

Evolving Practices in Behavioral Parent Training: Immediate and Long-term Impact

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Agenda

- ◆ Background & New Directions
- ◆ Positive Family Intervention
- ◆ Preliminary Group Outcomes
- ◆ Sample Single Subject Data
- ◆ Summary & Conclusions

Rationale for BPT

- ◆ Behavior is maintained with natural contexts and routines,
- ◆ Parents have the most significant and consistent presence in the lives of their children, and
- ◆ Availability of competent behavioral service providers to assist in community settings is limited – and can interfere with normal activities.

Rationale for BPT (cont.)

- ◆ Therefore, BPT offers the most effective and efficient option for
 - promoting treatment integrity,
 - producing significant and meaningful behavior improvements, and
 - perpetuating generalization and maintenance

Features of Early BPT

- ◆ Teaching parents to identify, define, and record child behavior
- ◆ Instruction in basic social learning principles and methods (time-out, reinforcement)
- ◆ Use of modeling, role playing, and application to build skills

Shaeffer, Kotchich, Dorsey, & Forehand, 2001

Examples of BPT Programs

Journal of Applied Behavior Analysis

- ◆ Self-Recording of Contingent Attention (Herbert & Baer, 1972)
- ◆ Generalization Effects across Settings (Miller & Sloan, 1976)
- ◆ Parental Social Contingencies (Budd, Green, & Baer, 1976)
- ◆ Generalization across BPT (Koegel, Glahn, & Nieminen, 1978)
- ◆ Time-out and Point System (Wahler, 1980)
- ◆ Behavioral Self-Management (Sanders & Glynn, 1981)
- ◆ Long-Term Effects of RIP (Strain, Steele, Ellis, & Timm, 1982)
- ◆ Decreasing Dangerous Infant Behaviors (Mathews et al., 1987)
- ◆ Communication Skills Training (Kohr et al., 1988)
- ◆ Natural Language Paradigm (Laski, Charlop, & Shreibman, 1988)
- ◆ Parent Education Project (Feldman, Case, Rincover, et al., 1989)
- ◆ Pyramidal Parent Training (Bruder & Bricker, 1985; Neef, 1995)
- ◆ Discrete Trial Teaching (Lafasakis & Sturmey, 2007)

Examples of Group Training Programs in BPT

- ◆ Helping the Noncompliant Child (Forehand & McMahon, 1981)
- ◆ Behavioral Family Education (Sanders & Dadds, 1993)
- ◆ Planned Activities Training (Huynen, Lutzker, Bigelow, Touchette, & Campbell, 1996)
- ◆ Family Check-Up (Shaw, Supplee, & Dishion, 2006)
- ◆ Stepping Stones Triple P (Plant & Sanders, 2007; Roberts, Mazzucchelli, & Studman, 2006)
- ◆ Parent Plus Program (Quinn, Carr, Carroll, & O'Sullivan, 2007)
- ◆ Incredible Years (Reid, Webster-Stratton, & Hammond, 2007)

Evidence of Effectiveness

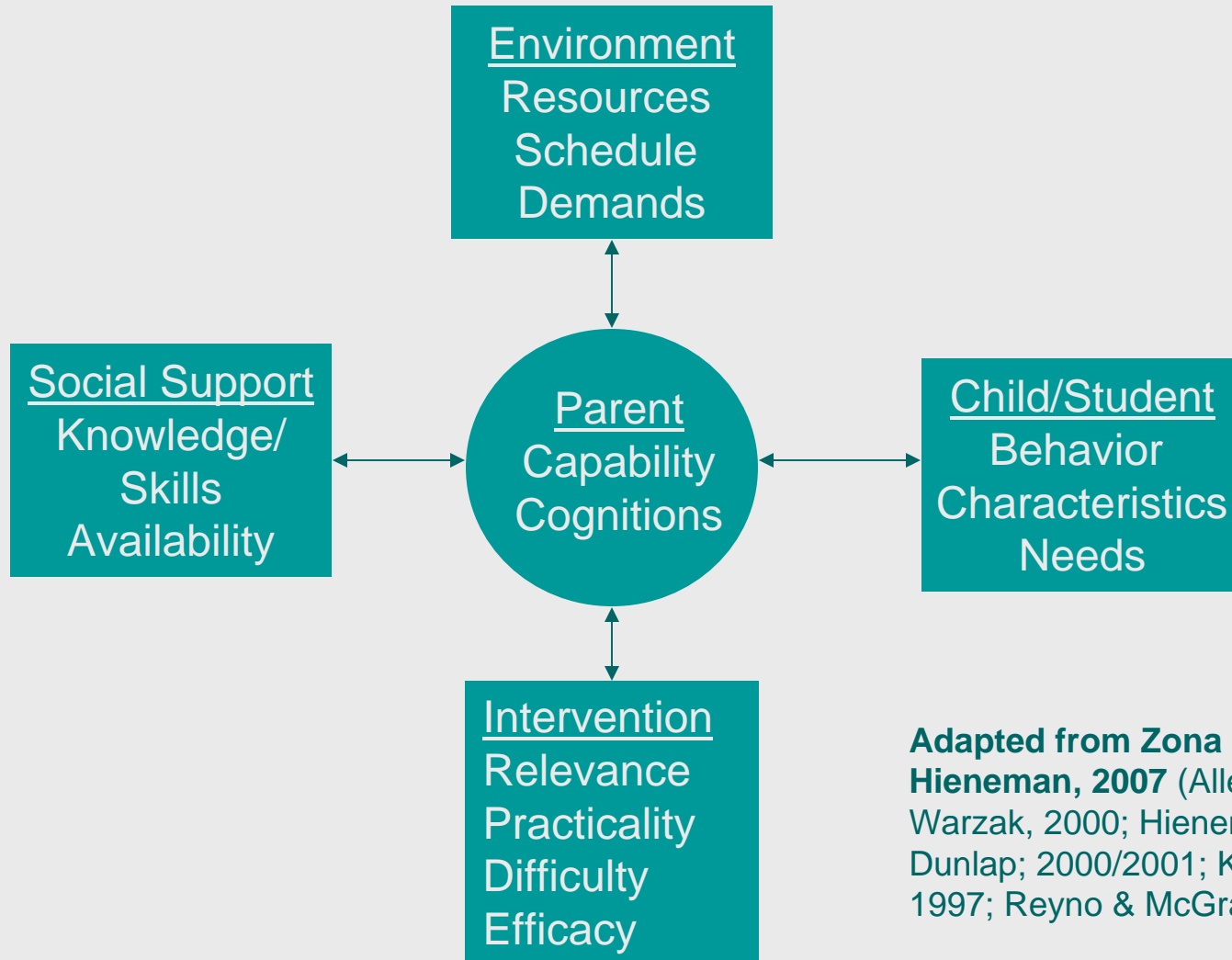
- ◆ Between Group (.30)
- ◆ Within Group (.68)
- ◆ Single Subject (.54)

Maughan, Christiansen, Jenson, Olympia, & Clark, 2005

Barriers to Implementation

- ◆ Prevalence of Attrition & Treatment Failure – 40-60% of parents drop out of outpatient treatment, i.e., BPT (Kazdin, 1996)
- ◆ Potential Factors Related to Parental Adherence...

Potential Factors Related to Parental Adherence with Intervention



Adapted from **Zona & Hieneman, 2007** (Allen & Warzak, 2000; Hieneman & Dunlap, 2000/2001; Kazdin, 1997; Reyno & McGrath, 2006)

Emerging Practices

- ◆ Engagement of *Parents as Partners* (Buschbacher, Fox, & Clarke, 2004; Koegel, Streibel, & Koegel, 1998; Kuhn, Lerman, & Vorndran, 2003; Vaughn, Dunlap, Fox, & Clarke, 1997)
- ◆ Including Parents in *FBA* (McNeill, Watson, Henington, & Meeks, 2002; Peterson, Derby, Berg, & Horner, 2002)

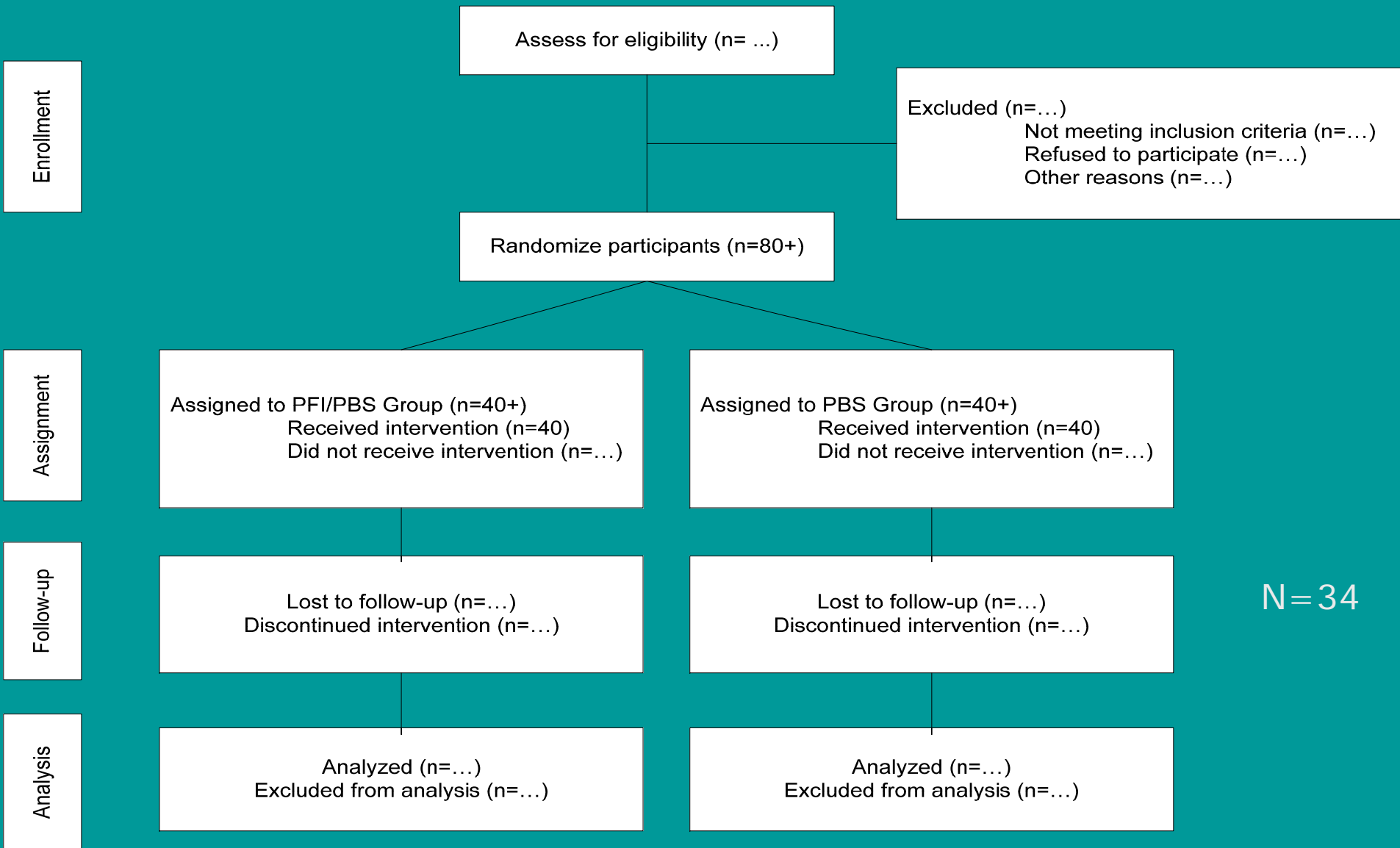
Emerging Practices (cont.)

- ◆ Building Comprehensive Plans that have *Contextual Fit* (Binnendyk et al., 2009; Lucyshyn et al., 2007; Moes & Frea, 2002; Singer et al., 2002)
- ◆ Teaching Parents *Principles* Rather than Procedures in Isolation (Dunlap, Hieneman, Knoster et al., 2000; Johnson, et al. 2007*)

Positive Family Intervention

Five year randomized control group study of the impact of a behavioral parent education protocol, teaching parents the principles of ABA (i.e., PBS) – combined with optimism training for ½ of the participants – on child behavior and parental perceptions.

Randomized Clinical Trial



Study Measures

Pre/Post/1-year/2-year

- ◆ Scales of Independent Behavior – Revised (SIB-R) Maladaptive Behavior Index
- ◆ Questionnaire on Resources and Stress (Pessimism Scale)
- ◆ Videotaped Child Behavior Samples - % of intervals with disruptive behavior
- ◆ Other Instruments: Barriers to Treatment; Parental Satisfaction; CCBL

Positive Family Intervention

- ◆ Standard treatment protocol
- ◆ 8 weeks - 1 ½ hours per session
- ◆ Consistent teaching process:
examples, application, & practice
- ◆ Accountability for homework
- ◆ Monitoring of procedural fidelity
- ◆ Integration of optimism training
for ½ of participants

PFI: Curriculum Content

- ◆ **Session 1: Establishing Goals**
 - Identify and engage team members
 - Develop broad goals for child and family
 - Define and prioritize target behaviors
 - Establish method for collecting baseline
- ◆ **Session 2: Gathering Information**
 - Introduce functional behavioral assessment
 - Develop a plan for watching (observation), talking (interviewing), and recording behavior
- ◆ **Session 3: Analysis and Plan Design**
 - Identify events surrounding child's behavior
 - Summarize in hypothesis statements

PFI: Curriculum Content

- ◆ **Session 4: Preventing Problems**
 - Identify circumstances preceding behavior
 - Develop strategies to avoid problem situations, make difficult situations better, and add cues for positive behavior
- ◆ **Session 5: Managing Consequences**
 - Identify circumstances following behavior
 - Develop strategies to reinforce positive behavior and withhold reinforcement for negative behavior
- ◆ **Session 6: Replacing Behavior**
 - Identify skills to replace problem behavior or better meet the needs of the circumstances
 - Develop instructional plans for teaching skills

PFI: Curriculum Content

- ◆ **Session 7: Putting Plan in Place**
 - Develop a written plan that integrates all of the components
 - Ensure contextual fit and orientation toward lifestyle change
 - Create an action plan for implementation
- ◆ **Session 8: Monitoring Results**
 - Develop strategies for ongoing monitoring
 - Create a plan for recycling PBS process to maintain positive outcomes

PFI: Optimism Training

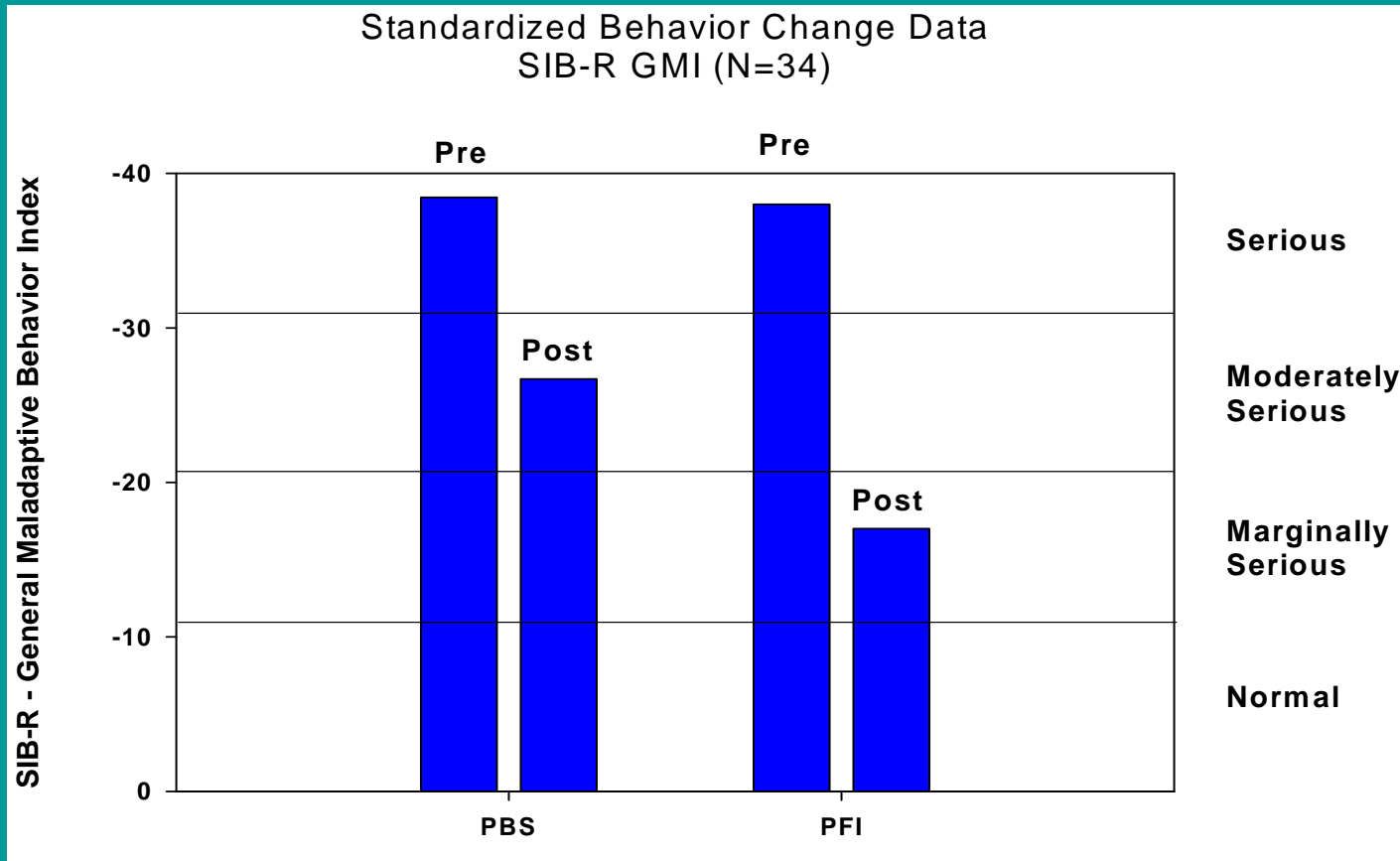
- ◆ **Situation:** Triggers to negative thinking
- ◆ **Belief:** Unproductive thought patterns
- ◆ **Consequences:** Results of negative thinking
- ◆ **Disputation:** Accuracy/Usefulness of beliefs
(**Distraction:** Thought stopping)
- ◆ **Substitution:** More productive self-talk
- ◆ **Reorientation:** New overall perspective

Seligman, M. E. P. (1998). Learned Optimism: How to change your mind and your life. New York: Pocket Books.

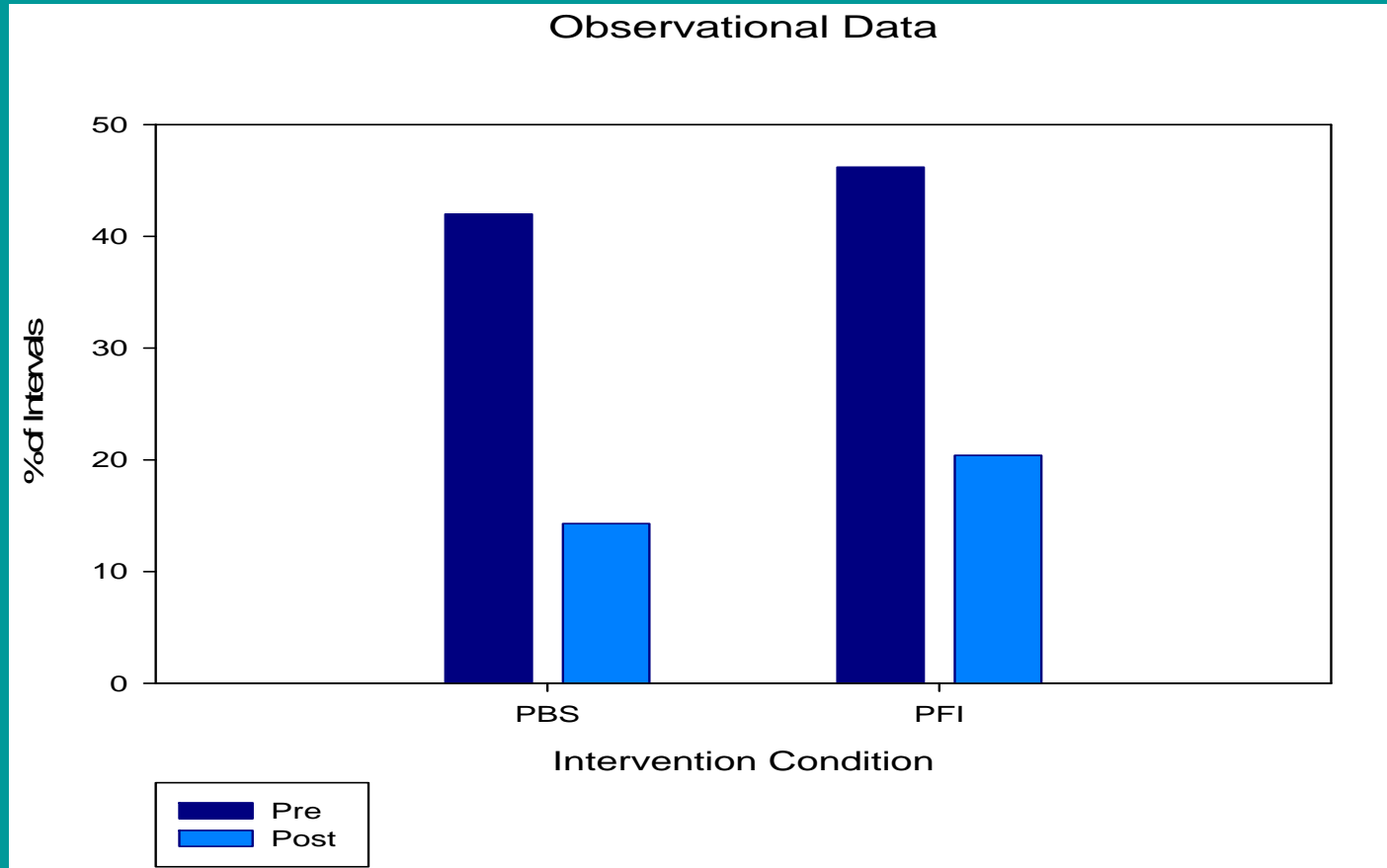
Preliminary Results

- ◆ Behavior of all children improve if families complete training.
 - Increase by two categories on SIB-R
 - Clear decreases in problem behavior
- ◆ Improvements for participants in the PFI condition may be more dramatic (Effect sizes: PBS = 1.25; PFI = 2.20).
- ◆ Self-report measures indicate positive changes in quality of life and parental confidence.

Preliminary Results – SIB-R GMI



Preliminary Results (Problem Behavior)



Illustrations of Process

Nonconcurrent Multiple Baseline

- ◆ Participants, Target Behaviors, & Routines
- ◆ Hypotheses and Intervention Strategies
- ◆ Graphs Illustrating Outcomes

Participants

Name	Age	Behaviors	Ppts	Target Routine(s)
Alex	5	<p>Tantrums: 1) running into walls/mom, sticking fingers into eyes, throwing food, clothes, toys 2) crying, screaming, hitting objects, himself or mom.</p> <p>Ramming: running at mom and hitting with hands, head, or chest</p> <p>Belly scratching: pinching or scratching mom's belly</p> <p>Door slamming</p>	Mom and Dad	After school, transitioning from activity to snack
Nate	4	<p>Tantrums: kicking, screaming, dropping to floor</p> <p>Aggression: spitting, kicking, scratching</p> <p>Noncompliance: ignoring directions</p> <p>Running away: leaving house</p> <p>Arguing: repeating statements</p>	Mom and Dad	Play time in the family room

Participants

Name	Age	Behaviors	Ppts	Target Routine(s)
Carl	4	<i>Tantrums: arching back, falling to floor, crying loudly, screaming, and wiggling around on the floor</i> <i>Striking out: throwing, kicking, or knocking over objects</i> <i>Ignoring instruction: not responding to requests, walking away from person asking</i>	Mom	Presenting demands within daily routines

Hypotheses/Interventions

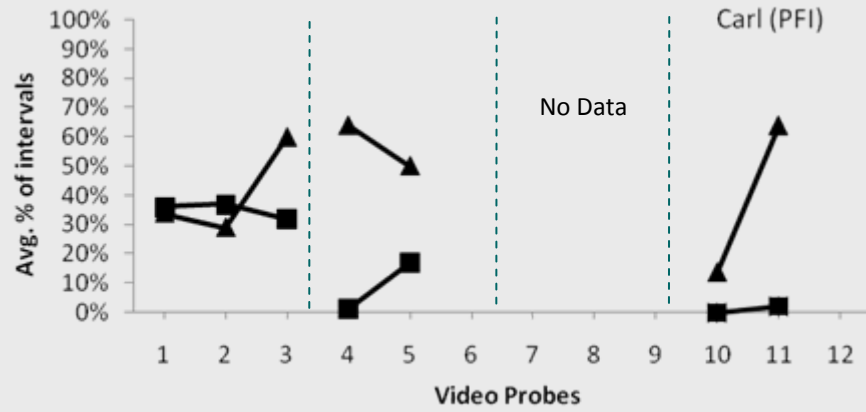
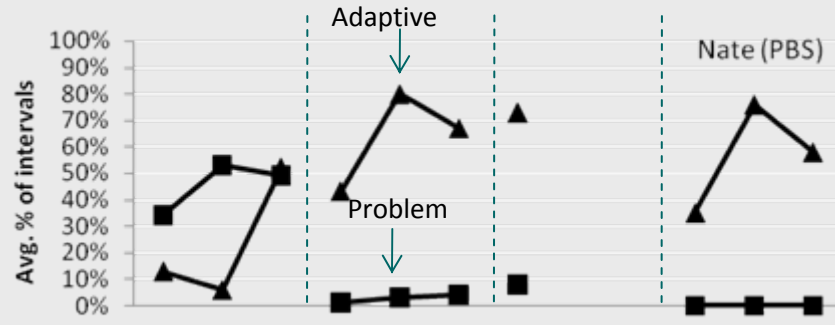
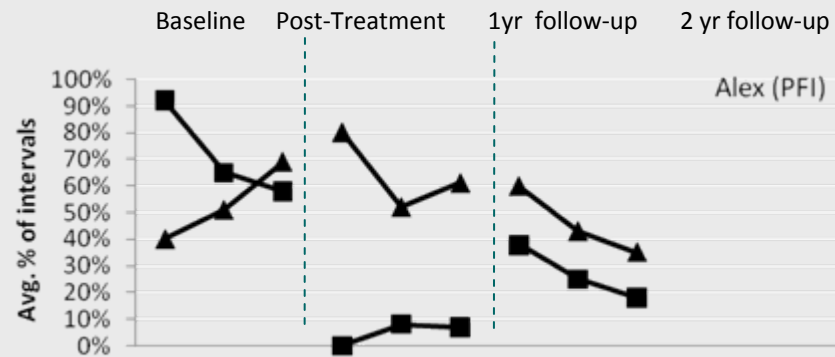
Name	Hypotheses	Interventions
Alex	<p><i>When Alex is asked to transition and complete a less preferred activity or denied access to an item or activity, he will tantrum to escape the request or get access to an item. He also tantrums to gain attention from his parents while they are occupied. Tantrums are more likely to occur during the time between after school and bedtime.</i></p>	<p><i>Prevention:</i></p> <ul style="list-style-type: none">◆ <i>Prepare for transitions with a picture schedule</i>◆ <i>Avoid lengthy discussions among parents in front of Alex</i> <p><i>Replacement Skills:</i></p> <ul style="list-style-type: none">◆ <i>Teach to say "no" or "a minute" in response to a request</i>◆ <i>Teach to say "cuddle" or touch arm for attention</i> <p><i>Managing Consequences:</i></p> <ul style="list-style-type: none">◆ <i>Provide request in a calm manner but firm and acknowledge any form of cooperation.</i>◆ <i>If necessary, provide physical prompts or guide him through the transition and less preferred task.</i>◆ <i>Tell him once that he needs to ask for attention, item or activity by saying "cuddle" or touching your hand. If he continues to tantrum, move him to a safe area and say, "as soon as you are quiet we can have a snack/toy or play together. Wait 20 seconds after the episode before allowing him obtain what he wants.</i>

Hypotheses/Interventions

Name	Hypotheses	Interventions
Nate	<p><i>When Nate is involved in unstructured play activities (e.g., with his brother) or is required to wait, he will become aggressive or disruptive to get the attention from his mother or something to do.</i></p>	<p><i>Prevention:</i></p> <ul style="list-style-type: none">◆ <i>Give Nate attention periodically throughout the activity, especially when he has to wait</i>◆ <i>Provide activities and toys during down time</i>◆ <i>Structure play time with brother (e.g., initiate activity)</i> <p><i>Replacement Skills:</i></p> <ul style="list-style-type: none">◆ <i>Teach to request attention or interaction by saying "Excuse me" or bringing someone a toy</i>◆ <i>Teach to play independently or with his brother or peer</i> <p><i>Managing Consequences:</i></p> <ul style="list-style-type: none">◆ <i>Provide attention and interaction only when Nate is engaged in appropriate activities</i>◆ <i>Praise any efforts at independent play or playing with his brother</i>◆ <i>Ignore disruptive behavior</i>◆ <i>Use crisis procedures for aggression and withhold all preferred activities, treats, and unnecessary attention</i>

Hypotheses/Interventions

Name	Hypotheses	Interventions
Carl	<p><i>When Carl is given an instruction or is asked to transition to a less preferred activity, he will ignore (show no response), walk away, or engage in tantrum behavior. As a result, Carl receives attention as mom follows him, repeatedly providing verbal prompts. He also avoids completing the task (mom will eventually do it) and less preferred activities.</i></p>	<p><i>Prevention:</i></p> <ul style="list-style-type: none"><i>◆ Break down task to manageable steps, slowly removing mom's assistance</i><i>◆ Stay with Carl until the request is completed</i><i>◆ Use a timer</i> <p><i>Replacement Skills:</i></p> <ul style="list-style-type: none"><i>◆ Teach to complete tasks (e.g., getting dressed)</i><i>◆ Teach him to Stop (what he is doing), Look (at Mom), and Listen (follow direction)</i><i>◆ Teach him to ask for a reasonable delay</i><i>◆ Pick up after himself before preferred activity</i> <p><i>Managing Consequences:</i></p> <ul style="list-style-type: none"><i>◆ Provide enthusiastic praise for initiating and following directions</i><i>◆ Minimize attention for unwanted behaviors, simply redirect him to the requested task</i>



Issues & Reflections

- ◆ Whose behavior do we want to change?
- ◆ What variables are affecting their behavior?

How can we deliver BPT to better engage and empower parents?

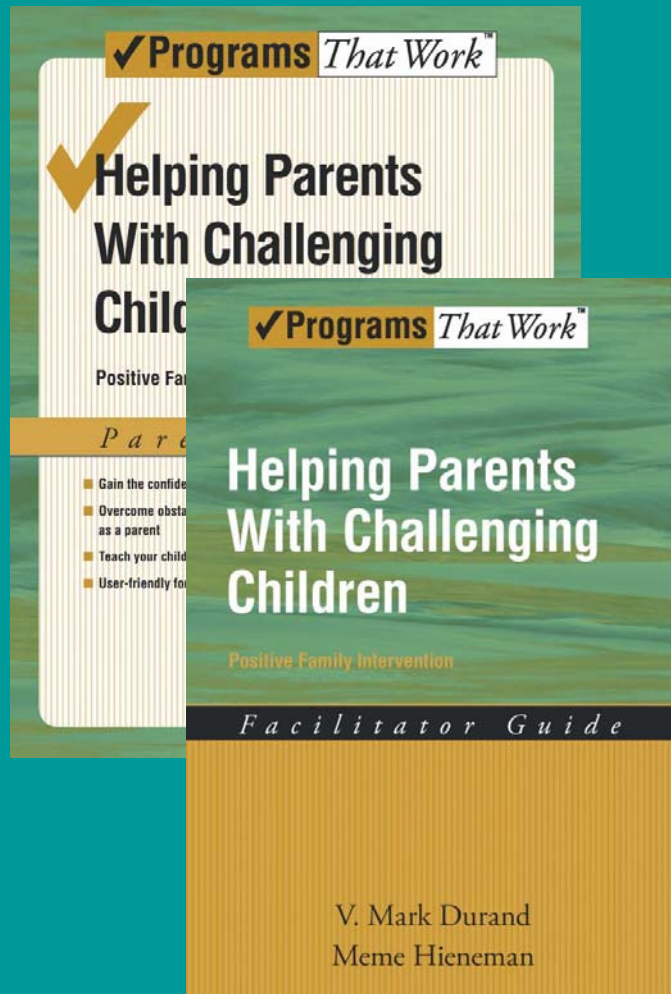
Summary & Conclusions

- ◆ Parents are critical to the success of behavioral interventions in homes and the community.
- ◆ A variety of factors can influence parental acceptance, adoption, and follow-through with interventions.
- ◆ The field of ABA is continually evolving - current practices should be incorporated in BPT and other applications.
- ◆ To be effective in our work with families, we may need to change our perspectives and practices.

Contact Information

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Additional Information



Durand, V.M. & Hieneman, M. (2008). *Helping parents with challenging children: Positive family intervention, Facilitator's guide*. New York: Oxford University Press.

Durand, V.M. & Hieneman, M. (2008). *Helping parents with challenging children: Positive family intervention, Workbook*. New York: Oxford University Press.

References

- ◆ Allen, K. D. & Warzak, W. J. (2000). The problem of parental nonadherence in clinical behavior analysis: Effective treatment is not enough. *Journal of Applied Behavior Analysis, 33*, 373-391.
- ◆ Binnendyk, L., Fossett, B., Cheremshynski, C. et al. (2009). Toward an ecological unit of analysis in behavioral assessment and intervention with families of children with developmental disabilities. In W. Sailor, G. Dunlap, G. Sugai, & R. Horner (Eds.), *Handbook of Positive Behavior Support* (pp. 73-123). New York: Springer.
- ◆ Buschbacher, P., Fox, L., & Clarke, S. (2004). Recapturing desired family routines: A parent-professional behavioral collaboration. *Research and Practice for Persons with Severe Disabilities, 29*, 25-39.
- ◆ Dunlap, G., Hieneman, M., Knostr, T., Fox, L., Anderson, J., & Albin, R. W. (2000). Essential elements of inservice training in positive behavior support. *Journal of Positive Behavior Interventions, 2*, 22-32.
- ◆ Durand, V. M. & Hieneman, M. (2008). Helping parents with challenging children: Positive family intervention, Facilitator's guide. New York: Oxford University Press.
- ◆ Durand, V. M. & Hieneman, M. (2008). Helping parents with challenging children: *Positive family intervention, Parent workbook*. New York: Oxford University Press.

References

- ◆ Hieneman, M. & Dunlap, G. (2000). Factors affecting the outcomes of community-based behavioral support: II. Identification and description of factor categories. *Journal of Positive Behavior Interventions, 2*, 161-169.
- ◆ Hieneman, M. & Dunlap, G. (2001). Factors affecting the outcomes of community-based behavioral support: II. Factor category importance. *Journal of Positive Behavior Interventions, 3*, 67-74.
- ◆ Johnson, C. R., Handen, B. L., Butter, E., et al. (2007). Development of a parent training program for children with pervasive developmental disorders. *Behavioral Interventions, 22*, 201-221.
- ◆ Lucyshyn, J., Albin, R. L., Horner, R. H., et al. (2007). Family implementation of positive behavior support for a child with autism: Longitudinal, single-case, experimental, and descriptive replication and extension. *Journal of Positive Behavior Interventions, 9*, 131-150.
- ◆ Kazdin, A. E. (1997). Parent management training: Evidence, outcomes, and issues. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 1349-1356.
- ◆ Kern, L., Gallagher, P., Starosta, K., Hickman, W., & George, M. (2006). Longitudinal outcomes of functional behavioral assessment-based intervention. *Journal of Positive Behavior Interventions, 8*, 67-78.

References

- ◆ Koegel, R. L., Streibel, D., & Koegel, R. L. (1998). Reducing aggression in children with autism toward infant or toddler siblings. *The Journal of the Association for Persons with Severe Handicaps*, 23, 111-118.
- ◆ Kuhn, S. A. C., Lerman, D. C., & Vorndran, C. M. (2003). Pyramidal training for families of children with problem behavior. *Journal of Applied Behavior Analysis*, 36, 77-88.
- ◆ Maughan, D. R., Christiansen, E., Jenson, W. R., Olympia, D., & Clark, E. (2005). Behavioral parent training as a treatment for externalizing behaviors and disruptive behavior disorders. *School Psychology Review*, 34, 267-286)
- ◆ Moes, D. & Frea, W. D. (2002). Contextualized behavior support in early intervention for children with autism and their families. *Journal of Autism and Developmental Disorders*, 32, 519-533.
- ◆ McNeill, S. L., Watson, T. S., Henington, C. & Meeks, C (2002). The effects of training parents in functional behavior assessment on problem identification, problem analysis, and intervention design. *Behavior Modification*, 26, 499-515.
- ◆ Peterson, S. M., Derby, K. M., Berg, W. K., & Horner, R. H. (2002). Collaboration with families in the functional behavioral assessment of and intervention for severe behavior problems. *Education and Treatment of Children*, 25, 5-25.

References

- ◆ Reyno, S. M. & McGrath, P. J. (2006). Predictors of parent training efficacy for child behavior problems: A meta-analytic review. *Journal of Child Psychology and Psychiatry, 47*, 99-111
- ◆ Serketich, W. J. & Dumas, J. E. (1996). The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. *Behavior Therapy, 27*, 171-186.
- ◆ Shaeffer, A., Kotchich, B. A., Dorsey, S. & Forehand, R. (2001). The past, present, and future of behavioral parent training: Interventions for child and adolescent problem behavior. *Behavior Analyst Today, 2*, 91-105.
- ◆ Singer, G. H. S., Goldberg-Hamblin, S. E., Peckham-Hardin, K. D., Barry, L., & Santarelli, G. E. (2002). Toward a synthesis of family support practices and positive behavior support. In J. Lucyshyn, G. Dunlap, & R. W. Albin (Eds.), *Families and positive behavior support: Addressing problem behavior in family contexts* (pp. 155-183). Baltimore, MD: Paul H. Brookes.
- ◆ Vaughn, B., Dunlap, G., Fox, L., Clarke, S., & Bucy, M. (1997). Parent-professional partnership in behavioral support: A case study of community-based intervention. *The Journal of the Association for Persons with Severe Handicaps, 22*, 186-197.