March 2007

**Pediatric School Psychology Service Delivery: Benefits and Barriers**

Emily D. Warnes  
*University of Nebraska - Lincoln, ewarnes2@unl.edu*

Kathryn E. Woods  
*University of Nebraska - Lincoln*

Carrie A. Blevins  
*University of Nebraska - Lincoln*

Katie Magee  
*University of Nebraska - Lincoln*

Michelle S. Swanger-Gagne  
*University of Nebraska - Lincoln*

*See next page for additional authors*

Follow this and additional works at: [https://digitalcommons.unl.edu/cyfsposters](https://digitalcommons.unl.edu/cyfsposters)

Part of the [Pre-Elementary, Early Childhood, Kindergarten Teacher Education Commons](https://digitalcommons.unl.edu/cyfsposters)

[https://digitalcommons.unl.edu/cyfsposters/22](https://digitalcommons.unl.edu/cyfsposters/22)

This Article is brought to you for free and open access by the Children, Youth, Families & Schools, Nebraska Center for Research on at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Posters, Addresses, & Presentations from CYFS by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Authors
Emily D. Warnes, Kathryn E. Woods, Carrie A. Blevins, Katie Magee, Michelle S. Swanger-Gagne, Heather E. Magee, and Susan M. Sheridan
Pediatric School Psychology
Service Delivery: Benefits and Barriers

Emily D. Warnes, Ph.D.
Kathryn E. Woods, M.A.
Carrie A. Blevins, B.S.
Katie L. Magee, B.S.
Michelle S. Swanger-Gagné, M.A.
Heather E. Magee, Ph.D.
Susan M. Sheridan, Ph.D.
University of Nebraska-Lincoln

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 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, and 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
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 1
Child Demographic Information (n = 16)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>9.4 years</td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4th grade</td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td><strong>Diagnoses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADHD</td>
<td>87.5%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>More than one diagnoses</td>
<td>6.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Nature of Concerns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>55.5%</td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>55.5%</td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Missing data</td>
<td>44%</td>
<td></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>Number of Responses for level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Positively influenced child self-perceptions</td>
<td>3</td>
</tr>
<tr>
<td>Positively influenced child behavior</td>
<td>8</td>
</tr>
<tr>
<td>Psychologist provided individual attention</td>
<td>5</td>
</tr>
<tr>
<td>Psychologist provided useful recommendations</td>
<td>3</td>
</tr>
<tr>
<td>Psychologist was supportive and responsive to parents and/or teachers</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total (48 responses)</strong></td>
<td><strong>27</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>Number of Responses for Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Time restraints</td>
<td>9</td>
</tr>
<tr>
<td>Teacher/school resistance</td>
<td>4</td>
</tr>
<tr>
<td>Scope of services did not meet parents’ expectations</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Total (23 responses)</td>
<td>17</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>
<thead>
<tr>
<th>Type of Benefit</th>
<th>Number of Responses for Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved communication and collaboration between home and school</td>
<td>21 High, 6 Med, 1 Low</td>
</tr>
<tr>
<td>Psychologist assisted physician with treatment planning</td>
<td>9 High, 5 Med, 7 Low</td>
</tr>
<tr>
<td>Psychologist developed useful intervention plans</td>
<td>11 High, 2 Med, 3 Low</td>
</tr>
<tr>
<td>Psychologist provided useful information regarding the child’s behavior to parents and/or teachers</td>
<td>3 High, 3 Med, 6 Low</td>
</tr>
<tr>
<td>Positively influenced child behavior</td>
<td>14 High, 2 Med, 0 Low</td>
</tr>
<tr>
<td>Psychologist helped identify needed resources/services to parents and/or teachers</td>
<td>5 High, 3 Med, 4 Low</td>
</tr>
<tr>
<td>Psychologist was supportive and responsive to parents and/or teachers</td>
<td>6 High, 3 Med, 2 Low</td>
</tr>
<tr>
<td>Psychologist facilitated skill development in parents and/or teachers</td>
<td>5 High, 1 Med, 0 Low</td>
</tr>
<tr>
<td>Other</td>
<td>3 High, 1 Med, 0 Low</td>
</tr>
<tr>
<td>Total (126 responses)</td>
<td>77 High, 26 Med, 23 Low</td>
</tr>
</tbody>
</table>
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>
<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>14</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Scheduling/coordination difficulties</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Teacher/school resistance</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Poor treatment integrity</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Communication difficulties with parents</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Strained home-school relationship</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Scope of services were not appropriate for child’s needs</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total (58 responses)</td>
<td>34</td>
<td>14</td>
<td>10</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
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.


References


