School-Based Mental Health Treatment Recommendations: Examining Practice Patterns Across Evidence-Based Assessments for Youth in a State System of Care

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Agenda

- Study Background and Importance
- Foundational Work
- The Current Study
  - Aims
  - Method
  - Results
  - Discussion
- Questions
Agenda

• **Study Background and Importance**
• **Foundational Work**
• **The Current Study**
  ◦ Aims
  ◦ Method
  ◦ Results
  ◦ Discussion
• **Questions**
Study Background

• Increasing use of evidence-based practice (EBP) is a key lead in improving youth community mental health services

• Methods toward this goal need further exploration
Therapist Trainings

Continuing education
Role-plays
Workshops

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Family Engagement

Positive Expectation-Setting
Accessibility Promotion
Psychoeducation

Credit: © vgajic; 155376712
Organizational Facilitators

Barriers Assessment
Leadership
Supervision

Credit: © tagxedo.com
Service System Improvement

Measurement Feedback
Learning Collaboratives
Service Documentation
Service System Improvement

Measurement Feedback

Learning Collaboratives

Service Documentation

Progress and Practice Monitoring Tool: Anxiety Focus

Case ID: ####

Gender: Female
Ethnicity: Multiethnic

Age (in years): 12.7
Primary Diagnosis: Social Anxiety Disorder

Progress Measures:
- Left Scale
  - Average Fear Rating
  - Fear Rating at School
  - Times out of the House

- Right Scale
  - % Days at School
  - % Days Ate Lunch at School

Display Measure:
- Yes Average Fear Rating
- Yes Fear Rating at School
- Yes Times out of the House
- Yes % Days at School
- Yes % Days Ate Lunch

Display Time:
- To Last Event

Focus Area:
- Anxiety
Service System Improvement

Measurement Feedback

Learning Collaboratives

Service Documentation

Help Your Keiki
Service System Improvement

Measurement Feedback
Learning Collaboratives

Service Documentation

Diagnostic Assessment
Comprehensive Service Plan
MHTPs, IEPs, BSPs, etc.
Service Documents

• Include a variety of documents that follow youth throughout service periods

• Despite their critical importance in determining youth’s treatment:
  ◦ Very little is known about these documents
  ◦ Documentation is complicated and variable
Service Documents

• Two major goals for quality improvement:
  ◦ Increase stability/continuity between documents
  ◦ Increase presence of EBP within documents
Service Documents

- At least two methods toward these goals:
  - Applying distillation methodology to service documents to examine practices
  - Comparing and contrasting service document practice against treatment literature practices
Agenda

- Study Background and Importance
- Foundational Work
  - Assessing stability between treatment planning documents in a system of care (Young et al., 2007)
- The Current Study
  - Aims
  - Method
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- Questions
Foundational Work: Aims

- **Aim 1**: Can service system staff reliably code practice elements within different types of service documents?
Foundational Work: Aims

- **Aim 2:** When a practice is recommended in one document, do other documents preserve that recommendation?

  - **Diagnostic Assessment**
  - **Comprehensive Service Plan**
  - **MHTPs, IEPs, BSPs, etc.**

  **Stable?**
Foundational Work: Methods

- **Aim 1:** Service Guidance Review Form (SGRF)

<table>
<thead>
<tr>
<th>Intervention Strategies Used This Month (check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Scheduling</td>
</tr>
<tr>
<td>Assertiveness Training</td>
</tr>
<tr>
<td>Attending</td>
</tr>
<tr>
<td>Behavioral Contracting</td>
</tr>
<tr>
<td>Biofeedback, Neurofeedback</td>
</tr>
<tr>
<td>Care Coordination</td>
</tr>
<tr>
<td>Catharsis</td>
</tr>
<tr>
<td>Cognitive</td>
</tr>
</tbody>
</table>

- **Aim 2:** Calculate kappas between multiple documents
Foundational Work: Findings

- **Aim 1:** High reliability across documents for PEs (ICC 2,1, = 0.90) and targets (ICC = 0.95)
- **Aim 2:** Lower stability of targets and PEs between documents

- **Diagnostic Assessment**
  - .30 - .37 “Fair”

- **Comprehensive Service Plan**
  - .31 - .38 “Fair”

- **MHTPs, IEPs, BSPs, etc.**
  - .26 - .34 “Fair”
Agenda

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- Questions
Current study: Aims

- 1: Replicate the coding with a sample of diagnostic assessments

- 2: Investigate how practice recommendations compare with the evidence-base
Agenda

- Study Background and Importance
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- Questions
Method

- Overall background
- Participants
  - Youth
  - Coders
- Procedures
  - Manual Development and Training
  - Coding
  - Database Construction
- Analytic strategy
Overall Background

- Center for Cognitive Behavioral Therapy
- Our contracts
- Our services

Credit: © University of Hawai‘i
Method

- Overall background
- Participants
  - Youth
  - Coders
- Procedures
  - Manual Development and Training
  - Coding
  - Database Construction
- Analytic strategy
Participants

- **Aim 1: Coders (N = 4)**
  - Current or prior staff members at UH CCBT
  - Bachelors- to Doctoral-level clinical psychologists
  - Diverse clinical experience ($M = 7.2$; Range = $0.5 - 15$ years)

- **Aim 2: Youth (N = 207 reports)**
  - Mean age: 11.8 years
  - 69.1% male
  - 58.9% multi-ethnic
Method

• Overall background

• Participants
  ◦ Youth
  ◦ Coders

• Procedures
  ◦ Manual Development and Training
  ◦ Coding
  ◦ Database Construction

• Analytic strategy
Manual Development and Training

- Service Guidance Review Form - Revised
  - Codes for presence/absence of PEs
  - Refined through an iterative process
Manual Development and Training

• Match process for coder certification

• Several drift-prevention strategies:
  ◦ Weekly meetings early in coding process
  ◦ Group meetings to tie-break discrepancies
Method

- Overall background
- Participants
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- Procedures
  - Manual Development and Training
  - Coding
  - Database Construction
- Analytic strategy
Coding

• Coders recorded presence of PEs within each paragraph of recommendations narrative

<table>
<thead>
<tr>
<th>Intervention Strategies Used This Month</th>
<th>(check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Scheduling</td>
<td>Emotional Processing</td>
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<tr>
<td></td>
<td>Line of Sight Supervision</td>
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<td></td>
<td>Personal Safety Skills</td>
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<td></td>
<td>Stimulus or Antecedent Control</td>
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<tr>
<td>Assertiveness Training</td>
<td>Exposure</td>
</tr>
<tr>
<td></td>
<td>Maintenance or Relapse Prevention</td>
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<tr>
<td></td>
<td>Physical Exercise</td>
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<td></td>
<td>Supportive Listening</td>
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<tr>
<td>Attending</td>
<td>Eye Movement, Tapping</td>
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<td></td>
<td>Marital Therapy</td>
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<td></td>
<td>Play Therapy</td>
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<td></td>
<td>Tangible Rewards</td>
</tr>
<tr>
<td>Behavioral Contracting</td>
<td>Family Engagement</td>
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<tr>
<td></td>
<td>Medication/Pharmacotherapy</td>
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<td></td>
<td>Problem Solving</td>
</tr>
<tr>
<td></td>
<td>Therapist Praise/Rewards</td>
</tr>
<tr>
<td>Biofeedback, Neurofeedback</td>
<td>Family Therapy</td>
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<tr>
<td></td>
<td>Mentoring</td>
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<tr>
<td></td>
<td>Psychoeducation, Child</td>
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<tr>
<td></td>
<td>Thought Field Therapy</td>
</tr>
<tr>
<td>Care Coordination</td>
<td>Free Association</td>
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<td></td>
<td>Milieu Therapy</td>
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<tr>
<td></td>
<td>Psychoeducation, Parent</td>
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<td></td>
<td>Time Out</td>
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<td>Catharsis</td>
<td>Functional Analysis</td>
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<td>Mindfulness</td>
</tr>
<tr>
<td></td>
<td>Relationship or Rapport Building</td>
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<tr>
<td></td>
<td>Twelve-Step Program</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Goal Setting</td>
</tr>
<tr>
<td></td>
<td>Modeling</td>
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<tr>
<td></td>
<td>Relaxation</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
</tr>
</tbody>
</table>
Method

- Overall background
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Database Construction

Each set of coded practices traced back to youth’s diagnoses and demographics

Coded reports sorted by principle diagnosis area

Frequency of research recommendations for each practice by each problem area compared to frequency of report recommendations
Method

- Overall background
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Analyses

• Aim 1:
  ◦ Coder agreement assessed via Kappa calculation

• Aim 2:
  ◦ Compared frequencies of practices between coded report recommendations and treatment outcome literature by diagnosis
    • Practices with 10+% presence across evidence-based treatment protocol considered to be EBP
    • Defined presence in report recommendations as “correct use” or “commission error”
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Results: Aim 1

- Coders showed “Almost Perfect” ($\geq .81$) or “Substantial” ($\geq .61$) reliability across all problem areas

<table>
<thead>
<tr>
<th>Problem Area</th>
<th>N</th>
<th>Kappa (qualitative descriptor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>110</td>
<td>.86 (“Almost Perfect”)</td>
</tr>
<tr>
<td>Disruptive Behavior</td>
<td>45</td>
<td>.84 (“Almost Perfect”)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>19</td>
<td>.89 (“Almost Perfect”)</td>
</tr>
<tr>
<td>Trauma</td>
<td>7</td>
<td>.80 (“Substantial”)</td>
</tr>
<tr>
<td>Depression</td>
<td>6</td>
<td>.83 (“Almost Perfect”)</td>
</tr>
</tbody>
</table>
Results: Aim 2

- How did recommendations from gold-standard diagnostic assessments match with the outcome literature?
  - [https://goo.gl/ar1Krc](https://goo.gl/ar1Krc)
Results: Aim 2

Attention Disorder Practice Profile

<table>
<thead>
<tr>
<th>Practice Element</th>
<th>% EBP</th>
<th>% Report Endorsed</th>
<th>% Report Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent or Teacher Praise</td>
<td>52%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Tangible Rewards</td>
<td>47%</td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td>Psychoeducational Parent</td>
<td>42%</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td>Problem Solving</td>
<td>38%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Commands</td>
<td>33%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Therapist Praise or Rewards</td>
<td>31%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>
Results: Aim 2

Attention Disorder Practice Profile

<table>
<thead>
<tr>
<th>Practice Element</th>
<th>% EBP</th>
<th>% Report Endorsed</th>
<th>% Report Commission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoeducational Child</td>
<td>5%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Psychiatric Medication Consultation</td>
<td>0%</td>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>Activity Scheduling</td>
<td>0%</td>
<td></td>
<td>59%</td>
</tr>
<tr>
<td>Self Monitoring</td>
<td>7%</td>
<td></td>
<td>36%</td>
</tr>
<tr>
<td>Insight Building</td>
<td>5%</td>
<td></td>
<td>36%</td>
</tr>
<tr>
<td>Additional Specialized Assessment</td>
<td>0%</td>
<td></td>
<td>28%</td>
</tr>
</tbody>
</table>
Discussion

- Limitations
- Coding reliability
- Practice frequencies
Discussion

WHY SHOULD I CARE?
Thank you!

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