often contribute to early dropout (Kruzich, Jivanjee, Robinson, & Friesen, 2003).

To help address barriers to treatment and reduce attrition rates, EP was specifically adapted to meet the typically lower educational attainment of caregivers in poverty. The largest change was designing EP to be delivered in the children's homes rather than at a clinic, university, or laboratory site. Home-based therapy has several advantages to traditional clinic-based therapy for families in poverty including increased engagement, the provision of

services to individuals who would otherwise be unable to attend sessions at a clinic, the ability to better tailor the services to fit the unique needs of the family and their home setting (e.g., determining an appropriate time-out location in a small apartment with several individuals in residence), and the opportunity to model appropriate treatment strategies for parents and to immediately address behavioral concerns as they naturally occur in child's home environment while providing feedback to caregivers (Gresl et al., 2014; Lowell et al., 2011). A number of adaptations to the program itself also were made and are described in the Method section of this article.

Research Questions and Hypotheses

Research Question 1: Do children in the immediate treatment (IT) group decrease challenging behaviors from pretest to posttest as measured by the Early Child Behavior Screen–Challenging Behavior Scale (ECBS-CBS) compared to the wait-list (WL) group?

Hypothesis 1: Children's challenging behaviors in the IT group will be significantly lower than the WL group, based on the results of the ECBS-CBS.

Research Question 2: Do children in the IT group increase prosocial behaviors from pretest to posttest as measured by the Early Child Behavior Screen–Positive Behavior Scale (ECBS-PBS) compared to the WL group?

Hypothesis 2: Children's prosocial behaviors in the IT group will be significantly higher than the WL group, based on the results of the ECBS-PBS.

Research Question 3: Do parents of children in the IT group decrease their use of verbal and corporal punishment, as measured by the Parent Behavior Checklist (PBC), compared to the WL group?

Hypothesis 3: Parents' use of verbal and corporal punishment will be significantly lower for the IT group compared to the WL group, based on the results of the PBC.

Research Question 4: Do parents of children in the IT group increase their frequency of nurturing behaviors, compared to the WL group?

Hypothesis 4: Parents' use of nurturing will be significantly higher for the IT group compared to the WL group, based on the results of the PBC.

Research Question 5: Do parents and children in the IT group increase their engagement and warmth during play, based on an increase in the total scores on the Parent–Child Play Assessment (PCPA), as compared to the WL group?

Hypothesis 5: Parent and child engagement and warmth during play will be significantly higher for the IT group compared to the WL group, based on the total scores on the PCPA.

Research Question 6: Will treatment gains in decreasing the children's challenging behaviors, increasing the children's prosocial behaviors, decreasing the parents' use of corporal and verbal punishment, and increasing parental nurturing be maintained for both groups at the 3-month follow-up after treatment completion, in comparison to the initial pretreatment baseline?

Hypothesis 6: Treatment gains in decreasing the children's challenging behaviors, increasing the children's prosocial behaviors, decreasing the parents' use of corporal and verbal punishment, and increasing parental nurturing will be significant for both groups at the three months of follow-up after treatment was completed in comparison to the initial pretreatment baseline.

Method

Participants

Participants included 199 children between the ages of 1 and 5 consecutively referred to a clinic specializing in serving young children with externalizing behavior problems in poverty (Fox, Keller, Grede, & Bartosz, 2007) by over 60 referral sources including pediatricians, public health nurses, birth-to-three agencies, the child welfare bureau, children's hospitals, among others. Children with prior diagnoses of Autism Spectrum Disorders were excluded from the study and were referred for more intensive services. Children who were not receiving public assistance, which required that their annual family income was below the federal poverty level, were also excluded from the study. Although the EP program has demonstrated effectiveness with populations that include children who meet the federal definition of poverty and those that do not qualify, the original program was designed specifically to meet the needs of families in poverty. Thus, children who did not meet the federal definition of poverty were not included in our current study. These children, however, still received the full range of services at the clinic. The average age for a child in this sample was 2.88 years ($SD = 1.09$). The sample was predominantly composed of male (70.4%), African American (38.7%), and Latino/a (41.2%) children. The primary caregivers' average age was 28.16 years ($SD = 6.89$). The primary caregiver was typically the mother (95.5%) and most caregivers were unmarried (73.1%). There were no significant differences on any demographic variables between the WL and IT groups.

EP Program

The EP treatment program included four core elements: (a) strengthening the parent–child relationship through child-led play; (b) helping parents maintain developmentally appropriate expectations for their child and learn cognitive strategies to respond calmly and thoughtfully to their child's challenging behaviors; (c) using positive reinforcement, teaching strategies, and

establishing family routines to strengthen the child's prosocial behaviors; and (d) using limit-setting strategies to reduce the child's challenging behaviors, such as redirection, ignoring, or time-out. These psychoeducational components normally were introduced in the first four to six treatment sessions, depending on the parents' learning style and ability to grasp and implement the concepts being taught. Additional sessions included problem-solving strategies to adapt the treatment techniques to the child's unique home situation and instruction in skills to improve the child's listening and to create a safe and predictable home routine.

The EP treatment program is designed for implementation over the course of 8–10 sessions. The initial sessions are focused on strengthening the parent–child relationship, while the latter sessions introduce discipline strategies. The first session includes an initial intake session in which the parent is oriented to EP and all parent report measures are completed. An observation of the parent–child play is directly observed and the quality of this interaction is rated. The concept of child-led play is introduced and initial treatment goals are formed. Additionally, the family is connected with advocacy resources as needed. The second session involves reviewing the results of the intake session and developing a treatment plan. Child-led play is reviewed, and parents are coached in-session regarding ways in which to engage with their child during the play session. This coaching first involves the clinicians modeling the play and then parents practicing and received feedback during the play interaction. Parents are required to conduct child-led play once daily for 15 min as a part of the treatment. Additionally, clinicians work with parents to identify ways to effectively praise their children by helping them clarify the type of reinforcement they would like to use (e.g., social, tangible, and edible), the timing of the praise (ideally as close to compliance as possible), and the frequency in which the praise should occur. Finally, psychoeducation is provided to help differentiate between their child's behavior and temperament/personality. Parents are strongly

encouraged to separate the child from their behavior. For example, instead of saying “You are a bad boy for hitting,” parents were coached to say, “You should not hit others.” The third session includes psychoeducation on the child's language, cognitive, and social–emotional development based on child's developmental age to ensure that expectations for the child are appropriate. Next, the concept of a negative behavior cycle is introduced and includes the following: a brief statement of the child's challenging behavior (tantrums), what the parent thinks when the behavior occurs (“My child does not respect me”), how the parent feels when the behavior occurs (“I am really angry”), how the parent reacts when the behavior occurs (yelling), and what the child learns from this cycle (to continue the tantrum in the future for more attention). Ways in which the parent can alter this negative behavior cycle are explored in session through a cognitive behavioral technique where parents are taught to Stop, Think, Ask, and Respond (STAR) before addressing their child's challenging behaviors and to interrupt the negative behavior cycle. This technique prompts parents not to respond immediately to their child's negative behaviors (unless a safety concern is present such as a child reaching for a hot burner on the stove), think about how their child's behavior is affecting their own thoughts and feelings, ask themselves about the challenging behavior in context of their child's developmental level, and respond in a manner that is thoughtful, deliberate, and in line with their goals for their child. During the fourth session, parents are coached on how to give effective requests. They are taught to use the STAR technique before making a request, consider their timing (waiting for a natural break in play), establish eye contact, break down larger tasks into smaller steps, use statements and not questions, repeat directions only once, follow through with consequence for noncompliance, and use positive reinforcement following compliance. Following this session, parents are encouraged to conduct daily 5-min “listening sessions” that practice effective commands with their children in addition to the child-led play.

Session 5 focuses on establishing home routines and focuses on ways to prepare children if their routine becomes disrupted (e.g., prompting children ahead of time of a doctor's appointment). Once a positive parent-child relationship and structured environment are in place, the sixth session focuses on discipline strategies. Discipline strategies modeled and practiced in session include redirection, ignoring, natural consequences, and time out, and always consider the child's developmental level. The final two sessions include reviewing and refining treatment strategies and completing posttest paper work. Based on the clinician's judgment, more sessions can be added to meet the parent's goals for their child. For a more thorough explanation of all treatment strategies, refer to the EP Treatment Manual (Fox & Gresl, 2014) or the web-based 10-hr training course for professional mental health practitioners (www.marquette.edu/early-pathways).

A number of important adaptations were made in the EP program to tailor it to families living in poverty. First, significant time was spent initially establishing rapport and trust with the families. This step often resulted in the identification of unique challenges faced by these families (e.g., limited care from a pediatrician and rarely any care from a dentist, high lead levels in children, lack of stable housing, involvement by child protective services, unsafe neighborhoods, children not enrolled in school or therapy programs despite obvious speech and other delays, children witnessing intimate partner abuse, parents needing mental health services to address their own past trauma or mental health problems, several people living in a small space, limited food, absence of toys, etc.). Consequently, clinicians often assumed an early advocacy role and connected the family with available community resources to begin to meet these often overwhelming needs and reduce family stress. Some families were also provided with a parent mentor to help them navigate the complex service delivery programs. Rules were established early in the treatment sessions, such as the child and caregiver must be present for all sessions, no TV,

visitors, cell phone use, or other distractions, involving other appropriate caregivers including grandparents living in the home as well as older siblings, and contacting the clinician ahead of time for any absences. All families were contacted the day before a session to remind them of the appointment. By the third session, each family was reviewed regarding their attendance and level of engagement. Clear policies about unexcused absences were reviewed and when necessary, services were postponed (family crisis) or in some cases terminated (family moved or could not be contacted). Often these families were reengaged at a later time when they were more ready to participate. All handouts and program materials were written at a lower reading level and the clinicians provided all materials needed to implement the program to the family (e.g., toys, reinforcers, door handle covers, cabinet locks, and child-proof gates to protect the child's safety). Clinicians used a structured training format that included a brief explanation for the rationale of a technique such as quiet time, modeling the technique for the caregiver, having caregiver practice the technique with their children, and finally the clinician providing positive and corrective feedback to the caregiver. Simple and realistic treatment plans were provided at the end of each session for the parent to implement between sessions such as use non-directive play with the child once/day for 15 min. Parents were provided recording sheets that required simple check marks regarding whether or not they implemented the treatment plan. Clinicians were flexible in implementing EP. For example, if a child was very aggressive at intake and had the potential to cause harm to a new infant sibling, a quiet time may be introduced right away to protect the child and infant although normally, limit-setting procedures were not introduced until later in the program. Clinicians also were instructed in culturally sensitive practices. For example, Latino fathers often felt that early child rearing was the mothers' responsibility. As such, although fathers were encouraged to participate, their wish to remain in the background during sessions was respected. Parent feedback about their

perceptions of the EP program near the end of their participation also was incorporated. A detailed EP manual was developed for training purposes and constantly underwent changes as new information or clinicians' insights were obtained.

Treatment sessions occurred once per week for 1 to 2 hrs. Each week, a daily practice sheet tracking treatment goals was provided for the parent. Subsequent sessions began by reviewing and documenting progress toward treatment goals and completing the ECBS-CBS (Holtz & Fox, 2012). Therapy was terminated when the clinician and the parent agreed that treatment goals had been met. Three months following treatment termination, a follow-up session was conducted in the child's home. When necessary, additional booster sessions were provided.

Measures

Intake. The initial 2-hr intake evaluation session included a parent interview to gain information regarding the child's background, strengths, family composition and mental health history, child's health history, daily routines and living skills, and specific externalizing problem behaviors. Multiple parent-report measures were administered and a parent-child play interaction was directly observed. The intake evaluation concluded with the parent and therapist identifying goals for treatment and scheduling the first treatment session.

ECBS. The ECBS (Holtz & Fox, 2012) is a 20-item self-report screening instrument developed specifically for very young children in poverty. The ECBS items were written at a 3.9-reading grade level and included 10 prosocial behavior items (e.g., "listens to you" and "shares toys") and 10 challenging behavior items (e.g., "hits others" and "has temper tantrums"). All items are rated on a 3-point Likert-type rating scale (1 = *almost never*, 2 = *sometimes*, 3 = *often*). Total scores on the Prosocial Behavior Scale ranged from 10 to 30, with higher scores indicating a greater frequency of positive behaviors. Total scores on the Challenging Behavior Scale (CBS) ranged

from 10 to 30, with higher scores indicating a greater frequency of disruptive behaviors. Internal consistencies using coefficient α s were .87 for the Challenging Scale and .92 for the Prosocial Scales. The CBS demonstrated adequate levels of concurrent validity ($r = .75$) with the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999). In addition, the CBS demonstrated adequate levels of sensitivity (82%) and specificity (80%) based on its relationship with the ECBI. For the current sample, the coefficient α for the CBS was .88 and the Prosocial Behavior Scale was .77. The ECBS-CBS was administered at pretest, all individual treatment sessions, posttest, and follow-up. The rationale for including this measure at all sessions was to provide a brief assessment of the child's behavior throughout treatment and as a safeguard for families who dropped out of treatment prematurely. The ECBS Prosocial Scale was administered at pretest, posttest, and follow-up only.

PBC. The PBC (Fox, 1994) is a self-report measure, designed to assess the behaviors of parents of young children between the ages of 1 and 5. Two subscales of the PBC were used including Discipline and Nurturing. The Discipline Scale consisted of 10 items that assessed parental response to the child's problem behaviors (e.g., "I yell at my child for whining"). The Nurturing Scale consisted of 10 items that measured specific parent behaviors that promoted the child's psychological growth (e.g., "My child and I play together on the floor"). Items were rated using a 4-point frequency scale (1 = *almost never/never*, 2 = *sometimes*, 3 = *frequently*, and 4 = *almost always/always*). Total scores for each subscale were converted into *t*-scores based on the child's age. Higher scores on discipline indicate more frequent use of verbal and corporal punishment (e.g., yelling and spanking). Higher scores on nurturing indicate more frequent use of nurturing activities (e.g., reading with child and playing with child). From a representative sample of 1,140 mothers, the following internal consistencies using coefficient α s were reported: Discipline = .91 and Nurturing = .82. Test-retest reliabilities for each of the subscales were Discipline = .87 and

Nurturing = .81 (Fox, 1994). The PBC was administered at Time (T) 1, T2, and T3.

PCPA. The PCPA is a clinician-rated behavior observation coding system that measures the quality of parent-child interactions during a 10- to 15-min observation of child-led play. Sample items include the clinician's rating of the child's interest in play, parent's responsiveness, and child's positive and negative affect during the play interaction. The scale consisted of 11 items that were rated on a 3-point Likert-type scale (0 = *poor*, 1 = *fair*, and 2 = *good*). Veteran clinicians trained newer clinicians and students on how to score each item of the play assessment (e.g., what constitutes a poor vs. fair vs. good rating) to help ensure consistency among raters. This assessment was developed as part of the EP program as another means to assess progress outside of parent report. In order to compute interrater reliability for the PCPA for this study, two trained clinicians were present in the home to independently observe the parents and children playing together ($n = 66$ clinician pairs). κ s ranged from .63 (parent engagement) to .92 (reciprocity). The average κ for the 5 child items was .76 and .80 for the 6 parent items. Total scores can range from 0 to 22, with higher scores indicating better play interaction. The PCPA was administered at T1 and T2.

Family satisfaction survey. The family satisfaction survey is a 7-item consumer satisfaction measure. This measure was provided anonymously to families who completed treatment. On a 7-point Likert-type scale, parents were asked to rate the quality of services received (1 = *poor* to 7 = *excellent*), how the services contributed to their child's improvement (1 = *not at all* to 7 = *a lot*), how the clinic helped them to improve management of their child (1 = *not at all* to 7 = *a lot*), if parents would use the clinic again if needed (1 = *no, definitely not* to 7 = *yes, definitely*), current status of the child's referral concern (1 = *considerably worse* to 7 = *greatly improved*), if parents would recommend the clinic to others (1 = *no, definitely not* to 7 =

yes, definitely), and the parent's confidence in managing their child's behavior in the future (1 = *not at all confident* to 7 = *very confident*). Total scores can range from 7 to 49, with higher scores indicating greater satisfaction with services. The coefficient α for this study was .83. This survey was administered at the end of treatment, T2.

Procedures

The Internal Review Board at a Midwestern university approved this study and written informed consents were obtained from the legal guardians of all children. For participants who spoke Spanish, a translated version of the informed consent was provided and an interpreter or bilingual counselor was present at all sessions. Participants were randomly assigned to IT or WL groups using a computer-derived random numbers table. The parent who identified as the primary caregiver filled out all parent report measures for the study (95.5% were the children's mothers). The participants' flow through the study is shown in a consort diagram in Figure 1. For the IT and WL groups, preintervention measures were completed at the time of first intake (T1). The second time period represented a different stage in the study for the IT and WL groups. T2 for the IT group was a posttest measure taken after the intervention, whereas T2 for the WL group was a second pretest session. Participants allocated to the WL group were required to wait at least 4 to 6 weeks for treatment services after their initial intake. We were concerned that a longer wait period would result in a higher attrition rate for the WL group as indicated from previous community-based studies with this population. The WL group then received the full treatment program followed by a posttest. T3 represented the 3-month follow-up after treatment sessions ended. All sessions, including intake, posttest, and follow-up occurred in the participants' homes. Clinicians included licensed professional counselors and graduate students in community counseling, counseling psychology, or clinical social work. All clinicians received extensive training and supervision. The

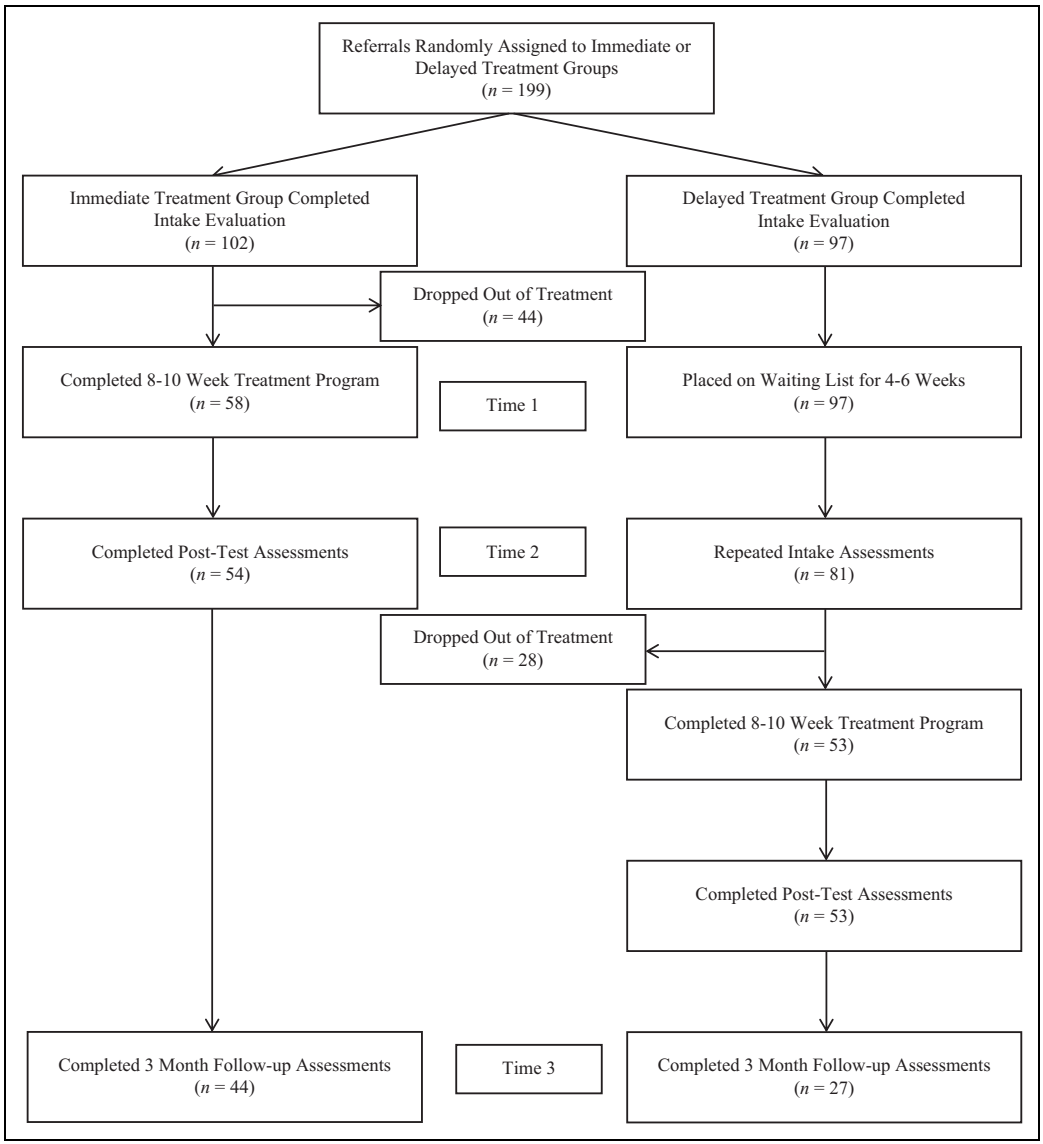


Figure 1. Participant flowchart from random group assignment through follow-up evaluations.

didactic training component included a review of the EP program treatment manual, policy and procedures manual, and training videos. All new clinicians and students shadowed veteran clinicians and gradually assumed a more active role in implementing treatment strategies and leading sessions. An extensive treatment fidelity checklist was completed by the primary supervisor to ensure that new clinicians and students were prepared to implement

the treatment program and procedures with fidelity. As students worked with several different clinicians, the fidelity checklist was reviewed and agreed upon by all supervisors for each student at weekly staff meetings. Students always attended treatment sessions with a veteran staff member, in part due to the unsafe neighborhoods where the children lived. All new staff and graduate students received weekly individual supervision sessions by

veteran clinicians; a licensed psychologist supervised the entire staff weekly.

Data Analysis Plan

Analyses of covariance (ANCOVAs), with pre-treatment scores as covariates, were used to determine whether the immediate group differed from the delayed group on posttest measures. All results reflected intent-to-treat (ITT) analyses by including all families who had available data regardless of whether they dropped out of treatment. In other words, the ITT analysis includes every subject who was randomized into the study. This analysis is more conservative than a dose-effect comparison. For the ITT analysis, the Last Observation Carried Forward method was used to account for data that were missing. Please see Gupta (2011) for further discussion of ITT analyses. The flow of participants through the study is shown in Figure 1. Treatment gains were also analyzed at a 3-month follow-up after both groups had received treatment to examine whether change was significantly different than baseline, T1.

Results

The assumptions for the ANCOVAs were met. The ITT analysis of Hypothesis 1 indicated that parents in the IT group reported significantly fewer challenging behaviors concerns on the ECBS Challenging Scale at T2 than parents in the WL group, $F(1, 196) = 45.62, p < .001, d = .72$. The effect size for this measure was large, indicating that there was a significant decrease in reported disruptive behaviors for parents in the IT group following treatment. This suggests less challenging externalizing behaviors were occurring for children who received treatment. Small effect sizes were observed for the remaining outcome variables. With regard to Hypothesis 2, children in the IT group displayed more prosocial behaviors on the ECBS Prosocial Scale than children in the WL group, $F(1, 196) = 11.88, p = .001, d = .31$. Children in the IT group engaged in behaviors such as sharing toys with others and listening with greater frequency than those in

the WL group. ITT analysis results for Hypothesis 3, indicated that parents in the IT group reported significantly less use of harsh discipline on the PBC Discipline Scale at T2 than parents in the WL group, $F(1, 196) = 10.32, p = .002, d = .31$. In other words, parents in the IT group reduced their previous reliance on corporal and verbal punishment as a means of discipline compared to those in the WL group. For Hypothesis 4, a small effect size was observed for nurturing behaviors on the PBC Nurturing Scale, with IT parents endorsing more nurturing behaviors at T2 than parents in the WL group, $F(1, 196) = 8.44, p = .004, d = .30$. Results for Hypothesis 5 indicated that the clinicians' rating of the parent-child play interaction was more positive for the IT group at T2 than the WL group, $F(1, 196) = 15.88, p < .001, d = .43$, on the PCPA. IT parents at T2 had more positive parent interactions (e.g., higher engagement and more sensitivity to the child) and child interactions (e.g., positive affect and interest in the play). At the initial posttest for the IT group, a total of 60 children from both groups had dropped from the study (attrition rate = 30.2%). Table 1 lists means, standard deviations, analyses, and significance levels for T1 and T2 comparisons.

Similar to the ITT T1 to T2 analyses, results comparing ITT T1 to T3 analyses (Hypothesis 6) were significant, with a large effect size observed for the ECBS-CS, $F(1, 198) = 175.04, p < .001, d = .88$, and small effect sizes for all other measures (see Table 2). The follow-up results at 3 months after both groups had received treatment indicated that treatment gains were still significant for both child and parent outcome measures. In other words, 3 months after treatment was completed, children continued to have less disruptive behaviors and more prosocial behaviors. Additionally, parents continued to use less frequent harsh verbal and corporal punishment and increased their level of nurturing from the initial T1 baseline. Of those who completed treatment, a posttest satisfaction survey was provided. Their total scores ranged from 31 to 49 ($M = 45.09; SD = 4.08$). These finding suggested that families were highly satisfied with EP.

Table 1. Analysis of Covariance for Outcomes From Intake to Time 2 for IT and WL Groups.

N Measure	Group	N	Time 1 ^a		Time 2 ^b			F	p	d ^d
			M	SD	M	M ^c	SD			
ECBS-CS	IT	102	22.76	4.52	18.97	19.13	5.03	45.62	<.001	.72
	WL	97	22.02	3.07	22.58	22.41	4.01			
ECBS-PS	IT	102	22.26	2.92	23.53	23.34	3.19	11.88	.001	.31
	WL	97	23.21	4.00	22.20	22.34	3.21			
PBC-DS	IT	102	46.52	10.21	42.31	41.57	10.96	10.32	.002	.31
	WL	97	44.77	11.36	43.90	44.68	9.19			
PBC-NS	IT	102	50.23	13.06	52.19	51.57	11.37	8.44	.004	.30
	WL	97	48.16	13.14	47.29	47.96	12.44			
PCPA	IT	102	14.40	4.61	16.53	16.28	4.46	15.88	<.001	.43
	WL	97	13.67	4.12	14.07	14.32	4.69			

Note. ECBS-CS = Early Child Behavior Screen–Challenging Scale; ECBS-PS = Early Child Behavior Screen–Prosocial Scale; PBC-DS = Parent Behavior Checklist–Discipline Scale; PBC-NS = Parent Behavior Checklist–Nurturing Scale; PCPA = Parent–Child Play Assessment; IT = immediate treatment; WL = wait-list control. Degrees of freedom for all analyses = (1, 196).

^aTime 1 = Intake data for both IT and WL groups. ^bTime 2 = Posttest data for IT group and Second Intake for WL group.

^cAdjusted Time 2 scores based on analyses of covariance. ^dCohen's *d* = effect size between IT and WL groups at Time 2 based on adjusted mean scores.

Table 2. Repeated Measures Analysis of Variance for Outcomes From Intake to 3-Month Follow-Up.

Measure	N	Time 1		Time 3		F	p	d
		M	SD	M	SD			
ECBS-CS	199	22.98	4.26	18.96	4.82	175.04	<.001	.88
ECBS-PS	199	22.15	2.99	23.63	3.42	52.08	<.001	.46
PBC-DS	199	45.67	10.80	40.87	10.01	55.66	<.001	.47
PBC-NS	199	49.23	13.11	51.38	11.80	6.76	.010	.17

Note. ECBS-CS = Early Child Behavior Screen–Challenging Scale; ECBS-PS = Early Child Behavior Screen–Prosocial Scale; PBC-DS = Parent Behavior Checklist–Discipline Scale; PBC-NS = Parent Behavior Checklist–Nurturing Scale; PCPA = Parent–Child Play Assessment. Degrees of freedom for all analyses = (1, 198).

Discussion

Poverty has a negative impact on both behavioral and cognitive functioning (Holmes & Kiernan, 2013; Linver, Brooks-Gunn, & Kohen, 2002) and serves as a significant risk factor for both the development and maintenance of high-intensity externalizing behaviors (Cote et al., 2006; Fanti & Henrich, 2010). In fact, children who live in persistent poverty beginning in early childhood are more likely to meet criteria for a psychiatric disorder upon school entry (Carter et al., 2010). Despite the need for early intervention services, children who live in poverty, particularly those from ethnic

minority backgrounds, continue to have disproportionately unmet mental health needs (Santiago et al., 2013).

As a means of helping to bridge this gap in care, EP was developed as a home-based therapy program focused on fostering healthy parent–child interactions and promoting positive parenting practices and discipline. Although poverty has a negative impact on both behavioral and cognitive functioning, research has shown that families that have strong parent–child relationships are more resilient to negative cognitive and behavioral outcomes (Holmes & Kiernan, 2013; Linver et al., 2002). Additionally, lower levels of

maternal distress and positive parenting practices (i.e., parents who were observed to use less authoritarian parenting) serve as significant mediators of positive cognitive and behavioral outcomes for young children in poverty (Linver et al., 2002). A home-based therapy approach may help increase accessibility to children who otherwise might not be able to receive treatment. However, using a home-based model represents a significant departure from traditional service delivery in clinic or university laboratory settings. During our first year of operation as a clinic serving this population, we attempted a traditional approach of providing mental health services for young children from families in poverty at a clinic site. We served only 25 children the first year and encountered significant difficulties getting families in for an initial intake evaluation. It quickly became clear that engaging these families for the time needed to make changes in their children's behaviors was not successful. Moreover, unlike parents from middle income and higher education levels, our families had significant difficulty transferring strategies taught at the clinic to their homes. As additional evidence of the need to provide services in the home, our clinic has now grown from serving 25 children the first year to nearly 500 children a year.

A unique strength of this study is that it is one of the first studies where all of the participants representing diverse populations were living in poverty and receiving a home-based treatment program. This study adds to the positive outcomes of previous studies supporting the use of EP with very young children in poverty (e.g., Fox et al., 2013; Fung, Fox, & Harris, 2014; Gresl et al., 2014) by examining treatment outcomes using a randomized treatment control methodology. After EP treatment, parents reported significant improvements in their child's disruptive behaviors and an increase in their child's positive prosocial behaviors. Additionally, and importantly, the quality of the parent-child relationship also improved on both parent measures and the clinician measure. A large portion of the EP work is targeted at improving the

quality of the parent-child relationship and teaching effective strategies to parents when their child displays aggressive or noncomplaint behaviors. During EP, improvement in the parent-child relationship is targeted from several different angles (e.g., teaching child-led play, emphasis on developmentally appropriate expectations, and education on positive reinforcement strategies) and is an ongoing component of the treatment program. Additionally, EP has a module built in to help parents manage their own emotional response to their child's misbehavior so they can respond in a manner that is consistent with the goals they set for their child in therapy. Parents who completed EP reported significantly less use of verbal and corporal punishment and increased levels of nurturing behaviors. Additionally, clinicians reported a significant improvement in the quality of the parent-child social interaction. The families that completed EP also reported they were highly satisfied with the treatment they received.

Limitations and Future Research

A limitation of this research is, despite the reduction of attrition compared to studies with similar sample demographics, attrition was still a concern. This was of particular concern for the 3-month follow-up data and in light of this high attrition rate, follow-up data should be interpreted cautiously. However, in order to address this concern, ITT analyses were used to provide the most conservative estimate of treatment effectiveness. Finally, the majority of participants did complete the clinician report PCPA measure; however, a small subset did not. Although, this measure adds additional information to the traditional parent report measures, the findings from this measure should be interpreted with more caution. Additionally, this measure was not able to be collected at T3 follow-ups and inclusion of these follow-up data in future studies could help to strengthen the support for EP.

Given the limited research and training provided to therapists for working with very young children from families in poverty, professionals

that wish to serve this population may benefit from the EP program. Additionally, future research should test the EP program outside the original study site location. Providing this research would further strengthen the efficacy of the EP program and also provide important information on how the program may need to be adapted for different regions of the country or other cultural/ethnic groups.

Many questions remain to be answered in serving this at-risk population. First, what are the essential elements of our program and clinical approach that produce successful outcomes? Second, how do we determine early in treatment those families who are likely to drop out prematurely? Third, for families who drop out early from treatment, are there alternative treatment strategies that will facilitate their retention? Fourth, what level of education and training are required by clinicians to successfully implement the EP program? Fifth, how clinician-friendly is the home-based approach used in the EP program for practitioners in the field, particularly those who are individual providers and are reimbursed for contact hours only (not travel time, no shows, etc.)?

Despite these challenges and numerous others, this is important work. If we are to provide our mental health expertise to families most in need, we will need significantly more researchers, clinicians, and university-training programs to accept and even embrace these challenges that come with serving those most in need. Given that poor long-term outcomes are associated with untreated mental health concerns in young children, and that poverty is a risk factor placing children at an elevated risk for psychopathology, the importance of providing evidence-based treatment for this population is underscored. Further research and continued clinical work are necessary to meet the needs of this unique population.

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Author Biographies

Sara E. Harris is pursuing a PhD in Counseling Psychology at Marquette University and spends her time as a researcher at the Penfield Children's Center Behavior Clinic. Her research and professional interests include pediatric psychology, children's reactions to traumatic stress, development of pediatric psychological tests, and professional ethics.

Robert A. Fox, PhD, is professor of Counselor Education and Counseling Psychology at Marquette University and founder and consulting psychologist of the Behavior Clinic at Penfield Children's Center. His current research and teaching interests are early childhood disorders, developmental disabilities, and supervision.

Joanna R. Love is pursuing a PhD in Counseling Psychology at Marquette University and also spends her time as a researcher at the Penfield Children's Center Behavior Clinic. Her research and professional interests involve therapeutic interventions for children who have experienced trauma.