

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

Roxanna E. Stumpf, M.A.¹, Ryan T. Tolman, B.A.¹,
Charles W. Mueller, Ph.D.², Bruce F. Chorpita,
Ph.D.², & Eric L. Daleiden, Ph.D.¹
¹State of Hawai'i CAMHD
²University of Hawai'i at Mānoa

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

Activity Involvement	Contentment, Enjoyment, Happiness	Learning Disorder, Underachievement	Phobias/Fears	Sleep Disturbance
Academic Achievement	Depressed Mood	Low Self-Esteem	Positive Thinking/Attitude	Social Skills
Aggression	Eating, Feeding Problems	Mania	Psychosis	Speech and Language Problems
Anger	Empathy	Medical Regimen Adherence	Runaway	Substance Use
Anxiety	Enuresis, Encopresis	Oppositional/ Non-Compliant Behavior	School Involvement	Suicidality
Assertiveness	Fire Setting	Peer Involvement	School Refusal/Truancy	Traumatic Stress
Attention Problems	Gender Identity Problems	Peer/ Sibling Conflict	Self-Control	Treatment Engagement
Avoidance	Grief	Personal Hygiene	Self-Injurious Behavior	Willful Misconduct, Delinquency
Cognitive-Intellectual Functioning	Health Management	Positive Family Functioning	Sexual Misconduct	Other:
Community Involvement	Hyperactivity	Positive Peer Interaction	Shyness	Other:

Clinical Progress Ratings

	Deterioration < 0%	No Significant Changes 0-10%	Minimal Improvement 11-30%	Some Improvement 31-50%	Moderate Improvement 51-70%	Significant Improvement 71-90%	Complete Improvement 91-100%
Oppositional Behavior		✓					
Depressed Mood				✓			
Positive Family Functioning					✓		

Practice Elements

✓	Activity Scheduling	Eye Move., Tapping	Marital Therapy	Play Therapy	Stimulus/ Artic. Control
	Assertiveness Training	Family Engagement	Medication/ Pharm.	Problem Solving	Supportive Listening
	Biofeedback, Neurofeedback	✓ Family Therapy	Mentoring	Psycho-ed., Child	✓ Tangible Rewards
	Catharsis	Functional Analysis	Milieu Therapy	Psycho-ed., Parent	Therapist Praise/Reward
	Cognitive/ Coping	Free Association	Modeling	Relationship/ Rapport Build.	Thought Field Therapy
	Commands/ Limit Setting	Guided Imagery	Mindfulness	Relaxation	Time Out
	Communication Skills	Hypnosis	Motivational Interviewing	✓ Response Cost	Twelve-step Programming
	Crisis Management	Ignoring or DRO	Natural/Logical Consequences	Response Prevention	Other:
	Directed Play	Insight Building	Parent Coping	✓ Self-Monitoring	Other:
	Educational Support	Interpretation	Parent Praise	Self-Reward/ Self-Praise	Other:
	Emotional Processing	Line of Sight Supervision	Parent- Monitoring	Skill Building	
	Exposure	Maint./Relapse Prevention	Peer Modeling of Paring	Social Skills Training	

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%

Study 1 - Method

- Participants
 - Gender
 - Male: 136 (65.4%)
 - Female: 72 (34.6%)
 - Age
 - Range: 5.69 - 17.98
 - Mean (SD): 14.29 (2.78)

Study 1 - Method

- 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%

Study 1 - Procedure

- Investigating treatment characteristics
 - Treatment Characteristics
 - MTPS Practice Elements
 - Classified practice elements as evidence-based or not
 - Biennial Report (CAMHD, 2004)

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%

Least Utilized Practice Elements

Practice Element	Low Success (%)	High Success (%)	Combined (%)
Biofeedback/Neurofeedback	0.0	0.0	0.0
Eye Movement/Body Tapping	0.0	0.0	0.0
Hypnosis	0.0	0.0	0.0
Thought Field Therapy	0.0	4.0	2.0
Marital Therapy	1.9	4.0	3.0

*Evidence-based practice for disruptive behavior disorders

Most Utilized Practice Elements

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

*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

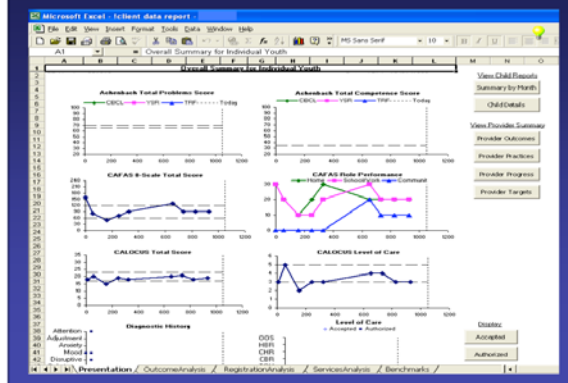
Study 2 - Qualitative Review

- 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



Clinical Reporting Module

Practice Element	Frequency	Percentage	Other Elements
Autistic Education	1000	100%	
Behavioral Therapy	1000	100%	
Family Therapy	1000	100%	
Individual Therapy	1000	100%	
Medication Management	1000	100%	
Parent Training	1000	100%	
Peer Support	1000	100%	
Respite Services	1000	100%	
Specialized Services	1000	100%	
Transition Services	1000	100%	
Other Elements	1000	100%	

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?

MTPS Data	High Success	Low Success
Total MTPS Completed	4.0	7.14
Total PEs Utilized	25.14	34.57
EBS PEs Utilized	15.86	22.29
EBS Percentage	66.00%	64.48%

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)



References

- Child and Adolescent Mental Health Division (2003). *Instructions and Codebook for Provider Monthly Summaries*. Honolulu, HI: Hawaii Department of Health Child and Adolescent Mental Health Division.
- Child and Adolescent Mental Health Division. (2004). *Evidence Based Services Committee: 2004 biennial report, summary of effective interventions for youth with behavioral and emotional needs*. Honolulu, HI: Hawaii Department of Health Child and Adolescent Mental Health Division.
- Chorpita, B. F., Daleiden, E. L., & Weisz, J. R. (2005). Identifying and selecting the common elements of evidence based interventions: A distillation and matching model. *Mental Health Services Research, 7*(1), 5-20.
- Daleiden, E. L. & Chorpita, B. F. (2005). From data to wisdom: Quality improvement strategies supporting large-scale implementation of evidence-based services. *Child and Adolescent Psychiatric Clinics of North America, 14*, 329-349.
- Hodges, K. (1998). *Child and Adolescent Functional Assessment Scale (CAFAS)*. Ann Arbor, MI: Functional Assessment Systems.