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Roles and Functions: School Psychology Within a Pediatric Setting

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Pediatric School Psychology

- With an increasing number of children with chronic health conditions, the concept of pediatric care has expanded from a primarily medical emphasis to one that is more comprehensive and includes the disciplines of psychology and education (Perrin, 1999).

- Children with developmental disabilities experience symptoms that affect their physical, academic, behavioral, developmental, and social functioning; therefore, collaboration among interdisciplinary professionals is essential.
Pediatric school psychology represents an “emergence of a subspecialty” within school psychology and includes the competencies of both school psychology and health psychology (Power, DuPaul, Shapiro, & Parrish, 1995).

- Pediatric school psychologists serve as a liaison among families, educational professionals, and health care providers.

Training in pediatric school psychology has been recommended to promote interdisciplinary collaboration and communication among families, schools, and health care providers (Power, DuPaul, Shapiro, & Kazak, 2003; Shaw, 2003).

- With expertise in learning and development as well as consultation and intervention, school psychologists are uniquely qualified to facilitate collaborative efforts across home, school, and medical settings (Shapiro & Manz, 2004).
In response to the identified need for qualified pediatric school psychologists, the University of Nebraska-Lincoln (UNL) School Psychology Program and the Munroe-Meyer Institute (MMI) worked collaboratively to provide school psychology doctoral students with training in this emerging discipline.

Training in pediatric school psychology occurred over a 3-year span which included the following:

- Year 1 (UNL): Training in Conjoint Behavioral Consultation (CBC)
- Year 2 (MMI): Training in Interdisciplinary Leadership
- Year 3 (MMI): Integration of Training through Field-Based Practicum
CBC (Sheridan & Kratochwill, in press; Sheridan, Kratochwill, & Bergan, 1996) is a partnership-centered, indirect model of service delivery wherein parents, educators, health professionals, and consultants work collaboratively to meet a child’s developmental needs, address concerns, and achieve success by promoting the competencies of all parties.

CBC includes 4 stages:
- Conjoint Needs Identification
- Conjoint Needs Analysis
- Treatment Implementation
- Treatment Evaluation
Year 2 (MMI): Training in Interdisciplinary Leadership

- LEND (Leadership in Education in Neurodevelopmental Disabilities): provided trainees with knowledge of public policy, developmental disabilities, discipline-specific practices, and family advocacy.

- Trainees conducted observations in a variety of clinics and participated regularly in the Developmental Pediatric Clinic (e.g., seeing clients with physicians and providing behavioral and educational recommendations).
Year 3 (MMI): Integration of Training through Field-Based Practicum

- Physicians at the Developmental Pediatric Clinic referred clients who were experiencing medical, home, school, and/or communication concerns.

- Trainees worked collaboratively with parents, educators, and health care providers to identify and implement appropriate services to address the children’s educational and health concerns across settings.

- Trainees implemented CBC and other services across multiple schools as an external consultant.
Purpose

- Pediatric school psychology is an emerging field with a limited number of training programs and practitioners (Power, DuPaul, Shapiro, & Parrish, 1995; Sheridan et al., 2006). As a result, information is lacking on the characteristics of referred clients and the types of services provided by pediatric school psychologists.

- Therefore, the purpose of this study was to identify the roles and functions of trainees in pediatric school psychology.
Exploratory Questions

1. What population is referred for pediatric school psychology services (e.g., gender, age, and ethnicity)?
2. What are common diagnoses in referred clients and how do they differ across cohorts?
3. What are the primary reasons clients are referred for services (e.g., medical, school, home, and/or communication concerns)?
4. What services are typically provided by school psychologists in a pediatric setting (e.g., observations, consultation, etc.) and how have these services differed across cohorts?
5. What percentages of cases result in various levels of trainee involvement? (Levels of involvement will be described in the Methods section.)
Methods:
Participants

- 5 school psychology doctoral students:
  - Cohort 1: 1 student completed training in Spring 2004
  - Cohort 2: 2 students completed training in Spring 2005
  - Cohort 3: 2 students completed training in Spring 2006
- Services were provided to 51 clients (34 males; 17 females) referred by pediatricians at the Developmental Pediatric Clinic at MMI.
Methods: Measure

- Referral matrix: Completed for each referred client
  - Demographic information (e.g., gender, ethnicity, age)
  - Referral concerns:
    - Medical (e.g., potential medication side effects, medication dose/type in question)
    - School (e.g., academic, behavior, social problems)
    - Home (e.g., behavior, homework, emotional, social problems)
    - Communication (e.g., parent-school communication problems, divergent parent-school problem perception or solution)
Methods: Measure Con’t

- Services provided:
  - **Observation** – observing the child in relevant settings and sharing information with parents, educators, and/or physicians.
  - **IEP Consultation** – educating parents on the IEP process, encouraging them to take an active role, attending IEP meetings, and providing recommendations.
  - **Parent Consultation (PC)** – working collaboratively with parents to apply the principles of behavioral consultation.
  - **Teacher Consultation (TC)** – working collaboratively with teachers to apply the principles of behavioral consultation.
  - **CBC** – implementing a collaborative problem-solving process as described above.
  - **Other services** – providing informal recommendations, coordinating services, making referrals, etc.
Methods: Analysis

- Descriptive statistics were used to answer the exploratory questions.

- To address question #5, the 6 types of services were placed on a continuum of those requiring the most (e.g., CBC) to least (e.g., other) amount of trainee involvement.

- All cases were categorized into mutually exclusive categories as follows:
  1. **CBC** – involved CBC and any of the below services.
  2. **PC/TC** – involved individual consultation with either a parent or a teacher and any of the below services.
  3. **IEP consultation** – involved IEP consultation and any of the below services.
  4. **Observation** – involved observations and may have included “Other” services.
  5. **Other** – did not include any of the above services, but required some trainee attention.
Results:
Client Demographics

- Gender: 67% Male, 33% Female
- Ethnicity: 83% Caucasian, 17% Other
- Ages: 17% 5-7, 22% 8-10, 37% 11-13, 24% 14-16
Results: Diagnoses Across Cohorts

<table>
<thead>
<tr>
<th>Cohort</th>
<th># of Clients</th>
<th>ADHD</th>
<th>ODD</th>
<th>MH</th>
<th>AUT</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>75.0%</td>
<td>37.5%</td>
<td>0.0%</td>
<td>22.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>78.9%</td>
<td>10.5%</td>
<td>10.5%</td>
<td>20.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>63.6%</td>
<td>4.5%</td>
<td>22.7%</td>
<td>36.4%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>71.4%</td>
<td>12.2%</td>
<td>14.3%</td>
<td>27.5%</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

Note: AUT = Autism Spectrum Disorders (Pervasive Developmental Disorder, Aspergers, Autism). Other = Cerebral Palsy, Cystic Fibrosis, Tourette’s Syndrome, Fetal Alcohol Syndrome and other low incidence disorders.
### Results: Referral Concerns

<table>
<thead>
<tr>
<th>Referral Concern</th>
<th>% of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>17.6%</td>
</tr>
<tr>
<td>School</td>
<td>96.1%</td>
</tr>
<tr>
<td>Home</td>
<td>51.0%</td>
</tr>
<tr>
<td>Communication</td>
<td>45.1%</td>
</tr>
</tbody>
</table>
## Results:
### Types of Services Across Cohorts

<table>
<thead>
<tr>
<th>Cohort</th>
<th># of Cases</th>
<th>OBS</th>
<th>IEP</th>
<th>PC</th>
<th>TC</th>
<th>CBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>66.7%</td>
<td>0.0%</td>
<td>22.2%</td>
<td>44.4%</td>
<td>11.1%</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>45.0%</td>
<td>25.0%</td>
<td>10.0%</td>
<td>0.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>81.8%</td>
<td>40.9%</td>
<td>18.2%</td>
<td>9.1%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>64.7%</td>
<td>27.5%</td>
<td>15.7%</td>
<td>11.8%</td>
<td>29.4%</td>
</tr>
</tbody>
</table>
Results:
Levels of Trainee Involvement

OBS: 25.50%
IEP: 13.70%
TC/PC: 19.60%
OTHER: 11.80%
CBC: 29.40%
Discussion

- ADHD was the most frequent diagnosis for referred clients.
  - This may be representative of a large population of clients with ADHD at the Developmental Pediatric Clinic; alternatively, pediatric school psychologists may be referred clients with ADHD in greater numbers because symptoms present across settings and may be viewed as responsive to a collaborative intervention (e.g., CBC).
- Characteristics of referred clients changed across the duration of this study.
  - Initial clients presented with more externalizing diagnoses (e.g., ADHD and ODD); recent clients presented with more developmental disabilities (e.g., MH and Autism Spectrum Disorders).
  - Physicians may have initially viewed pediatric school psychology trainees as effective with externalizing disorders; as trainees established their roles, physicians may have recognized that services could be expanded to more diverse populations.
Discussion Con’t

- A limited number of cases involved medical concerns; the vast majority were referred due to school concerns followed by home and communication concerns.
  - These latter concerns may have been frequently referred due to the perception that they would be successfully addressed through collaborative efforts.
- The role of trainees has changed over time, such that initial cases primarily involved individual consultation (e.g., PC/TC) and recent cases primarily involved IEP consultation and CBC.
  - Changes may reflect an increased recognition and appreciation by physicians of the diverse services trainees provide to clients, families, and schools.
Discussion Con’t

- Approximately 30% of referrals resulted in CBC, which is considered the highest degree of consultant involvement across multiple settings.

- Approximately 50% of the cases never surpassed the IEP level, and trainees had minimal opportunities for active involvement (e.g., promoting problem-solving and joint-decision making).
  - Many services provided by trainees did not incorporate problem-solving models (e.g., PC/TC and CBC).

- School observations were the most frequently delivered service for referred clients.
  - Possible reasons why school observations do not lead to increased levels of coordinated services: lack of parent/teacher interest, differing problem perceptions between parents and teachers, and the absence of need beyond a school observation.
Limitations

- External validity is questionable due to the small sample of trainees and clients.
  - Results may differ for pediatric school psychologists who work in other settings (e.g., primary care facilities) and who did not receive the rigorous, systematic training described earlier.
- Effectiveness of services and satisfaction of clients/consultees has yet to be established.
Future Directions

- Future investigations should examine consultation outcomes (e.g., effect sizes, satisfaction).

- Future research should explore the extent to which the referred sample of clients is representative of the Developmental Pediatric Clinic population.
  - Differences between the referred sample and the general population could suggest that pediatric school psychologists are viewed as beneficial for one particular subset of the population (e.g., clients diagnosed with ADHD).

- Future studies could examine the relationships among a client’s diagnoses, referral concerns, and services provided to understand what factors contribute to a case’s progression toward interdisciplinary services, such as CBC.