Early Intervention
Positive Behavior Support

Presented December 6, 2004
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To provide families, caregivers, and others with positive strategies and skills that will result in the child’s acquisition of appropriate social and communication skills.

To assist young children with challenging behavior and their families with support to achieve quality of life outcomes.
Local Concerns and Shared Passions

- Increased numbers of young children presenting with challenging behaviors
- Limited options in our community for identified children and their families
- Limited evidence-base for young children with CB
- Supporting transition from Part C to Part B
- Readiness for kindergarten
Collaboration

- **USF**
  - USF Early Intervention Program
  - FMHI
  - School Psychology Program

- **Community**
  - FDLRS
  - Northside Mental Health
  - Hillsborough County Children’s Board
EIPBS Components

- **EIPBS Parent Group**
  - Provides caregivers with new knowledge and skills
  - Addresses concerns that are lower intensity or parenting issues
  - Six week curriculum in English and Spanish

- **EIPBS Individual Support**
  - Home visiting/community model
  - Comprehensive support in natural environments
  - Individualized to meet needs of caregiver and child
Goals of the Program

- Provide comprehensive and effective services to young children (birth to three) who have challenging behavior in Hillsborough County.

- Conduct research that will evaluate the effectiveness of the program and contribute to the evidence-base on effective practices for children with challenging behavior.

- Provide data that facilitate the development of a system of care for young children with challenging behavior.
Positive Behavior Support

A values-based, empirically-valid approach for resolving problem behaviors and helping people lead enhanced lifestyles
Program Perspectives

- Individualized
- Natural environments
- Family systems
- Ecological
- Strength-based
- Focused on skills
- Comprehensive
Process of Positive Behavior Support

Step 1: Convene a team and identify goals of intervention

Step 2: Gathering information (functional assessment)

Step 3: Developing hypotheses

Step 4: Designing behavior support plans

Step 5: Implementing, monitoring, and evaluating outcomes
Intervention Components

- Screening to determine potential eligibility
- Family/Child Care visit to determine severity of behavior within natural environment and daily routines
- Person-centered planning with family system and circle of support
- Functional assessment within home and child care environments
Intervention (continued)

- Family-centered, comprehensive behavior support plan development
- Modeling and coaching in natural environments
- Family support and education
- Ongoing evaluation and monitoring
Research Questions

What are the overall immediate and long-term outcomes for children and families who participate in the program?

What is the potential for service integration of the program in a community-based service delivery system (efficiency, feasibility, acceptance, and process)?
EIPBS Outcomes

- Child overall development
- Change in problem behavior
- Family quality of life
- Parent Stress
- Parent Hassle
Research Questions

- Will family-centered PBS result in meaningful child outcomes for families and children?

- What are effective ways to teach natural change agents to implement PBS within the natural environment of home, community, and child care?

- Will the implementation of PBS with systematic transition planning affect the child’s transition from one child care setting or service setting to another?
Outcomes of PBS

- Multiple baseline design across routines or settings
- Independent Variable – family-implemented positive behavior support within natural settings
- Dependent Measures – child behavior reduction, child engagement or active participation, child communication, family member interaction/communication
- Follow-up probes to extend 24 months post-intervention
Gregory

- 24 months old; lives with mother and father; both employed full-time
- Mother – clerical; Father – tug boat crew
- FSP Outcomes: improve language, improve behavior
- Assessment: overall mild delays; moderate delays in language development
- EI services: speech therapy 30 min./2x week
Initial concerns

- Tantrums (rolls on floor, ear-piercing screams, runs away, falls to floor, pulling hair, kicking, hitting)

- Difficult activities: diaper changes, washing hair, bath, coming in from outside play, grocery store, changes in routine (seems to be o.k. at family child care)
Process

- Rapport Development; Ecological Assessment
- Person-centered planning
- Functional Assessment
- Intervention in targeted routines
- Expanded support to community activities
Methods

- **Single Subject Design:**
  - Concurrent multiple baseline across routines

- Conducted during three daily home routines:
  - 1. Diaper change; 2. Bath time; 3. Transition from play

- D.V. = Greg’s challenging behavior and engagement; Parent interaction

- I.V. = The PBS process
Dependent Measures

- **Total Challenging**: Any occurrence of aggression, collapsing on floor, arching back, out of area, property destruction, or screaming
- **Engagement**: Following directions, participating in activity appropriately for majority of interval
- **Parent Positive**: Verbal positive comments, positive physical touch, instructions, requests
- **Parent Negative**: Verbalizations that are attempt to terminate problem behavior, redirection, physical guidance for redirection
- **Length of diaper change**: Latency from initial instruction to completion of routine
- **Communication**: Use of words (sound pattern or word approximation, words); lexicon of words
Hypothesis Statement: Greg displayed challenging behavior in an attempt to escape from home routines that were not preferred (function=escape + attention)

- **Diaper Change Routine**
  - 1. Environmental modifications; 2. Visual schedule & choice board; 3. Preferred toy; 4. Active Participation; 5. Ignore and redirect

- **Bath Routine:**
  - 1. Environmental modifications; 2. Safety signal; 3. Object cue for transition; 4. Preferred activities/toys; 5. Active participation; 6. Ignore and redirect
Percentage of Intervals with Engagement and Total Challenging Behavior Across Three Routines

Diaper Change

Baseline

Intervention

Follow-up

Engagement

Total Challenging

Days

Percentage of Intervals

Generalization Probe

Monthly Probes

^ = No tooth brushing

*= Generalization Probe (dad)

# = Terminated Session
Procedural Fidelity Percentage of Steps Completed

Baseline  Intervention  Follow-up

Diaper

Bathtime

Play

Transition

Days  Monthly Probes

* Generalization probe- (Dad)
Mean Adult Interactions Across All Conditions

Diaper

Baseline | Intervention | Follow-up
---|---|---
positive comments, instructions, physical contact

correction, redirection, physical guidance

Mean Percentage of Intervals

Bath

Baseline | Intervention | Follow-up
---|---|---

Mean Percentage of Intervals
Duration of Diaper Change Across All Conditions

Baseline

Days

Duration in Seconds

Intervention

Follow-up

Monthly Probes
Frequency of All Words and Number of Different Words Spoken During Bathtime

Baseline

Intervention

Follow-up

Days

Monthly Probes

Words Spoken

Frequency of words

Number of Different Words

0 10 20 30 40 50 60 70 80 90 100

0 10 20 30 40 50 60 70 80 90 100
Contributions of study

- One of few applications with child under 30 months
- Parent acted as intervention agent in naturally occurring routines
- Collateral data of child communication
Challenges

- Context of family home and routines for research
- Family structure of negative reinforcement; imposing a baseline
- Rapid development of young children
- Distinguishing between problem behavior of concern and problem behavior that is developmentally expected
- High intensity, low frequency problem behavior
Integration of EIPBS into Part C

- Match
  - Team approach
  - Natural environments
  - IFSP driven
  - Measurable outcomes

- Challenges
  - Trained providers
  - Time intensive
  - $$
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