

Pediatric School Psychology Service Delivery: Benefits and Barriers

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Children with Multifaceted Needs

- A high prevalence of children and adolescents have unique health care needs or suffer from health-related disorders
- Approximately 20% of children and adolescents are affected by a mental health disorder (U.S. Public Health Service, 2000)
- These children present with symptoms that affect their physical, academic, developmental, psychological, and social functioning
- An interdisciplinary, inter-systemic approach to pediatric care is necessary to meet the needs of children across systems (Power, Shapiro, & DuPaul, 2003)

Children with Multifaceted Needs

- To meet the complex needs of children pediatric care has expanded to a more comprehensive service delivery approach that includes *psychology* and *education* (Perrin, 1999)
- Educational reform emphasizes that schools must begin to address how such mental and physical health issues are potential barriers to learning (Adelman & Taylor, 1998)

Pediatric School Psychology

- Pediatric school psychology is a unique subspecialty within school psychology that
 - includes school and health psychology
 - follows a public health model that includes all children
 - places an emphasis on building resources and solving problems
 - is based in hospitals, medical clinics, and schools

(Power, DuPaul, Shapiro, & Parrish, 1995)

Pediatric School Psychology Practice

These professionals have unique knowledge and skills in:

- Consultation
- Intervention
- Data-based decision making
- Evidence-based interventions
- Children's health and mental health
- Family systems
- School-based services
- Medical, pediatric, and health related issues

(Power, DuPaul, Shapiro, & Kazak, 2003; Sheridan, Kratochwill, & Bergan, 1996)

Roles of Pediatric School Psychologists

- Roles in pediatric school psychology include:
 - *Advocating* for children's educational and social needs
 - *Consulting* with care providers, families, and educators
 - *Facilitating collaboration* among these individuals
 - *Serving as a liaison* among families, educational professionals, and health care providers

(Power, DuPaul, Shapiro, & Parrish, 1995)

Training in Pediatric School Psychology

- Specialized training in pediatric school psychology includes one or more of the following:
 - Grant-supported training experiences in pediatric settings
 - Supplemental coursework specific to medical and/or health-related issues that extend beyond traditional program requirements (e.g., medical topics, health psychology, behavior medicine)
 - Practica opportunities in pediatric settings such as hospitals and medical clinics

Pediatric School Psychology Training at the University of Nebraska-Lincoln (UNL)

- Students are involved in a three-year training experience linking the university program with a pediatric medical setting
 - Training involves:
 - Didactic instruction in conjoint behavioral consultation (CBC)
 - Interdisciplinary leadership training
 - Providing pediatric school psychology services to patients of a developmental pediatrics clinic

Previous Research Related to UNL's Model of Pediatric School Psychology

- Previous research in the field of pediatric school psychology has examined:
 - The types of clinical services provided and types of clients for whom these services were provided (Warnes et al., 2006)
 - The roles and functions that school psychology consultants can have within a pediatric practice (Olson, Rohlk, Sheridan, & Ellis, 2006)
 - The conditions in which CBC model is appropriate and desirable in medical settings (Warnes et al., 2006)
 - The effectiveness of CBC as a model for addressing the multiple needs of children in a pediatric setting (Sheridan et al., 2004)

Purpose and Research Questions

■ Purpose

- To examine the perceptions of participants (i.e., parents and pediatric school psychologists) who are involved in pediatric school psychology services within a medical setting

■ Questions

- What do parents and pediatric school psychologists report as the *benefits* from pediatric school psychology service delivery?
- What are the *barriers* faced by parents and pediatric school psychologists in the provision of services to children and adolescents in a pediatric setting?

Table 1
Child Demographic Information (n = 16)

Gender	Male	81%
	Female	19%
Age	Mean	9.4 years
	S.D.	3.2
Grade	Mean	4th grade
	S.D.	3.3
Diagnoses	ADHD	87.5%
	Other	12.5%
	More than one diagnoses	6.3%
Nature of Concerns	School	100%
	Home	55.5%
	Medical	55.5%
	Combination	68%
	Missing data	44%

Pediatric School Psychologists Demographics

- 9 school psychology doctoral students were involved as trainees delivering pediatric school psychological services
- Pediatric school psychologists were involved in total of 56 cases

Measures

- *Pediatric School Psychology Referral Form*
 - Purpose: to summarize case information
 - Completed by pediatric school psychologists for each case
 - Information included:
 - Demographic information (gender, age, grade, ethnicity, diagnosis, medication, and status in special education).
 - Primary reasons for referral were recorded (e.g., academic or behavioral concerns in home and/or school)
 - Types of clinical action taken (e.g., school observation, IEP consultation, CBC)
 - Organized by Levels of Services Provided
 - **Low**: Observation and/or referral only
 - **Medium**: Combinations of IEP consult, parent consult, and/or teacher consult
 - **High**: Conjoint Behavioral Consultation

Measures

- *Perceptions of Pediatric School Psychology Services Form*
 - Purpose: to collect information regarding the benefits and barriers of services provided by pediatric school psychologists
 - Completed by parents and pediatric school psychologists for each specific case
 - Quantitative Measure
 - 8 items
 - Likert-type rating scale ranging from 1 – 6
 - Qualitative Questions
 - 2 open-ended items
 - Evaluated the benefits of the consultant's involvement within the medical setting and the barriers encountered during service delivery

Procedures

- Pediatric school psychologists completed the *Pediatric School Psychology Referral Form*
- Surveys were mailed to parents and pediatric school psychologists participating in pediatric school psychology services
- Packets included:
 - The *Perceptions of Pediatric School Psychology Services Form*
 - Cover letter
 - Self-addressed return envelope
- Following the return deadline, a second mailing was sent to non-responders

Return Rate

- Pediatric School Psychologists
 - 88% (49/56) total returned surveys
 - 22% low services
 - 31% med services
 - 47% high services
- Parents
 - 30% (16/53) total returned surveys
 - 12.5% low services
 - 25% med services
 - 62.5% high services

Quantitative Analysis and Results

Results: Quantitative Data

[Link to table](#)

Pediatric School Psychologist Results

- Pediatric school psychologists with higher levels of service involvement report more positive outcomes related to their work
- Increased understanding, improved communication, and developing intervention plans were viewed as positive aspects to service delivery
- Benefits extended across home and school settings

Parent Results

- Parents with higher levels of service involvement report more positive outcomes for pediatric services
- Increased understanding of child needs and obtaining information on how to address child concerns at home were positive aspects of service delivery
- Overall, parents involved in various levels of service delivery report that consultation services provided from a pediatric setting are a unique service that they view favorably and would recommend to others

Qualitative Analysis and Results

Analysis-Coding

■ Qualitative Data

- 3-stage coding process derived from Grounded Theory (Strauss & Corbin, 1998)
- *Step 1: Open Coding with Triangulation*
 - 2 coders, blind to the types of services provided, independently identified categories by assessing similarities and differences in responses.
- *Step 2: Axial Coding with Triangulation*
 - Each coder reevaluated the responses and categories and identified any subcategories.
- *Step 3: Selecting Coding with Member Checking*
 - 4 consultants reviewed the lists developed by the coders and finalized the categories.
 - 2 coders independently placed each response into the appropriate category.
 - Frequencies for each category were calculated

Table 3
Parent Benefits

Type of Benefit	Number of Responses for level of Service		
	High	Med	Low
Positively influenced child self-perceptions	3	0	0
Positively influenced child behavior	8	1	1
Psychologist provided individual attention	5	2	1
Psychologist provided useful recommendations	3	4	4
Psychologist was supportive and responsive to parents and/or teachers	7	2	5
Other	1	0	1
Total (48 responses)	27	9	12

Parent Benefits

- Higher percentage of parents receiving a high level of service delivery reported positive improvement in behavior
- Parents reported that pediatric school psychologists provided useful recommendations for all 3 levels of service
- Both high and low levels of service prompted reports of responsiveness and support among parents

Table 4
Parent Barriers

Type of Barrier	Number of Responses for Level of Service		
	High	Med	Low
Time restraints	9	1	0
Teacher/school resistance	4	0	2
Scope of services did not meet parents' expectations	3	3	0
Other	1	0	0
Total (23 responses)	17	4	2

Parent Barriers

- Among those receiving a high level of service, time restraints was frequently reported as a barrier
- Parents involved in both high and low levels of service reported teacher/school resistance as a barrier

Table 5
Pediatric School Psychologist Benefits

Type of Benefit	Number of Responses for Level of Service		
	High	Med	Low
Improved communication and collaboration between home and school	21	6	1
Psychologist assisted physician with treatment planning	9	5	7
Psychologist developed useful intervention plans	11	2	3
Psychologist provided useful information regarding the child's behavior to parents and/or teachers	3	3	6
Positively influenced child behavior	14	2	0
Psychologist helped identify needed resources/services to parents and/or teachers	5	3	4
Psychologist was supportive and responsive to parents and/or teachers	6	3	2
Psychologist facilitated skill development in parents and/or teachers	5	1	0
Other	3	1	0
Total (126 responses)	77	26	23

Pediatric School Psychologist Benefits

- Improved communication, useful intervention plans, and improvement in child behavior were all reported by pediatric school psychologists providing high levels of service
- Providing useful information to parents and teachers was reported as a benefit by pediatric school psychologists providing lower levels of service
- Assisting physicians in treatment planning was reported for all three levels of service delivery

Table 6
 Pediatric School Psychologist Barriers

Type of Barrier	Number of Responses for Level of Service		
	High	Med	Low
Time restraints	14	7	3
Scheduling/coordination difficulties	5	0	1
Teacher/school resistance	1	3	0
Poor treatment integrity	6	0	0
Communication difficulties with parents	0	0	4
Strained home-school relationship	3	0	0
Scope of services were not appropriate for child's needs	0	3	1
Other	5	1	1
Total (58 responses)	34	14	10

Pediatric School Psychologist Barriers

- Time restraints was the most frequently reported barrier for high and medium levels of service
- Poor treatment integrity was reported by pediatric school psychologists providing high level of service

Summary

- Pediatric school psychologists and parents involved in higher levels of service delivery reported more positive results than those experiencing lower levels of service delivery
- Intervention plans developed for home and school were viewed favorably by pediatric school psychologists and parents
- Respondents viewed services favorably and reported that services were unique to their needs and would not have otherwise been provided

Implications for Practice

- Results of this study indicate that parents value professional involvement at many levels
- Continued effort should be made to educate and partner with families so that they can meet the needs of their children
- Parents and teachers have a wealth of experience and information to share and should be viewed as essential members of the medical decision-making team

Implications for Practice

- Involving professionals with interdisciplinary training is important to meet the needs of children with medical concerns
- These professionals not only improve child behavior outcomes, but also create partnerships among important individuals in the child's life
- Opportunities should be available in a variety of settings to allow pediatric school psychologists with training in the fields of medicine and education to assist families of children with behavioral concerns

Limitations and Future Research Directions

- External validity is questionable
- Direct outcome data are subjective (i.e., self-report) rather than objective (i.e., independent observations)
- The perspective of teachers and physicians were not examined
- Perceptions were reported independent of case outcomes

Limitations and Future Research Directions

- Parents and pediatric school psychologists reported high levels of agreement, resulting in a lack of variability in outcome data
- Pediatric school psychologists completed multiple surveys which may confound their ratings
- The *Perceptions of Pediatric School Psychology Services Form* was developed specifically for this project, and thus lacks validity and reliability

Research/Future Directions

- Further research evaluating the effectiveness and social validity of multisystemic CBC in addressing the needs of children and strengthening partnerships across settings is needed
- Program evaluation research is needed to investigate the outcomes (e.g., knowledge and skill level, future employment) of this type of specialized training

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