Factors Associated With Perceptions Of Need For Child And Adolescent Psychiatry

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Overview of Presentation

• Background
• Study Goals
• Methods and Design
• Findings
• Discussion
Background

• Few studies report on mental health professionals’ assessment of need for mental health services
• Little is known about factors that may impact administrators’ perceptions of need.
• Professionals and mental health administrators largely determine which children receive services (Blais et al, 2003; Farmer, 2003; Hurlbut, 2003)
  – Assessment
  – Access & Referral
• Children’s development is rapid. Failure to address children’s mental health concerns has long term consequences (Pottick & Warner, 2002).
Goals of Study

- Identify models to define mental health need
  - Strengths
  - Limitations
- Describe county administrators’ perceptions of the current status of CAP services in New York State
- Examine factors associated with administrators’ perceptions of need for CAPs and mental health services for children and adolescents.
- Discuss policy implications of using administrators’ assessments of need
Defining Need (Bradshaw, 1999)

• **Comparative: Epidemiological Studies**
  – Strength: data widely available & most widely used
  – Limitation: do not indicate actual demand or need for services (Zahner et al, 1992)

• **Expressed: Utilization Studies**
  – Strength: shows what services being used
  – Limitation: fails to account for disparities and barriers to service

• **Felt: Consumer Surveys**
  – Strength: Empowers individuals
  – Limitation: Fearing stigma, individuals may not self-identify
    • Children & adolescents may not be aware of their need for services

• **Normative (Expert): Professional and Administrator Surveys**
  – Strength: Can draw on many factors
  – Limitation: Like felt need, may also be subjective
Method and Design

• Design: Predictive and Cross Sectional
• Sample
  • Subsample of 51 Mental Health Administrators*
  • Total sample was 58: 7 largest counties omitted
• Data Collection
  - Telephone Survey
  - Secondary Data
  - Collected between October and December 2007
• Analysis
  • Univariate and Bivariate Statistics
  • Multivariate Statistics

*Or individual with comparable knowledge
Research Questions

– What are the factors that predict mental health administrators’ perceptions of the need for child psychiatrists (CAPs) and mental health services for children and adolescents?

– Are different types of need equally influenced by the same factors?
Conceptual Framework

Personal Characteristics
- Sociodemographics
- Experience
- Responsibilities of position

Social Indicators
- Population with mental disability
- Age distribution of population

Current Services/Capacity
- Number of psychiatrists
- Number of beds

PERCEPTION of NEED for:
- Personnel (e.g., psychiatrists, nurses)
- Services (e.g., assessment, medication, counseling)
- Settings (e.g., inpatient, outpatient, residential care)
Rationale for Conceptual Framework

• Perception of need for personnel, services and settings is likely influenced by a number of factors:
  – Respondent Characteristics
  – Social Indicators
  – And Current Services
Steps in the Analysis

1. Univariate analysis: Checking distribution of variables
2. Created new variables: Need for counseling and Need for beds
3. Bivariate analyses: Pearson’s Correlations and one-way ANOVA
4. MR using each of 3 sets of independent variables from the conceptual model
5. Identified independent variables from 3 sets of dependent variables and Bivariate analyses
6. MR on unique independent variables for each of 3 dependent variables
7. MR using final consistent set of independent variables for each of 3 dependent variables
Dependent Variables: Measures of Need

- **CAPs (Personnel)**
  - Total number of CAPs needed in county
- **Counseling (Services)**
  - Principal Components Analysis
    - Individual mental health counseling (by CAP)
    - Family therapy (by CAP)
- **Child & Adolescent Beds (Settings)**
  - Range: 0 – 3
    - Long term
    - Inpatient
    - Residential Treatment
Independent Variables

• Respondent Characteristics
  • Position Title/Category
  • Gender
  • Number of years in position

• Social Indicators
  • Ethnicity (% white)
  • Gender (% male)
  • Population < 18 years of age
  • Median Family Income
  • Rural/Urban
  • Population 5 to 15 years with a mental disability

• Current Services (children & adolescents)
  • Number of CAPs
  • RTF in county
  • Inpatient beds in county
Descriptive Findings

• **Context:** Number of CAPs and Need for CAPs

• **Dependent Variables:** CAPs Need, Counseling Services Need and Need Beds

• **Independent Variables:** Respondent Characteristics, Social Indicators, and Current Services
Number of CAPs and Need for CAPs

- 51 counties: 157 CAPS
- Average # of practicing CAPs: 3
- Counties with zero CAPs: 12
- Counties with one CAP: 9

- Nearly all counties reported need for at least one additional CAP (47 out of 51)
- Average # of CAPs Needed: 2

<table>
<thead>
<tr>
<th># of CAPs</th>
<th>Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4-7</td>
<td>7</td>
</tr>
<tr>
<td>8-10</td>
<td>5</td>
</tr>
<tr>
<td>11-17</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categories of CAPs Need</th>
<th>Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Full or Part-time</td>
<td>19</td>
</tr>
<tr>
<td>2 Full or Part-time</td>
<td>11</td>
</tr>
<tr>
<td>3-4</td>
<td>14</td>
</tr>
<tr>
<td>5-9</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>
Dependent Variables: Need (N=51)

- CAPs (Personnel)
- Counseling (Services)
- Child and Adolescent Beds (Settings)

<table>
<thead>
<tr>
<th>Need</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPs</td>
<td>2.13</td>
<td>1.87</td>
</tr>
<tr>
<td>Need Counseling</td>
<td>0</td>
<td>1.00</td>
</tr>
<tr>
<td>Need Beds</td>
<td>1.63</td>
<td>0.89</td>
</tr>
</tbody>
</table>
Once Validated
User Accesses
APPS Web Forms
Logs In

Independent Variables:
Respondent Characteristics (N = 51)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45.1</td>
</tr>
<tr>
<td>Female</td>
<td>54.9</td>
</tr>
<tr>
<td>Job position</td>
<td></td>
</tr>
<tr>
<td>Manager or Supervisor</td>
<td>19.6</td>
</tr>
<tr>
<td>Director or Assistant Director of Services</td>
<td>80.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years in this position</td>
<td>6.98</td>
<td>6.10</td>
</tr>
<tr>
<td>Years in this community</td>
<td>13.68</td>
<td>10.44</td>
</tr>
</tbody>
</table>
## Independent Variables: Current Services and Social Indicators (N=51)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent(%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having Child/adol RTF beds</td>
<td>15.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having Child/adol INPT beds</td>
<td>25.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of CAPs practicing</td>
<td>3.08</td>
<td>3.63</td>
<td></td>
</tr>
<tr>
<td><strong>Social indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Male</td>
<td>49.70</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Percent White</td>
<td>91.90</td>
<td>5.66</td>
<td></td>
</tr>
<tr>
<td>Population &lt;18 yrs of age</td>
<td>23625.22</td>
<td>19743.49</td>
<td></td>
</tr>
<tr>
<td>Median family income, $</td>
<td>52257.43</td>
<td>13355.015</td>
<td></td>
</tr>
<tr>
<td>Rural-UrbanConti2003</td>
<td>3.61</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>Population 5-15 w/ Mental Disability</td>
<td>951.12</td>
<td>656.91</td>
<td></td>
</tr>
</tbody>
</table>
Building the Model
Final Model

- Personal Characteristics (Normative/Expert)
  - Job title
  - Gender
- Social Characteristics (Comparative)
  - Population age 5 to 15 yrs with a mental disability
  - Gender (% male)
- Current Capacity (Proxy for Expressed Need)
  - Number of CAPs
  - Inpatient beds in county
## Multivariate Analysis of Need

<table>
<thead>
<tr>
<th></th>
<th>CAPS</th>
<th>Counseling</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respondent Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director vs. Supervisor</td>
<td>-.11</td>
<td>-.18</td>
<td>-.40*</td>
</tr>
<tr>
<td>Female vs. Male</td>
<td>-.04</td>
<td>.21</td>
<td>-.44**</td>
</tr>
<tr>
<td><strong>Social Indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Population, ages 5-15, with</td>
<td>-.02</td>
<td>.39</td>
<td>.33</td>
</tr>
<tr>
<td>mental disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Male</td>
<td>.14</td>
<td>.33*</td>
<td>-.10</td>
</tr>
<tr>
<td><strong>Current Services/Capacity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of CAPS</td>
<td>.35**</td>
<td>-.02</td>
<td>-.01</td>
</tr>
<tr>
<td>Inpatient beds in county (0 = no,</td>
<td>.53**</td>
<td>-.17</td>
<td>-.02</td>
</tr>
<tr>
<td>1 = yes)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Standardized Betas Presented; CAPS= Child and Adolescent Psychiatrists

* p ≤ .05; ** p<.01
Multivariate Results

• Current capacity may be most important factor in estimating need for additional personnel (CAPs).
• Social indicators may be most important factor in estimating need for counseling services.
• Respondents’ characteristics may be most important factor in estimating need for settings and facilities.
Discussion

• Is expert need influenced by personal experience and biases?
  – If so why do these personal factors only influence need for beds in this study?

• Is comparative need in congruence with social indicators?
  – Why do these social factors only influence need for counseling services?

• The need for personnel (CAPs) appears to be influenced by capacity
  – Using capacity as a proxy for utilization which represents expressed need.
Conclusion

• Types of need may be impacted by different categories of need.

• Unique patterns found in this study:
  – Current capacity → need for additional capacity
  – Social Indicators → need for counseling
  – Ind. Characteristics → need for facilities/beds

• All measures of need have strengths and limitations, especially when considered alone.

• Mental health administrators can draw on a range of sources to estimate need and are an important resource for policy makers.
Study Limitations

• Findings may not be generalizable to other states
• Largest counties omitted
• Felt need is not represented in our model
• Measurement
  – Additional factors not included in current analysis may impact administrators’ perceptions
Implications for MH Policy

• Mental health administrators’ perspectives on need add value and should be included in development of policy

• Include multiple factors and multiple perspectives
  – Perspective of need from various sources
  – Comprehensive Information on Characteristics
    • Capacity, Utilization, Prevalence, and Demographics

• Different factors appear to influence perspectives on need in different categories

• Further research on linking which factors are associated with which categories of need could help in giving weight to sources of need
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Number of CAPS
CAPS: Rate per 100,000 youth