Which Solution Where?

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Part two of a 3-part series

If you participated last month, you learned about screening options for identifying an at-risk population of students.

Students at risk for social, emotional, and behavioral problems is where we would like to insert services.
Which Solution Where

Risk Factors

Where we can consider intervention

Emotional Behavioral Disabilities

Where we traditionally intervene
Today

This presentation will demonstrate a model for early identification and intervention selection.
The model has been successfully piloted.
Results include:
- Faster time to prevention, intervention services,
- Shorter problem-solving meeting time,
- Greater identification of evidence-based practices for implementation.
Symptoms do not mean the same thing for everyone

INSOMNIA CLINIC

Do you have dark circles around your eyes?
Do you stay awake all night?
We can help
Call 555-2148
Primary Improvement Areas | Secondary Improvement Areas | Adaptive Skill Strengths
---|---|---
Hyperactivity | Aggression | None
Anxiety | Conduct Problems |
Matching intervention selection to problem behavior is theoretically and empirically justified.

- Empirically, the best treatment plans are developed based on assessment or diagnosis (Pollak, Levy, & Breitholtz, 1999; Nelson 2002)
- and use of treatment protocols improves practice (Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001)
- providing a basis for behavioral intervention selection (Burks, 1977; Gresham & Elliott, 1990; McCarney, 1994).
- This is true across disciplines including allied fields such as medicine (Karjalainen & Palva, 1989), and in other professional high stakes operations such as engineering (Fortz, Rexford, & Thorup, 2002; Tchobanoglous, 1991)
Behavioral Constructs

- Aggression,
- Attention,
- Anxiety,
- Adaptability,
- Conduct Problems,
- Depression,
- Functional Communication Skills
- Hyperactivity,
- Somatization,
- Social Skills
Interventions with empirical support:

Interventions for Aggressive Behaviors
1. Problem Solving Training
2. Cognitive Reconstructing
3. Verbal Mediation
4. Social Skills Training
5. Peer Mediated Conflict Resolution and Negotiation
6. Replacement Behavior Training

Interventions for Anxious Behaviors
1. Exposure-Based Techniques
2. Contingency Management
3. Modeling
4. Family Therapy
5. Integrated Cognitive-Behavioral Therapy

Interventions for Somatization
1. Behavioral Interventions
2. Multimodal Cognitive-Behavioral Therapy
3. Interventions for Academic Problems:
   4. Advanced Organizers
   5. Presentation Strategies – Structuring
   6. Presentation Strategies – Time
   7. Presentation Strategies – Responding
8. Peer Tutoring
9. Class Wide Peer Tutoring
10. Cognitive Organizers
11. Mnemonics
12. Self-Monitoring
13. Self-Instruction
14. Reprocessing Strategies

Interventions for Attention Problems
1. Contingency Management
2. Daily Behavior Report Cards
3. Modified Task-Presentation Strategies
4. Self-Management
5. Class Wide Peer Tutoring
6. Computer Assisted Instruction
7. Multimodal Interventions

Interventions for Problems with Adaptability
1. Functional Behavior Assessment
2. Pre-correction
3. Procedural Prompts and Behavioral Momentum
4. Self Management Training
5. Cognitive Behavior Management

Interventions for Conduct Problems
1. Token Economy System
2. Interdependent Group-Oriented Contingency Management
3. Anger Management Skills Training
4. Problem-Solving Training
5. Social Skills Training
6. Moral Motivation Training
7. Parent Training
8. Multimodal Interventions
9. Multi-systemic Therapy

Interventions for Depression
1. Cognitive-Behavioral Therapy
   1. Psycho-educational
   2. Problem-Solving Skills Training
   3. Cognitive Restructuring
   4. Pleasant Activity Planning
   5. Relaxation Training
   6. Self Management Training
   7. Family Involvement
2. Interpersonal Therapy for Adolescents

Interventions for Hyperactive Behaviors
1. Functional Assessment
2. Contingency Management
3. Parent Training
4. Self-Management
5. Task Modification
6. Multimodal Interventions

Interventions for Functional Communication
1. Functional Communication Training
2. Picture Exchange Communication System
3. Video Modeling
4. Milieu Language Teaching
5. Pivotal Response Training
Case Example of Elmer

- Elmer’s scores on Hyperactivity, Anxiety, and Attention Problems fall in the clinically significant range, and probably should be considered among the first behavioral issues to resolve.
- Note that Elmer also had scores on Aggression and Conduct Problems that are areas of concern. Interventions for these areas are not provided in this report. However, these areas may require additional follow up.
- **Example: Hyperactivity**
  - Functional Assessment
  - Contingency Management
  - Parent Training
  - Self-Management
  - Task Modification
  - Multimodal Interventions

Vannest, K.J. (2011) Intervention and Strategy Training in a 3-Tier Model.
Consider barriers and capacity

Our current models involve resource mapping, but we may consider the match between problem type and intervention rather than a generic intervention or an overly engineered or prescribed one.

- Look at supports available to Elmer at home or in the community.
- Look at capacity and resources of the school.
- Also consider the barriers in the related settings.

For example:

- A functional assessment to determine specific antecedent and consequence manipulations may be beyond the scope of the available time and resources of the school and classroom.
- Contingency management may not seem like the type of intervention suggestion that would work with a particular teacher personality.
- Parent training likewise may not be a “best fit”.
- However self-management works well for Elmer’s age, the school, the classroom and your time use. So you might then engage in a treatment plan that includes or starts with self-management.
Interventions are not “topical”

- Strategies and interventions are not topical. Meaning we can not apply them like an ointment and wait for the problem to resolve.
- Strategies and interventions are reciprocal. They change teacher behavior & student behavior.
- Strategies and interventions are active. The require participation, buy in and effort from all involved.
# Decision Matrix

<table>
<thead>
<tr>
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<th>(Buy-in +)</th>
<th>(Supports +)</th>
<th>Barriers (-)</th>
<th>(=)Capacity</th>
</tr>
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<tbody>
<tr>
<td>Student</td>
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<tr>
<td>School System</td>
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<td>Implementer</td>
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Buy in is belief in efficacy, willingness to try, believe that student will benefit, believes in administrator support, perceives low barriers.

Supports is about training, physical capacity, ability, administrative support.
Campus profiles look different, even within district. This example of 4 schools demonstrates differences (based on BASC-2 ratings of students at risk)
Example of student data

- After a student is identified as at elevated levels of risk or meeting criteria for services
- Self monitoring used as an intervention
- Data on student problem behavior for a week before starting intervention.
- Here are some data for actual students this year.
Response to token economy intervention

Darryl Car.

Graph showing response to token economy intervention with two lines:
- Hyperactive (brown squares)
- Aggressive (orange diamonds)

Dates and values on the x-axis and y-axis.
Evidence for token economy systems with conduct problems

- McCurdy, Mannella, and Eldridge (2003) School wide token economy system (Positive Behavioral Supports) 500 students (K-5th) focused on decreasing disruptive behavior and preventing an increase in antisocial behaviors 55% decrease in office referrals for fighting and 46% overall decrease in referrals.

- O’Leary and Becker (1967) Token reinforcement Elementary school adjustment class for students with inappropriate classroom behavior. Decreased deviant behavior from 76% to 10%.

- Baer, Rowbury, and Baer (1973) Differential reinforcement using tokens in 3 children 4 to 6 years old who exhibited noncompliance and disruptive behaviors Compliance increased from 14% to 73%, 23% to 52%, and 38% to 100%.
Results

OVERALL

Truchlicka, et al., 1998
Sullivan & O'Leary, 1990
Stevens, et al., 2011
Sran & Borrero, 2010
Smith & Fowler, 1984
Simon, et al., 1982
Salend, et al., 1988
Salend & Lamb, 1986
Salend & Allen, 1985
Rosenberg, 1986
Reitman, 2004
Musser, et al., 2001
Mottram, et al., 2002
McGoey & DuPaul, 2000
Maglio & McLaughlin, 1981
TE Successes

**Settings:**
- Schools
- Residential Treatment Centers
- Mental Health Hospitals
- Prison’s
- Detention Centers
- After school programs
- Church schools

**Populations:**
- EBD
- Intellectual Disabilities
- ADHD
- Learning Disabilities
- Schizophrenia
How to set up a token economy

- Determine the target behavior.
- Consider a reinforcement survey.
- Identify ratio of tokens to reinforcers.
- Explain and model the system to the students.
- Students should also model to demonstrate understanding.
- Keep track of points in a visual way.
- When the target behavior occurs, the teacher adds points/tokens.
- When the problem behavior occurs, the teacher removes points/tokens.
- Post a clear schedule for trading in tokens.
Considerations if your TE seems less effective than it used to be

- Teachers should avoid using tokens as bribery, randomly offering tokens for jobs, and using threatening comments (Goldstein, 1995).
- Reinforcers should be modified or changed routinely to maintain interest.
- The program must be continuously monitored or effectiveness and modified as needed.
- Enough tokens must be earned to outweigh the loss of tokens in order to avoid student apathy.
- Positive strategies should be attempted before response-cost strategies.
- Is your “schedule” rich enough
Sometimes we need perspective

Inadvertently, Roy dooms the entire earth to annihilation when, in an attempt to be friendly, he seizes their leader by the head and shakes vigorously.
How To Video Modeling

1. Identify target behaviors
2. Collect video footage
3. Edit video footage to create short exemplar video(s)
4. Provide opportunities for the student to view the video(s)
5. Have student perform target behaviors subsequent to watching the video
How To Video Feedback

1. Identify target behaviors
2. Collect video footage
3. View video footage with the student (typically in an alternate location)
4. Discuss target behaviors as demonstrated on video
Video Modeling or Video Feedback as a Moderator

2000. Embregts
Combined
1996. Osborne
1995. Kern. 2. Inapp
1995. Kern. 1. Inapp
1993. Shear. 1
1993. Shear. 2
1988. McCurdy
Combined
1997. Dowrick
1983. Booth
1999. Possell
1986. Kehle
Why aren’t we using evidence based practices?

Many possible explanations for the failure to use research-based methods are acknowledged in the literature

- lack of treatment acceptability (Gunter & Denny, 1996),
- a distrust of empirical research or researchers (Landrum, Cook, Tankersley, & Fitzgerald, 2002),
- educator’s perception of current research as immaterial (Greenwood & Abbott, 2001; Ruhl & Berlinghoff, 1992),
- the lack of successful treatment replication from controlled experimental environments to occasionally changing and unpredictable applied settings (Belfiore, Lee, Scheeler, & Klein, 2002; Carnine, 1997; Glasgow, Lichenstein, & Marcus, 2003),
- insufficient teacher training (George, George, Gersten, & Grosenich, 1995; Wehby, Lane, & Falk, 2003),
- or the lack of clinician involvement in research and unusable (practitioner-friendly) effective interventions (Greenwood & Abbott, 2001).
Universal screening can identify students at risk for emotional and behavioral problems.

Behavior Ratings provide an efficient and accurate method of identifying problems to target.

Intervention Materials with clear data, clear procedures, and clear perspective means greater buy-in and greater fidelity of implementation.

Intervention must be matched to problem type for efficacy.
If you don’t know where you are going, any road will take you there.
Thank You

Q&A session

Join us for webinar #3 on Progress Monitoring
Wednesday May 23 / 12:00 PM Eastern
Register: www.psychcorp.com/RTIwebinars