A Descriptive Analysis of Positive Behavior Support Research with Young Children with Challenging Behavior

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Introduction

• Importance of intervention research with young children
  – Increase number of young children who demonstrate challenging behaviors (Campbell et al., 1995; Webster-Stratton, 1997)
  – A number of intervention programs exist (e.g., Incredible Years, RIP)
    • Emphasis on reactive approach rather than a proactive approach to intervention
Introduction - continued

- Positive Behavior Support
  - A proactive approach for working with children with challenging behaviors
  
  - An emerging technology (Carr et al., 1999)
  
  - Most of the research has been conducted on persons with developmental disabilities
    - Fewer studies have been conducted with young children
Introduction - continued

• National emphasis on evidence-based practices

• Increased national attention on proactive interventions to address these problem behaviors in young children
  – Center on Evidence-based Practice: Young Children with Challenging Behavior (www.challengingbehavior.com)
Purpose

• To provide a descriptive overview of the PBS research conducted with young children who demonstrate challenging behaviors

• To discuss for future research directions
Search Procedures

• Identified empirical research studies using PBS strategies with young children (ERIC, Psych lit)
  – Key Words:
    • Positive behavior support
    • Functional assessment, Functional behavioral assessment
    • Self-management
    • Functional communication training
    • Assessment-based interventions

• Hand search of journals/authors
Criteria for Inclusion

• Experimental research study
• Included at least one participant 6 years or younger
• Implemented one of the following types of interventions:
  – Assessment-based intervention
  – Self-monitoring
  – Functional Communication
  – Choice making
Journals

- Total number of journals = 20 (1984 - present)
- Journals included:
  - Behavior Disorders (4)
  - Behavior Modification (3)
  - Behavior Therapy (1)
  - Child & Family Behavior Therapy (1)
  - Early Education and Development (1)
  - Education and Treatment of Children (3)
  - Education and Treatment of Young Children (1)
  - Education and Treatment of Mental Retardation (1)
  - Exceptional Children (3)
  - Intervention in School & Clinic (1)
  - Journal of Applied Behavior Analysis (16)
  - Journal of the Association for Persons with Severe Handicaps (1)
  - Journal of Autism and Developmental Disabilities (2)
  - Journal of Behavioral Education (1)
  - Journal of Early Intervention (1)
  - Journal of Emotional & Behavioral Disorders (1)
  - Journal of Positive Behavioral Interventions (7)
  - School Psychology (1)
  - School Psychology Quarterly (1)
  - Topics in Early Childhood Special Education (3)
Coding Procedures

• Categories
  – Disability type (no disability, at risk, intellectual
disability/severe/profound/mild-moderate, SED/EBD/ODD, ADHD/ADD,
developmental delay/autism/PDD, speech/language impairment, physical
disability)
  – Ages (1 - 6 years old)
  – Number of participants
  – Gender of participants
  – Race
  – SES
  – Intervention settings (community school/preschool, special education
placement, home community, residential/hospital, clinical, other)
Coding Procedures - continued

• Categories - continued
  – Target behaviors/dependent measures (destructive, disruptive, engagement or on/off task responding, stereotypy, social interactions, skill performance, psychosocial measures
  – Interventions linked to functional assessment outcomes?
  – Generalization measures collected?
  – Maintenance measures collected?
  – Treatment fidelity measures collected?
  – Social validation measures collected?
Coding Procedures - continued

• Categories - continued
  – Assessment with no intervention
  – Intervention type (antecedent intervention, instructional intervention, functional assessment based intervention, self-monitoring intervention, multicomponent intervention
  – Intervention agents (teacher/child care provider, parent, residential staff, researcher, peer
  – Design utilized
Coding Procedures - continued

• Reliability calculations
  
  – 2 Independent observers calculated IOA on each category
  
  – Percentage of Articles with IOA = 32% (17/53 articles)
  
  – IOA = 99.9% across all categories
Results

• Total number of articles = 53

• Increase in the number of PBS Early Intervention articles per year since 1992 (insert graph)
Number of PBS Early Intervention Articles per Year

Number of Articles

Year:
- 1984
- 1985
- 1986
- 1987
- 1988
- 1989
- 1990
- 1991
- 1992
- 1993
- 1994
- 1995
- 1996
- 1997
- 1998
- 1999
- 2000
- 2001
- 2002
Population

- **Type of disability**
  - No disability N = 11 (20%)
  - At risk N = 3 (6%)
  - Intellectual Disability N = 18 (34%)
  - SED N = 8 (15%)
  - ADHD N = 2 (4%)
  - DD/Autism/PDD N = 27 (51%)
  - Speech Delay N = 11 (21%)
  - Physical Disability N = 12 (23%)

- **Demographics**
  - Race reported N = 3 (6%)
  - Socioeconomic level reported N = 4 (8%)
Ages & Gender of Participants

- **Ages**
  - 1 year old N = 1 (2%)
  - 2 years old N = 11 (21%)
  - 3 years old N = 18 (34%)
  - 4 years old N = 24 (45%)
  - 5 years old N = 25 (47%)
  - 6 years old N = 13 (25%)

- **Gender**
  - Male N = 26 (49%)
  - Female N = 5 (9%)
  - Male & Female N = 19 (36%)
Settings

- Community School N = 19 (36%)
- Special Education N = 10 (19%)
- Home N = 12 (23%)
- Community N = 1 (2%)
- Residential/In patient N = 6 (11%)
- Clinical/outpatient N = 4 (8%)
- Other NOS N = 10 (19%)
Dependent Measures

- Destructive N = 43 (81%)
- Disruptive N = 31 (58%)
- Engagement N = 17 (32%)
- Stereotyppy N = 2 (4%)
- Social Interaction N = 14 (26%)
- Skill Performance N = 22 (42%)
- Psycho-social N = 1 (2%)
Intervention Type

• Antecedent Intervention N = 15 (28%)
• Instructional Intervention N = 34 (64%)
• Self-monitoring Intervention N = 9 (17%)
• FA based Interventions N = 14 (26%)
• Multicomponent Interventions N = 26 (49%)
• Intervention linked to FA N = 18 (34%)
• Assessment only (no intervention) N = 9 (17%)
Intervention Agents

- Teacher N = 24 (45%)
- Parent N = 13 (25%)
- Residential Staff N = 0
- Researcher N = 20 (38%)
- Peer N = 1 (2%)
Additional Outcomes

- Generalization N = 5 (9%)
- Maintenance N = 7 (13%)
- Treatment Fidelity N = 6 (11%)
- Social Validation N = 12 (23%)
- Research Designs
  - Within N = 42 (79%)
  - Group N = 1 (2%)
  - No design N = 10 (19%)
Discussion