Pediatric School Psychology
Service Delivery:
Benefits and Barriers

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Paper presented at the annual conference of the
National Association of School Psychologists
March 28, 2007
New York, NY
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)
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)
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
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 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>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Demographic Information (n = 16)</td>
</tr>
<tr>
<td>______________________________________________________________________</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>S.D.</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>S.D.</td>
</tr>
<tr>
<td><strong>Diagnoses</strong></td>
</tr>
<tr>
<td>ADHD</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>More than one diagnoses</td>
</tr>
<tr>
<td><strong>Nature of Concerns</strong></td>
</tr>
<tr>
<td>School</td>
</tr>
<tr>
<td>Home</td>
</tr>
<tr>
<td>Medical</td>
</tr>
<tr>
<td>Combination</td>
</tr>
<tr>
<td>Missing data</td>
</tr>
</tbody>
</table>
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>
<thead>
<tr>
<th>Type of Benefit</th>
<th>High</th>
<th>Med</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively influenced child self-perceptions</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Positively influenced child behavior</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Psychologist provided individual attention</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Psychologist provided useful recommendations</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Psychologist was supportive and responsive to parents and/or teachers</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total (48 responses)</strong></td>
<td><strong>27</strong></td>
<td><strong>9</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Type of Barrier</th>
<th>High</th>
<th>Med</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time restraints</td>
<td>9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Teacher/school resistance</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Scope of services did not meet parents’ expectations</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total (23 responses)</td>
<td>17</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Type of Benefit</th>
<th>Number of Responses for Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Improved communication and collaboration between home and school</td>
<td>21</td>
</tr>
<tr>
<td>Psychologist assisted physician with treatment planning</td>
<td>9</td>
</tr>
<tr>
<td>Psychologist developed useful intervention plans</td>
<td>11</td>
</tr>
<tr>
<td>Psychologist provided useful information regarding the child’s behavior to</td>
<td>3</td>
</tr>
<tr>
<td>parents and/or teachers</td>
<td></td>
</tr>
<tr>
<td>Positively influenced child behavior</td>
<td>14</td>
</tr>
<tr>
<td>Psychologist helped identify needed resources/services to parents and/or</td>
<td>5</td>
</tr>
<tr>
<td>teachers</td>
<td></td>
</tr>
<tr>
<td>Psychologist was supportive and responsive to parents and/or teachers</td>
<td>6</td>
</tr>
<tr>
<td>Psychologist facilitated skill development in parents and/or teachers</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Total (126 responses)</td>
<td>77</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Type of Barrier</th>
<th>Number of Responses for Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Time restraints</td>
<td>14</td>
</tr>
<tr>
<td>Scheduling/coordination difficulties</td>
<td>5</td>
</tr>
<tr>
<td>Teacher/school resistance</td>
<td>1</td>
</tr>
<tr>
<td>Poor treatment integrity</td>
<td>6</td>
</tr>
<tr>
<td>Communication difficulties with parents</td>
<td>0</td>
</tr>
<tr>
<td>Strained home-school relationship</td>
<td>3</td>
</tr>
<tr>
<td>Scope of services were not appropriate for child’s needs</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Total (58 responses)</td>
<td>34</td>
</tr>
</tbody>
</table>
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
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.
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.


References


