Practice Elements Utilized in the Treatment of Disruptive Behavior Disorder Youth Demonstrating High and Low Levels of Success

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Overview

• Background

• Current Investigation
  – Study 1 – Quantitative Approach
  – Study 2 – Qualitative Follow-Up

• Future Directions and Discussion

Background

• Movement towards evidence-based practice

• Evidence based decision making extends beyond treatment outcome literature

• Evidence-based practice vs. Practice-based evidence

Daleiden & Chorpita, 2005

Background

• Hawaii Child and Adolescent Mental Health Division (CAMHD)
  - Adopted various strategies to increase use of evidence based practice

• Distillation Model
  - Practice Elements - discrete clinical techniques typically used as part of a larger intervention plan
  - Examples: Exposure, Psychoeducation, Relaxation

Daleiden, Chorpita, & Weisz, 2005

Background

• Monthly Treatment & Progress Summary Form (MTPS)
  – Service format
  – Service setting
  – Treatment targets
  – Clinical progress ratings
  – Practice elements

Child and Adolescent Mental Health Division, 2003

Treatment Targets

<table>
<thead>
<tr>
<th>Activity Involvement</th>
<th>Coping Skills</th>
<th>Learning Disorder</th>
<th>Compliance</th>
<th>Physical Fitness</th>
<th>Sleep Disturbance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Interventions</td>
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<tr>
<td>Treatment Setting</td>
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<td>Treatment Focus</td>
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<tr>
<td>Therapeutic Setting</td>
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<td>Treatment Targets</td>
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<tr>
<td>Clinical Progress</td>
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<tr>
<td>Social Skills</td>
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<tr>
<td>Positive Thinking</td>
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<tr>
<td>Contentment, Enjoyment, Happiness</td>
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</tbody>
</table>
Clinical Progress Ratings

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Positive</th>
<th>Minimal Improvement</th>
<th>Moderate Improvement</th>
<th>Significant Improvement</th>
<th>Complete Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operative Behavior</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Depressed Mood</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Family Functioning</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

Present Investigation

• Identify practice elements of more and less successful cases in actual care

• Hypotheses:
  - Specific Practice Elements
    • Successful cases will differ from unsuccessful cases in types of practice elements utilized
  - Number of Practice Elements
    • Successful cases will employ a lower number of practice elements utilized in the course of treatment

Study 1 - Method

• Participants (N = 208)
  - Diagnosis:
    • Criteria: Any Disruptive Behavior Disorder
      - CD, ODD, DBD NOS
    • Observed Primary Diagnoses:
      - DBD: 48.1%
      - Mood/Anxiety: 20.7%
      - Attentional: 20.7%
      - Other: 10.5%

• Measures
  - Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1998)
  - Monthly Treatment and Progress Summary (MTPS; Child and Adolescent Mental Health Division; 2003)
    • Practice Elements
Study 1 - Procedure

- Identifying higher and lower success cases
  - Outcome Measure
    - CAFAS (Hodges, 1998)
    - Residual scores based on regression using CAFAS intake
  - Quartile Split
    - High Success: Top 25%
    - Low Success: Lower 25%

- Investigating treatment characteristics
  - Treatment Characteristics
    - MTPS Practice Elements
    - Classified practice elements as evidence-based or not

Study 1 - Results

- Hypothesis 1
  - Majority of chi-square analyses not significant
- Hypothesis 2
  - No significant difference in number of practice element utilized
- Trend
  - Wide range of practice element use
    - Evidence-based: 5% - 85.3%
    - Not evidence-based: 0% - 85.2%

Most Utilized Practice Elements

<table>
<thead>
<tr>
<th>Practice Element</th>
<th>Low Success (%)</th>
<th>High Success (%)</th>
<th>Combined (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Solving*</td>
<td>86.5</td>
<td>84.0</td>
<td>85.3</td>
</tr>
<tr>
<td>Supportive Listening</td>
<td>90.4</td>
<td>80.0</td>
<td>85.2</td>
</tr>
<tr>
<td>Cognitive/Coping*</td>
<td>82.7</td>
<td>80.0</td>
<td>81.4</td>
</tr>
<tr>
<td>Communication Skills*</td>
<td>73.1</td>
<td>88.0</td>
<td>80.6</td>
</tr>
<tr>
<td>Family Engagement</td>
<td>75.0</td>
<td>86.0</td>
<td>80.5</td>
</tr>
</tbody>
</table>

*Evidence-based practice for disruptive behavior disorders

Least Utilized Practice Elements

<table>
<thead>
<tr>
<th>Practice Element</th>
<th>Low Success (%)</th>
<th>High Success (%)</th>
<th>Combined (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biofeedback/Neurofeedback</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Eye Movement/Body Tapping</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Hypnosis</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Thought Field Therapy</td>
<td>0.0</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Marital Therapy</td>
<td>1.9</td>
<td>4.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Evidence-based practice for disruptive behavior disorders

Study 1 - Limitations

- Disruptive behavior disorder sample
- Snapshot of treatment course
- Relatively unrestricted sample
- Validity of MTPS practice elements
Study 1 - Discussion

- Results not significant

- Interpretation of data
  - No true difference in practice element utilization
  - Error in study methodology

Study 2 - Qualitative Review

- Objective – To assess appropriateness of basic assumptions in Study 1

Study 2 - Method

- Random selection of high and low success cases from Study 1
- Clinical Reporting Module
  - Review a variety of factors
    - Treatment outcome measures
    - Treatment services
    - Practice element utilization

Clinical Reporting Module

Study 2 – Question 1

- Is our operational definition of success accurate?
  - Probably not
    - 7/12 High Success
    - 7/15 Low Success
  - Most common trend was for the scores to return towards initial score
Study 2 – Question 2

- What do the newly identified most and least successful cases look like?
  - N=14 (7 high, 7 low)
  - Length of data collected (in months)
    - High Success: 15.57
    - Low Success: 36.14

Qualitative Review

- Question 2: What do the truly most and least successful cases look like?

<table>
<thead>
<tr>
<th>MTPS Data</th>
<th>High Success</th>
<th>Low Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total MTPS Completed</td>
<td>4.0</td>
<td>7.14</td>
</tr>
<tr>
<td>Total PEs Utilized</td>
<td>25.14</td>
<td>34.57</td>
</tr>
<tr>
<td>EBS PEs Utilized</td>
<td>15.86</td>
<td>22.29</td>
</tr>
<tr>
<td>EBS Percentage</td>
<td>66.00%</td>
<td>64.46%</td>
</tr>
</tbody>
</table>

Study 2 - Limitations

- Could not access approximately 50% of cases
  - 15/27 High Success
  - 12/16 Low Success
- Incomplete data

Discussion

- No significant, interpretable differences in practice element utilization
- Reported use of practice elements quite high
- Methodological insight
- Potential utility of investigating actual care practices

Future Directions

- Examining youth with other diagnoses
- Validity of MTPS practice elements
- Additional types of treatment characteristics
- Hierarchical Linear Modeling (HLM)

Mahalo!
References


