THE BEHAVIOR ANALYST TODAY

A Context for Science with a Commitment to Behavior Change

The Behavior Analyst Today

EDITORIAL AUTOCLITICS

Beth Rosenwasser

ABA's coming up soon and we hope to see our readers and authors out and about, particularly at CBA and related presentations. Erik Augustson, CBA-SIG Chair welcomes readers and friends to the CBA-SIG meeting on 5/27. He highlights several events of interest to our readers. In fact, authors of our lead article, Block and Wulfert, will be presenting on similar topics so you can seek them out for further discussion.

Increasing dialogue across subdisciplines within the broader behavioral paradigm is the main mission of BAT. Our second issue of BAT brings you a wide range of topics from Stemmer's provocative discussion of language acquisition theory to Tillman's extension of generalization training to teacher consultees, to a functional assessment form developed by lead trainers at the Central Instructional Support Center in Pennsylvania (you can download and use it in your work). We also bring you up-to-date information on credentialing of behavior analysts each issue and present several articles covering professional aspects of ABA practice. Many readers may not realize that behavior analysis can be applied to organizational behavior. This issue presents three articles for those in a position to influence the organizations in which behavioral services, such as Wrap Around, are promoted or delivered.

My hope for BAT is that its multiplicity of voices within a single forum and easy accessibility due to on-line availability will foster a lively interchange across the three organizations whose members read this newsletter. Joe and I aspire to an even greater network down the road. The diverse authorship found here, from well-established academically-based behaviorists to up-and-coming students to applied master's level practitioners, can help to bridge the science-practice gap, maintain behavioral repertoires beyond grad school, and foster dissemination of behavioral theory and practice. Having said this, I encourage your thoughtful responses to the articles presented herein. Hosted by the Cambridge Center's rich website, (which I encourage you to visit; I make it my web homepage), the BAT forum resides along a continuum between a listserv and a refereed print journal. Let's be creative and see how behaviorism can maximize the reinforcers available in the electronic 21st century.

The next deadline is June 28th for our mid-July issue. For the first year, your program or university may submit an ad without charge and we will publish it, space permitting. Those interested in submitting manuscripts should email copies to BOTH myself (iBRosie@aol.com) and Joe (jcautill@astro.temple.edu). Formatting should conform to APA style and is best sent in RTF format (rich text file) which is readable across MAC and PC platforms. Feel free to email us if you have ideas you would like to discuss prior to submitting your manuscript. We are very happy to help you develop what you have to say!

See you at ABA!

UP-TO-DATE INFORMATION: BEHAVIOR ANALYST CERTIFICATION

Jerry Shook, Ph.D.

The Behavior Analyst Certification Board will administer certification examinations in Washington, DC and Oklahoma on May 30, 2000; and in California (San Francisco & Los Angeles), New York City, Pennsylvania (Harrisburg & Pittsburgh), and Texas (Dallas & Houston) on May 15, 2000.

While the deadlines for the above examinations have passed, the BACB will be announcing Fall examination administration dates and locations soon. The most current information on administrations as well as applications and other current certification information may be found on www.BACB.com.

Applications must be sent to:

Behavior Analyst
Certification Board
P.O. Box 11808
Tallahassee, FL
32302-2808

ACCEPTANCE OR CHANGE: TREATING SOCIALLY ANXIOUS COLLEGE STUDENTS WITH
ACT OR CBGT

Jennifer A. Block & Edelgard Wulfert, University of Albany, State University of New York

Traditionally, cognitive-behavioral therapy has worked from the assumption that anxiety, depression and other forms of emotional discomfort are caused by maladaptive or irrational patterns of thinking. Cognitive-behavioral therapists have developed an information-processing model, whereby hypothesized cognitive structures, or schemas, are causally involved in the development of psychopathology. Early maladaptive schemas predispose clients to distort events in a characteristic fashion (Young, Beck, & Weinberger, 1993). Treatment is aimed at identifying and modifying maladaptive beliefs and the underlying schemas from which they arise. Numerous interventions have been developed to accomplish these goals and many of these treatment procedures have received strong empirical support (Chambless & Hollon, 1998).

Acceptance-based therapeutic procedures stand in contrast to treatments that emphasize the modification of private events (thoughts and feelings). Rather than viewing psychological difficulties as the result of faulty thought processes that need to be changed, therapies that emphasize acceptance consider the struggle to change or avoid private events as problematic itself. Avoiding private experiences that are not under voluntary control requires the individual to avoid situations that elicit these experiences. This solves one problem but creates another one as a result of constricting activities and not taking part in life's events (Hayes & Wilson, 1994). To illustrate, the speech anxious student never speaks up in class and avoids unpleasant feelings; but there are costly long-term effects of her behavior. She has systematically passed off occasions that would have prepared her for future professional and personal opportunities. Hayes, Wilson, Gifford, Follette, & Strosahl (1996) have conceptualized a number of different topographically-defined behavioral disorders along the functional dimension of experiential avoidance. Acceptance-based methods encourage clients to let go of the struggle and come to accept the inevitable internal and external events of their lives (Wulfert, 1994).

The concept of acceptance is not new in the field of psychology. It serves as a key component in numerous psychological traditions and clearly plays some role in almost all psychological interventions. As Hayes (1994) conveys, acts of psychological acceptance can occur on a continuum and may be differentially valued across psychotherapeutic approaches. Acceptance of one's own private experience lies at the heart of the theories and therapies of the humanistic tradition, such as Rogers' (1951) client-centered therapy. Acceptance was strongly encouraged in client-centered therapy through the use of empathic listening and a shared understanding of feelings. Gestalt therapy also stresses the immediacy of experiencing, and holds the assumption that much of the dysfunction in our modern society is the result of people becoming "experience-phobic" and avoiding their own feelings (Greenberg, 1994). However, solid evidence to empirically support these acceptance-based interventions is largely absent from the scientific literature as humanistic and experiential types of therapies have historically been much less subjected to empirical evaluation.

If the humanistic traditions represent one end of the acceptance spectrum, behavioral and cognitive-behavioral approaches have fallen on the other end of the continuum. Until recently, the explicit incorporation of acceptance has been scarce in these approaches as they traditionally have emphasized change. A glance at some of the techniques used in contemporary cognitive behavioral interventions evidences this fact. Clients judged to exhibit maladaptive thinking are instructed to examine the evidence for their beliefs. They are taught to identify their "automatic thoughts," label them according to established categories of "cognitive distortions" and replace

them with more adaptive "rational responses" (Young et al., 1993).

Within the past few years, however, behavior therapists have begun to pay more attention to acceptance-based interventions and recently have started to subject them to empirical evaluation. Linehan & Kehrer's (1993) Dialectical Behavior Therapy for individuals with borderline personality disorder is one such example. It incorporates traditional cognitive-behavioral techniques and Zen concepts of acceptance in work with what is known to be a very difficult population. Jacobson (1992) presents a significant modification of traditional behavioral marital therapy with Integrative Behavioral Couple Therapy, an approach that emphasizes idiographic assessment and strives for a balance of acceptance and change strategies based on this assessment. Hayes' Acceptance and Commitment Therapy (ACT; Hayes, 1994; Hayes & Wilson, 1994) is another approach, with a foundation in behavior-analysis, that incorporates psychological acceptance. The elegance of this treatment lies in its integration of previously disparate psychological and spiritual traditions into a package that can be empirically investigated.

While the development and marketing of approaches such as ACT have recently been emphasized in the behavioral literature, empirical evidence for their efficacy, particularly in comparison with established empirically-supported treatments, has been limited. A brief review of the existing literature follows.

Zettle and Hayes (1987) and Zettle and Rains (1989) compared the effectiveness of cognitive therapy procedures with comprehensive distancing (an earlier version of ACT) in individuals with depressive symptoms. Each study found the two treatments to be comparable in efficacy, as demonstrated by a reduction in the depressogenic cognitions of participants. Biglan (1989) found ACT to be effective in reducing the suffering of families with children with chronic illness, and Khorakiwala's (1981) and McCurry's (1991) studies supported the efficacy of ACT in reducing overt and covert emotional avoidance within the therapy session. In an interesting treatment design that explored the field

effectiveness of ACT (Strosahl, Hayes, Bergan, & Romano, 1998), therapists received intense training and supervision in ACT and were instructed to use these learned techniques as they saw fit. A control group of therapists did not receive this training. Clients of ACT therapists reported significantly greater coping, more psychological acceptance, and were more likely to have completed treatment than clients of the control therapists. Finally, Paul, Marx, and Orsillo (1999) assessed the efficacy of ACT in a single-case design study with a 20-year-old exhibitionist. After 12 months of treatment, the client reported a considerable reduction in the frequency and severity of urges to expose himself and episodes of public masturbation, with treatment gains being maintained at six-month follow-up.

With the exception of the early work by Zettle and Hayes (1987) and Zettle and Rains (1989), studies that directly compare ACT with established treatments have been lacking. To bridge this gap, we have initiated a program of research to compare, in a controlled trial, the relative efficacy of ACT as compared to Cognitive-Behavioral Group Therapy (CBGT; Hope & Heimberg, 1993), an empirically-supported treatment for individuals with social phobia. In light of much evidence that treatments grounded in different philosophies and theoretical assumptions lead to similar outcomes (as examples, see the NIMH depression study or Project MATCH for treating alcohol dependence), we are especially interested in examining if and to what degree different mechanisms might be responsible for changes occurring through ACT and CBGT. A comparison of these treatments in a wait-list controlled trial may have important conceptual and applied implications and could eventually lead to the establishment of treatment matching guideline. We have concluded the collection of pilot data for this research program and report some preliminary findings below.

Method

Participants

Participants in this pilot study were 11 students from a large northeastern university (four males, seven females) with public speaking anxiety.

Measures

Levels of social anxiety were assessed with three instruments with established psychometric properties that have been widely used in research on social anxiety: (1) the Social Phobia Scale (Mattick & Clarke, 1998), a 20-item instrument designed to measure anxiety aroused by being observed by others; (2) the 12-item Fear of Negative Evaluation Scale (Leary, 1983); and (3) the five-item Fear Questionnaire (Marks & Matthews, 1979 as cited in Moylan & Oei, 1992) which measures phobic avoidance of evaluative situations.

Table 1.
Change Scores on Social Phobia Scale (SPS) and Fear of Negative Evaluation Scale (FNE)

Condition	Social Phobia Scale		Fear of Negative Evaluation	
	C1	C2[a]	C1	C2[a]
ACT				
P1	7	-15	-13	0
P2	-14	-17	-8	-17
P3	-28	-4	-28	2
CBGT				
P4	-2	-3	2	-13
P5	-23	1	-23	7
P6	-28	-10	-27	-5
P7	-6	-8	5	-9
WL				
P8	13	--	4	--
P9	27	--	16	--
P10	23	--	18	--
P11	-1	--	-4	--

Note: C1 = posttreatment score – pretreatment score; C2 = follow-up score – posttreatment score
[a] Participants in the wait-list condition were assessed at pretreatment and posttreatment assessment points only.

The authors created a six-item Willingness Scale to assess to what extent an individual is willing to engage in various academic-specific public speaking situations (i.e., raising one's hand to make a comment in a small seminar class, in a large classroom setting, in a lecture center; giving a presentation in a small seminar class, in a large classroom setting, in a lecture center). Willingness to engage in each activity was rated on a 0 (no willingness) to 10 (complete willingness) scale.

Procedure

Participants were recruited through announcements in introductory psychology courses and advertisements posted on campus. Potential participants were screened via a series of questionnaires to assess the extent of their anxiety and avoidance. Twelve students who met criteria for phobic anxiety were semi-randomly (because of scheduling constraints) assigned to one of three treatments: ACT (n=3, as one student failed to show), CBGT (n=4), or a wait-list control condition (n=4). Students in the control condition were told that the groups were currently complete and that they would be considered for the following group.

Data from the screening questionnaires served as pre-treatment assessment. At post-treatment and three-month follow-up, participants completed an identical set of questionnaires. Treatment was conducted by trained doctoral students in clinical psychology (two per treatment condition). ACT and CBGT each consisted of four 1 ½ hour sessions held at weekly intervals.
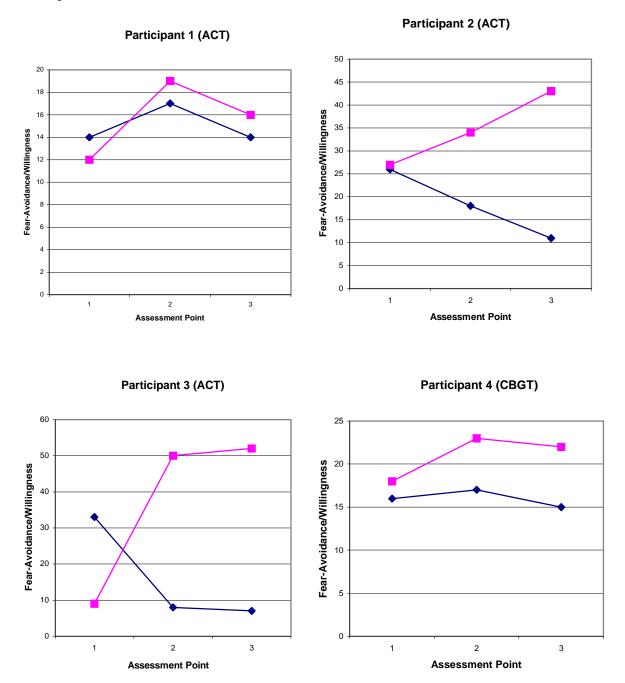
Treatments

Cognitive-Behavioral Group Treatment (Hope & Heimberg, 1993). CBGT consists of three primary components: simulated exposures to feared situations, cognitive restructuring, and homework assignments for in vivo exposure based on individualized hierarchies. The first treatment session entailed an overview of the cognitive-behavioral model of social anxiety and the rationale for treatment. Therapists then demonstrated an exposure set-up in which cognitive restructuring techniques, such as identifying automatic thoughts and cognitive distortions, were introduced to the group. The remainder of the first session and all subsequent sessions were devoted to simulated exposures and review of homework assignments.

Figure 1. Scores on the Fear Questionnaire and Willingness Scales at pretreatment, postreatment, and follow-up.

Participant 1 (ACT)

Participant 2 (ACT)

Participant 3 (ACT)

Participant 4 (CBGT)

Simulated exposures were graded according to the difficulty of the material presented and length of exposure (i.e., a three-minute talk about a hobby versus a ten-minute extemporaneous presentation on a current issue).

Acceptance and Commitment Therapy (Hayes, 1994; Hayes, Strosahl, & Wilson, 1999). An essential goal of ACT is to have individuals experience anxious thoughts and feelings (watching these as an unfolding behavioral process) and act with them rather than attempting to control or modify them (for a detailed discussion see Hayes et
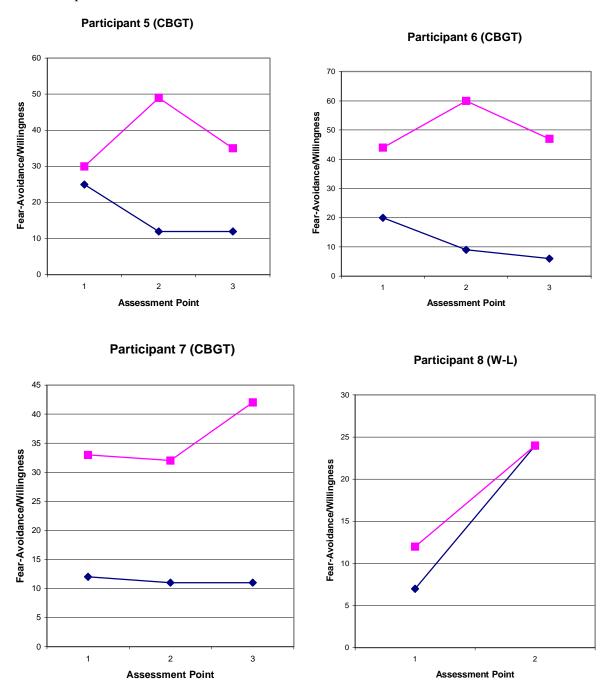
Figure 1 cont. Scores on the Fear Questionnaire and Willingness Scales at pretreatment, postreatment, and follow-up.

Participant 5 (CBGT)

Participant 6 (CBGT)

Participant 7 (CBGT)

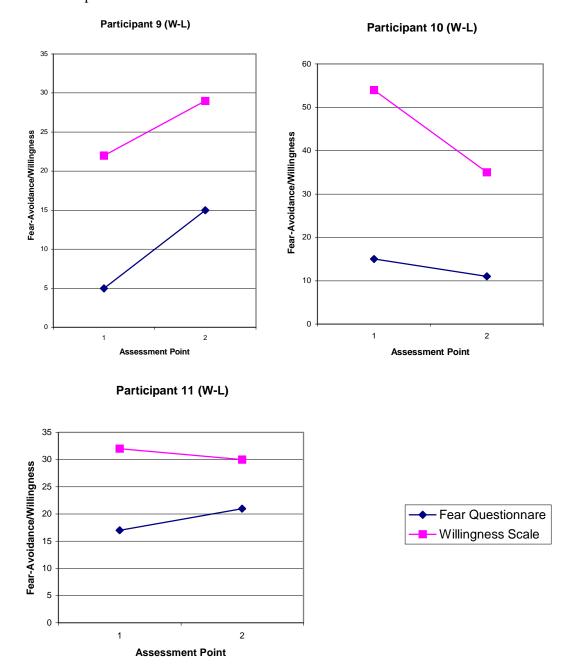

Participant 8 (W-L)

al., 1999). After a brief introduction to the problem of public speaking, numerous metaphors, role-plays, and experiential exercises were used to create the experiential basis of accepting the uncontrollability of one's own private experiences. Participants were then introduced to the idea of

willingness as a strategy or activity that one may choose in order to move one's life in a valued direction. Throughout treatment, group members were also encouraged to engage in exposure exercises and homework exercises similar to those in CBGT; however, their attention was focused on

just noticing any thoughts, feelings, and bodily sensations experienced rather than identifying and disputing cognitive distortions.

Results and Discussion

Results are displayed in Table 1 and Figure 1. Table 1 presents change scores on the Social Phobia Scale and the Fear of Negative

Figure 1 cont. Scores on the Fear Questionnaire and Willingness Scales at pretreatment, postreatment, and follow-up.

Participant 9 (W-L)

Participant 10 (W-L)

Participant 11 (W-L)

Evaluation Scale, from pre-treatment to post-

treatment, and for both treatment groups also from post-treatment to a three-month follow-up point. Figure 1 illustrates scores on the Fear-Avoidance Questionnaire and Willingness Scales at each of the three assessment points (data were only collected at two assessment points for the participants in the wait-list control condition, as these students were offered treatment after the second assessment point). While our small sample size precluded us from performing statistical analyses, we shall briefly examine trends in our data.

For the most part, scores on the SPS, FNE, and FQ decreased for participants in the ACT and CBGT conditions (indicating clinical improvement), while during the same time frame the scores for the wait-list control condition remained the same or increased. The opposite trend was observed on the Willingness Scale. Participants in both the ACT and CBGT conditions reported an increase in willingness to engage in feared situations (also indicating an improvement in clinical status). Individuals on wait list gave less consistent ratings on the Willingness Scale, with two showing a small decrease and two an increase while at the same time reporting higher levels of anxiety from the first to second assessment.

With regard to the efficacy of the two interventions, measures of anxiety seemed to slightly favor CBGT, while willingness ratings slightly favored ACT, especially at the follow-up assessment. These findings are consistent with the conceptual foundations and particular strategies of each treatment. Treatment with CBGT should produce decreased anxiety ratings if individuals indeed changed their beliefs about a situation, whereas following ACT we would expect an increased willingness to perform previously avoided behaviors, regardless of whether the anxiety level changes. Given this increased willingness, we might expect ACT participants to show even greater improvements beyond the one-month follow-up point. Indeed, longer-term follow-up and further consideration of change process are clearly warranted within treatment evaluation research. In this era of treatment proliferation in which a multitude of interventions are often pitted against each other without consideration of mechanisms of change, some have suggested that this type of theory-

driven research is desperately needed (Hayes, Follette, Dawes, & Grady; Kazdin, 1997).

Although the findings from this pilot study look promising, they must be viewed with caution. All data are based on self-reported fear and willingness ratings. Students' verbal responses may well have been influenced by social desirability. This might even explain some of the inconsistency in the wait list control condition. Perhaps the two students whose fear and willingness ratings increased over time sought to increase their chances to be included in the next treatment group by convincing the experimenters that their fear was "really strong" but that they were also "really willing" to carry out the feared behaviors if required. These observations show the potential pitfalls of relying on self-report and underscore the importance of including observational data in projects comparing the efficacy of treatments for anxiety conditions such as fear of public speaking.

With only seven participants in the two active treatments, it would be premature to make any statements about the differential effectiveness of ACT versus CBGT. However, the data suggest that both treatments may be effective relative to no treatment and both may teach speech anxious college students strategies and ways of coping that will ameliorate their condition. We expect that the outcome of a larger study currently in progress in our laboratory will be able to address some of the questions our pilot study has raised.

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BEHAVIORAL PSYCHOLOGY GRADUATE PROGRAM AT THE UJ

John R. Lutzker

The University of Judaism offers M.A. and M.S. degrees in Behavioral Psychology with a particular emphasis in serious disorders: developmental disabilities (focus on autism); child maltreatment; traumatic brain injury; and, schizophrenia. The M.A. is a two-year, 60 credit hour program culminating in an empirical thesis. The M.S. is a 1 1/2 year, 45 credit hour program culminating in a research paper. Coursework includes applied behavior analysis, tests and measurement, cognitive behavior therapy, and several other related topics. This is the third year of the program. We have 10 highly qualified participating faculty and excellent internship sites. To date, every student has received some form of financial support and all of our students work in field-related jobs. Some of our financial support comes from the California Department of Developmental Services. The stipends from there allow four students complete tuition remission and a monthly income. Those students are required to work 20 hours per week in the community. All classes are taught on Tuesdays and Thursdays and in the evenings. Thus, MWF is free for fieldwork. We are proud that our student body is quite diverse (meaning don't let the name of the school fool you. For more information, contact Cecily Bryan (888) UJ-FOR-ME or e-mail admissions@uj.edu.

FUNCTIONAL BEHAVIORAL ASSESSMENT IN PENNSYLVANIA'S PUBLIC SCHOOLS

Janet Sloand-Armstrong, Lynn Dell, & Sherry L. Milchick
Central Instructional Support Center

The Pennsylvania Department of Education addressed the need for a competency-based program for trained staff in applied behavior analysis by initiating the credentialing process in behavior analysis. As a result, the development of a training program designed around Functional Behavioral Assessment in public school settings has emerged. A practical tool for school teams, the Functional Behavioral Assessment Worksheet, has been developed using Applied Behavior Analysis principles and procedures. Educational consultants at the Central Instructional Support Center have developed the tool and are currently training Intermediate Unit staff, school district staff, and individual IEP teams in the use of the worksheet within effective behavior assessment procedures and educational programming.

The worksheet describes the rationale for functional behavioral assessment and includes an explanation of IDEA requirements for completion of the assessment process for disciplinary changes in placement. The worksheet contains a team interview section, a section on direct observation with data analysis, and a summary section that includes hypothesis formulation. The step-by-step process provides a procedural framework that ensures that the team will conduct systematic and effective assessment. Use of this tool guarantees that teams focus on data collection and analysis and base their decisions on this information. This is a more scientific approach than the sole reliance on informant methods currently in use in public school settings.

The worksheet appears below. Appendix A and Appendix B consist of basic data collection materials. For copies of the complete Functional Behavioral Assessment Worksheet, please contact the Central Instructional Support Center.

Functional Behavioral
Assessment Worksheet
Purpose

Individualized Functional Behavioral Assessment is typically used only in instances where behavior interferes *significantly* with the student's learning or that of his/her peers. Effective classroom management approaches embedded within effective instructional design and delivery appropriately address the majority of behavioral issues occurring in classrooms.

Process

A functional behavioral assessment is a process consisting of information-gathering procedures that result in a hypothesis about the function(s) that the behavior is serving for the student as well as ecological events and the consequences that are maintaining the behavior.

First, information must be gathered indirectly through interview(s) of person(s) who has observed the behavior of the student for an extended period of time in a variety of settings and conditions. The purpose of the interview(s) is to review a large number of potential variables and narrow the focus to those variables that are of particular importance to the individual.

Information must also be gathered through direct observation of the behavior across settings and times with consideration of a variety of other environmental factors (i.e. other persons present, task demands, changing conditions). Information that was gathered

during the interview portion of the functional behavioral assessment is used to narrow the focus of data collection during direct observations. A graphic analysis of the data collected during direct observations together with the interview information results in the following:

1. Development of a specific, clear, description of the behavior of concern

2. Identification of the physical and environmental factors that correspond with occurrences of the behavior

3. Identification of the potential function of the behavior in terms of its maintaining consequences.

This information then serves as the basis for the development of a Behavior Intervention Plan that manipulates environmental factors and consequences while providing instruction in the acquisition of new, more appropriate behaviors. Throughout the baseline and intervention phases, data is collected and evaluated, and decisions are made based upon analyses of the data. Ongoing revisions to the Behavior Intervention Plan are data-driven throughout the intervention phase.

FUNCTIONAL BEHAVIORAL ASSESSMENT

STEP 1: INTERVIEW

The IEP team, including a person or persons who have observed the behavior of the student for an extended period of time in a variety of settings and conditions, completes the interview questions focusing on antecedents, behaviors, and consequences.

STEP 2: DIRECT OBSERVATION WITH DATA ANALYSIS

Direct observation in the student's natural environment provides objective data to support or refute the interview information; thus leading to more accurate hypothesis formation. The parameters of the observations and the data collection methods are determined by information gathered during the interview phase (STEP 1).

STEP 3: SUMMARY

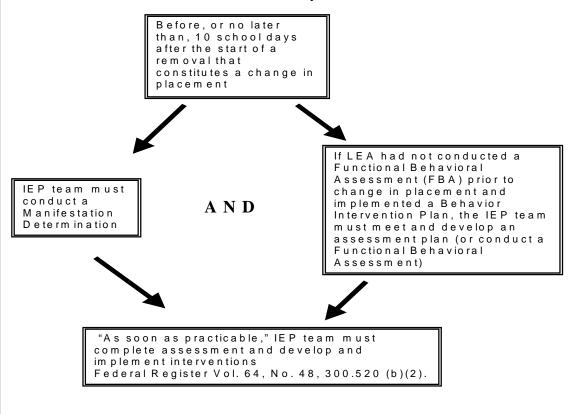The IEP team summarizes the interview information with the data collected during direct observation to form a hypothesis identifying the function the behavior is serving for the student. The IEP team uses this information to build an Effective Behavior Support Plan. Ongoing data collected during the intervention phase of the Behavior Support Plan guides the team in making progress and making necessary revisions.

When must a Functional Behavioral Assessment (FBA) be conducted?

IDEA Requirements

Disciplinary Changes in Placement Occurs (exclusion of a student with disability)

- More than 10 school days consecutively, **OR**
- More than 15 school days cumulatively in a school year, **OR**
- When days 11-15 constitute a pattern of exclusion, **OR**
- An exclusion of even one school day for a student with mental retardation

Before, or no later than, 10 school days after the start of a removal that constitutes a change in placement

IEP team must conduct a Manifestation Determination

A N D

If LEA had not conducted a Functional Behavioral Assessment (FBA) prior to change in placement and implemented a Behavior Intervention Plan, the IEP team must meet and develop an assessment plan (or conduct a Functional Behavioral Assessment)

"As soon as practicable," IEP team must complete assessment and develop and implement interventions
Federal Register Vol. 64, No. 48, 300.520 (b)(2).

Step 1: Functional Assessment Interview

Student Name: _____**Date:** _____

School: _____ **Grade:** _____ **DOB** _____

Educational Program Description: _____

_____

_____

Instructions: Interview a person (or persons) who has observed the behavior of the student for an extended period of time in a variety of settings and conditions. When the answer is YES, add details on the line provided.

I. Description of Behavior of Concern (specifically describe what the behavior looks like)**:** _____

_____

_____

II. Physiological and Medical Factors:

1. Could the behavior be a result of a medical condition or any form of physical discomfort?

   NO
   YES

2. Could the behavior be related to a side effect of medication?

   NO
   YES

   3.   Could the behavior be the result of some physical deprivation condition (thirst, hunger, lack of rest, etc.)?

   NO
   YES

III. Antecedents and Establishing Operations:

      1. Are there circumstances in which the behavior ALWAYS occurs?

            NO

            YES

      2. Are there circumstances in which the behavior NEVER occurs?

            NO

            YES

      3. Does the behavior occur only (or more often) during particular activities?

            NO

            YES

      4. Does the behavior occur only with (or more likely with) certain people?

            NO

            YES

5. Does the behavior occur in response to certain stimuli? (demands, termination of preferred activities, tone of voice, noise level, ignoring, change in routine, transitions, number of people in the room, etc.)

            NO

            YES

6. Could the behavior be related to any skill deficits?

    a. **Communication**. *Examples: The student appears "off track" and loses his/her train of thought. The student's volume and/or tone of voice are inappropriate. The student has difficulty getting messages across successfully and/or lacks the social skills to function productively in group activities. The student doesn't use active listening habits such as eye contact, head nods, asking, clarifying, or verifying questions.*

    b. **Sensory processing**. *Examples: The student has difficulty <u>interpreting</u> sensory information (i.e., sights, sounds, movements, touch, tastes, smells) and/or <u>organizing</u> multiple sensory information. The student seems unable to ignore irrelevant sensory information and/or to <u>focus</u> on relevant sensory information.*

    c. ***Task requirements are too difficult<u>.</u>***

            NO

            YES*

*If YES, please refer for further assessment (i.e., Speech & Language evaluation, Occupational Therapy evaluation, curriculum-based assessments).

IV. Consequence Factors:

1. Does the behavior allow the student to <u>gain</u> anything?

Preferred activities or items?
Indicators: The behavior often occurs when you take a particular item away from the student or when you terminate a preferred activity. The behavior often occurs when you inform the student that s/he cannot have a certain item or cannot engage in a particular activity. The behavior rarely occurs when you give the student free access to his or her favorite items or activities.
NO
YES

Peer or adult attention?
Indicators: The student frequently approaches you or others. The student frequently initiates social interaction. When the behavior occurs, you or others usually respond by interacting with the student in some way (i.e. verbal reprimand, redirection, comforting statements). The behavior rarely occurs when the student is receiving lots of attention.
NO
YES

2. Does the behavior allow the student to <u>postpone, avoid, or escape</u> anything (demands, social interaction, etc.)?
Indicators: The behavior often occurs when you place demands on the student. The behavior often occurs when the immediate environment is very noisy or crowded. The behavior rarely occurs when you place few demands on the student or when you leave the student alone. The student is often noncompliant when asked to complete tasks.
NO
YES

3. Does the behavior provide stimulation activity (an alternative to a lack of active engagement in activities)?
Indicators: The behavior occurs frequently when the student is alone or unoccupied. The student seems to have few known reinforcers or rarely engages in appropriate object manipulation or "play" behavior. The student is generally unresponsive to social stimulation. When the student engages in the behavior, you and others usually respond by not attending to the behavior.
NO
YES

STEP 2: DIRECT OBSERVATION WITH DATA ANALYSIS

A. At the completion of the interview (indirect) portion of the FBA, the team will have a measurable description of the behavior of concern and information which leads to more focused observation and assessment methods.

Direct observation with data collection and subsequent analysis:
♦ Serves to more clearly define the behavior
♦ Supports or refutes interview information
♦ Allows for assessment of the behavior in the student's natural environment
♦ Leads to a more accurate hypothesis regarding the function of the student's behavior of concern
♦ Serves as a baseline measure to evaluate and monitor intervention results
♦ Provides information that is necessary to build a behavior support plan

B. **Appendix A** contains sample data collection tools for use during direct observation followed by a graphic (visual) representation of the data to facilitate data analysis.

C. **Appendix B** contains blank data collection forms for you to use directly or adapt to fit your needs.

Step 3: Summary

History of interventions for current behavior of concern	
Antecedent (prevention) strategies:	Consequence strategies:

Observation data summary (attach graphic summary of observation data collected)

1. How often does the behavior of concern occur? _____
    _____
    _____

2. How long does the behavior of concern last when it occurs? _____
    _____
    _____

Antecedent and Consequence Factors

1. What antecedents (see pg. 4 and data collection) are present when the behavior of concern occurs? _____
    _____
    _____

2. What consequences (see pg. 5 and data collection) appear to be maintaining the behavior of concern?
    _____
    _____

Hypothesis Regarding Function of the Behavior of Concern

❑ To get attention from   _____
❑ To get access to (items or activities)   _____
❑ To escape, avoid, or delay   _____
❑ To provide stimulation activity (describe) _____

AN OBM STRATEGY FOR ACCOMPLISHING THE MISSION AND GROWING A SUSTAINABLE PENNSYLVANIA ASSOCIATION FOR BEHAVIOR ANALYSIS

Joseph Cautilli, M.Ed., M. Ed., BCBA

The newly formed Pennsylvania Association for Behavior Analysis (PennABA) seeks to promote advances in the science of behavior and best practices in the dissemination of its technologies. Like all organizations, PennABA has three main functions: survival, growth, and mission accomplishment (Malott, 1992; Mawhinney, 1992a, b). This essay outlines a strategy for expediting PennABAs successful achievement of these functions.

The first tactic assures PennABAs success in an ecological network of alternative guilds such as the Pennsylvania Psychological Association and the Pennsylvania Association of Social Workers. Although PennABA will be required to compete with such guilds for funding and other resources, the strength of behavior-analytic technology and the rapidity with which it can be brought to bear on a wide range of widely recognized human needs suggests that an adversarial strategy will not be necessary for PennABAs survival. To the contrary, the fact that Behavior Analysis overlaps the domains of so many guilds suggests that a cooperative stance involving multiple educational and social-action projects will foster growth by enhancing common interests and goals. By providing other guilds with certification training in the specific principles of philosophical, basic, and applied behavior analysis, we can enlist their grateful support in providing the growth enhancing resources that are available in their unique loci. Finally, ABA shares with other guilds an interdependency in its mission to provide competent and quality services to children and adults with disabilities.

The second tactic enlists university resources. Behavior analysis and therapy is considered the treatment of choice for disruptive behavior disorders (Brestan & Eyberg, 1998), developmental disabilities, organizational behavior management (Daniels,

1994; Flemin, 1992), and the need for reasonable accommodation in the workplace (Hantula & Reilly, 1996). Given the prevalence of such need, PennABA can help universities in the state of Pennsylvania connect with the natural communities of reinforcement that will make sponsoring behavior analytic training programs profitable for them.

The third tactic for success at survival, growth, and mission accomplishment is to bring together the major organizations and sites for training and hiring (Penn State, Temple University, and Devereux Foundation) so that they may collaboratively manage the start up and growth of behavior analytic enterprises.

The fourth tactic is to implement the human resource management model of Crowell and Anderson (1983). That model consists of five management functions: (1) specify program purpose (2) determine program scope at the level of individual workers (3) specify relevant worker actions that, if changed, would help or hinder the achievement of ultimate goals (4) monitor target behaviors and (5) develop individual-worker strategies for achieving the desired behavior changes. Together, these functions create an organizational environment that motivates and directs people to work hard and accept responsibility for helping the organization accomplish its missions (McGreggor, 1960). The first step in translating this management model into an organizational tactic is to bring together key players over the next few weeks to translate the models functions into specific behavioral objectives for our organization (c.f. Locke, Shaw, Saari, & Latham, 1981; Locke & Latham, 1981). One such objective will be to perform a systemtic descriptive functional analysis of each area as a step in the process of developing a problem-solving model. The functional analysis has five major steps (1)

identifying critical behaviors to be addressed (2) measuring the behaviors (3) identifying their antecedents and consequences, (4) developing an intervention strategy, and (5) evaluating to ensure that performances are improving. We predict that implementing the strategies outlined above will lead PennABA to quickly grow into a strong and successful organization. Yet a successful managerial strategy without a sufficient labor pool is not enough. PennABA must attract people who can commit the requisite time and energy. To succeed with a tiny budget, we must turn to committed student labor. So a fifth tactic is to market behavior analytic careers and give students positively-reinforcing histories for performing behavior analysis professionally. Defining behavior analytic job positions in clear behavioral terms will facilitate the successful achievement of this tactic. This requires a task analysis of the position. One way to begin such a task analysis is to observe those who are doing the job in other guilds and see exactly what it is that they do (e.g., Luthans & Lockwood, 1984).

If we can set strong behavioral goals, get key players functioning, and use the science of behavior to achieve our goals, then the future looks very bright for us and the quality of services in the state of Pennsylvania. Our community is turning a corner in its burgeoning recognition of the importance of science in achieving its potentials. We share Skinner (1974) ideal that we can begin to make a dent in human suffering. It is hoped that others will welcome science to the table of community service.

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Biography

John R. Lutzker is the Ross Distinguished Professor and Chair; Director of Graduate Training in Behavioral Psychology; and, Acting Provost at the University of Judaism. He has published three books and over 100 professional articles and chapters. He is a Fellow of APA, the American Association of Applied and Preventive Psychology, and the Behavior Research and Therapy Society. Dr. Lutzker has served on numerous editorial boards, currently: Behavior Therapy and Experimental Psychiatry; Journal of Family Violence; Behavioral Interventions; Children's Services: Social Policy, Research, and Practice; Journal of Positive Behavioral Interventions; Journal of Developmental and Physical Disabilities; and, Child and Family Behavior Therapy. From 1981-83, he was editor of the Behavior Therapist. He has also served as an AABT Convention Chair, and is currently finishing his three-year term as Member-at-Large on the Board of Directors. John's applied research interests are in child maltreatment and autism.

Position Statement

Service to the membership, advocacy for the field, education through: conventions, the dissemination of publications and videos, and networking/referrals. These are the basic tenets and practices of AABT provided by an international organization historically able to capture a homelike quality for its members in a time when other organizations feel impersonal. My steadfast goal is to keep the feeling while advancing the services. I have chosen to run for President at this time because I am serving my last year on the Board and am so enthusiastic about the direction the Board has taken during my term that, if elected, there would be no hiatus in my involvement.

Almost the entirety of my career, I have held leadership positions where I have worked and in my professional organizations, especially AABT. I am exhilarated by this opportunity to possibly serve as President. In addition to fulfilling the goals from our planning retreat held last summer, I would like to see AABT continue to embrace diversity in every way. There are the obvious aspects of diversity referring to people. Included in this is the need to be sure that our convention's invited addresses and events are state-of-the-art in every way, including making sure that women and other less represented groups have a significant role. My notion of diversity includes the field. In recent years, we have appropriately embraced the cognitive side of behavior therapy. We should also embrace the applied behavior analysis side. The recent effort by AABT, ABA, several divisions of APA, and other organizations, to have APA formally recognize behavioral psychology as a specialty is an example of the utility of cross fertilization among our colleagues who share our focus on empirically-derived and validated interventions. These kinds of efforts can only strengthen us in all ways. I would like to see us continue to be close to these other organizations in ways that will allow us to advocate for AABT members even stronger in other arenas. It would be an honor to serve as President and to try to continue to advance us in these ways.

THE ROLE OF ACTION NAMES, ACTION FRAMES, AND MODIFIERS IN LISTENER

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In Stemmer (1992) it is shown that, with respect to practically all verbal items, correct speaker behavior with respect to a particular item requires the previous acquisition of correct listener behavior with respect to this item. Once the listener behavior has been acquired it can then be "transferred" into speaker behavior[1]. Therefore, the correct analysis of the processes that establish listener behavior is of primary importance for the analysis of verbal behavior, including speaker behavior. Stemmer (1992) contributes to this project by analyzing so-called ostensive learning processes. Very briefly, in these processes children hear expressions such as "bicycle," "giraffe," or "thunder" while "paying attention" to a particular stimulus. That is, the children are exposed to the pairing of a verbal stimulus (the ostensive expression) with a non-vocal stimulus. These pairing events establish (relatively) correct listener behavior with respect to the ostensive expressions. For example, if a child is exposed to the pairing of the verbal stimulus "This is a bicycle" with the presentation of a (salient) bicycle then, after the exposure to this pairing event, vocal stimuli such as "Give me a bicycle" will often evoke correct listener responses (e.g., Nelson & Bonvillian, 1973; see also Skinner's example of the listener behavior that is generated by an exposure to the ostensive pairing of the vocal stimulus of "Jones-plug" with a Jones-plug, 1957, p. 360).

Ostensive learning processes are not operant conditioning processes. Rather, they are closely related to Pavlovian processes in the following sense: (a) a necessary, and often even a sufficient, condition for the learning effects to occur is the exposure to the pairing of two salient stimuli, one a verbal stimulus (e.g., the word "Jones-plug"), and the second, some other stimulus (e.g., the Jones-plug); and (b) the learning occurs without the systematic reinforcement of a specific response to the vocal stimulus.

Some readers may object to classifying ostensive learning as a variety of Pavlovian

conditioning, but this is mainly a terminological issue. What is important is that ostensive learning is significantly different from normal operant conditioning. In particular, there is no need for the systematic reinforcement of a specific response to the vocal stimulus. (See also Skinner's example of Ali Baba's listener behavior after he was exposed to the pairing of the vocal stimulus "Open, Sesame" with a non-vocal event, 1957, p. 359.)

In the present paper, I examine another type of process that generates early listener behavior, namely the operant conditioning processes that establish listener responses to so-called action frames such as "drop x [e.g., shoe]," "drink x [e.g. juice]," or "walk x [e.g., slowly]." These processes are even more important than the ostensive ones because the responses to at least some of the action frames are usually established before ostensive expressions are learned. Moreover, early listener behavior largely consists of responses to combinations of action frames with so-called modifiers which include, among others, the ostensive expressions. The present analysis therefore complements the analysis of Stemmer (1992). Together, they cover the main aspects of early listener behavior. This analysis will also suggest that one of the most important effects of ostensive pairing events is to establish ostensive expressions as modifiers of action frames.

Action Frames
Action Names.

The learning of action frames begins with the learning of responses to action names such as "come here," "drink," "more," "give me," "don't," "drop it," or "bye-bye" (e.g., Benedict, 1979; Dromi, 1987; Smith & Sachs, 1990). These responses are learned with the help of operant conditioning processes; the (relatively) correct responses to the names are established by a process of differential reinforcement.

Some of the action names may be considered by adults as consisting of two (or more)

elements such as "go to sleep," "go to the corner," "drink the milk," "walk slowly," "give shoe," or "drop sock." It is unlikely, however, that in the very first stages the listener responses are responses to two separate elements: one that specifies the action and one that specifies a property of the action or an object with which the action is convened. It is more plausible that the responses (e.g., going-to-a-corner, walking-slowly, giving-a-shoe, dropping-a-sock) are responses to undivided action names.

Action frames and modifiers.

In a second stage, and out of the previous instances, emergent listener behavior usually develops when children start to respond to novel combinations of elements of the previously learned action names, as to "drink slowly," "walk to corner," or "drop shoe" (e.g., Goldstein, 1983; Striefel, Wetherby, & Karlan, 1976; for similar results in nonhumans, see, e.g., Herman, Richards, & Wolz, 1984; Savage- Rumbaugh, 1986). This emergent behavior suggests that some of the elements of the previously undivided action names have now acquired an independent status. For instance, the elements "drink x," "walk x," and "drop x" now combine with the elements 'slowly,' "to-corner," and 'shoe' to evoke appropriate listener responses. Calling the former action frames and the latter modifiers, we can attribute the emergent behavior to this process: (a) the modifiers now discriminatively control certain properties of the responses controlled by the action frames; and (b) the properties that are controlled by the modifiers are the properties of the actions that were reinforced during the previous learning events.

For example, suppose that in a first stage, a child has learned to respond with the undivided action of giving-a-shoe to the verbal command "give shoe." This reinforced response had the property of being the giving of a shoe (rather than of something else). Suppose further that, in a similar manner, the child has also learned to respond to "drop sock." Then, in a second stage, the new combination "drop shoe" (which we describe as consisting of the action frame "drop x" and the modifier 'shoe') will evoke an action that has the property of the action that was reinforced in the first stage, namely, the property of giving a shoe (rather than something else). That is, the modifier

'shoe' which occurs in the command "drop x + shoe" determines that the response to this command has the property of being the dropping of a shoe, and the nature of this property is determined by the property of the action that was previously reinforced: the giving of a shoe. (The notion action frame is related to Skinner's notion partial frame, 1957, p. 336. The main characteristics of frames is the possibility of describing them as expressions that take variables. See also Palmer, 1998. In logical discourse they are often called predicates with one or more arguments. Regarding verbal items controlling certain response properties, see also Cerutti, 1989).

The above emergent behavior plays a crucial role in the development of listener behavior. It generates appropriate responses to "new" verbal stimuli: the new combinations of verbal elements. The person's listener behavior has become "productive" (cf. Catania & Cerutti, 1986). It is important to realize, however, that each of the elements of the new combinations must have occurred in a previous learning event of the above type. That is, the element must have been part of the verbal stimulus that occurred in a previous action-name learning event; it must be an "old" element. (There are certain exceptions, for example, the listener may have learned a semantically related version of a lexical item. But this is not the place to deal with such exceptions.)

Presently, it is difficult to decide whether the emergent behavior -- that is, the behavior evoked by new combinations -- derives from a special learning mechanism, or whether it derives from the previous learning of the undivided action names, from the differential reinforcement of the responses to these names. But for the purpose of this paper, this issue does not have to be decided. What is important is that animals also engage in this behavior. Therefore, the emergent behavior does not support Chomsky's claim that language derives from a Language Acquisition Device that is restricted to humans (see, e.g., Chomsky, 1965).

Ostensive expressions.

Finally, in a third stage, which is not necessarily clearly separated from the previous stages, ostensive learning makes its appearance. It establishes ostensive expressions as additional

modifiers of action frames, and the nature of the modification is determined by the nature of the non-vocal stimulus of the ostensive pairing event. That is, the ostensive pairing event establishes the control of the ostensive expression of a particular property of the relevant action, and the nature of this control is determined by the non-vocal stimulus of the pairing event. For example, the exposure to the pairing of "[This is a] bicycle" with a (salient) bicycle may establish "bicycle" as a modifier of action frames such as of "give me x" or "drop x." The element "bicycle" will now control a particular property P of the responses to the action frames, and the nature of P is determined by the nature of the non-vocal stimulus: the bicycle. Therefore, the response to "Give me bicycle" will be the giving of a bicycle rather than of something else. (In Skinner's example, the exposure to the ostensive pairing of "Jones-plug" with a Jones-plug establishes "Jones plug" as a modifier of appropriate action frames, among them of "please, hand me an x," and the modifying character of "Jones plug" is determined by the non-vocal stimulus of the ostensive pairing event: the Jones plug. Therefore, the response to "Please hand me a Jones-plug" has the property of being the handing over of a Jones-plug rather than of something else.)

Ostensive learning is of crucial importance for verbal behavior because it is such an easy, and almost effortless way to increase a person's "lexicon" -- it establishes the behavioral effects of modifiers by a process that does not require the repeated reinforcement of a specific responses. Frequently even a single exposure to an ostensive pairing event is sufficient to establish the word as a modifier of action frames (e.g., Nelson & Bonvillian, 1973).

The Verbal Explosion.

In a recent paper, Horne & Lowe (1996) call our attention to the verbal explosion phenomenon -- the "very rapid acceleration in name acquisition that occurs after approximately the first 10 to 20 names have been learned, normally when children are around 18 months old" (p. 202). Horne and Lowe attribute the explosion mainly to an increase in echoic capacities. But since the role of echoic capacities is restricted to the development of speaker behavior, the increase in these capacities cannot explain the explosion in

listener behavior, which not only precedes the speaker explosion but which also is a necessary condition for this explosion.

The present analysis suggests a completely different explanation. It attributes the verbal explosion to the listener effects of ostensive learning processes. Since these processes do not require the repeated reinforcement of specific responses but only the exposure to the pairing of two stimuli (under certain conditions), they very quickly establish ostensive expressions as modifiers of action frames -- they incorporate the expressions in the child's "lexicon" in a very short time. (Stemmer, 1992, discusses a number of conditions that ostensive pairing events must satisfy in order to establish the appropriate listener behavior, such as the significant salience of the two stimuli. But what is important in the present connection is that these conditions do not include the repeated reinforcement of a specific response to the vocal stimulus.)

Early listener behavior is thus established by the combination of two types of events. The first consists of the events that establish listener responses to action names, and that then give origin to responses to action frames and modifiers. The second consists of ostensive learning events that establish additional verbal stimuli as modifiers of action frames. In the former case, the responses are established by operant conditioning processes. In the latter case, the responses are established by a process that is related to respondent conditioning. (It is likely that some of these events have mixed features. But this is not the place to deal with them.)

These conclusions show the important role of the events that establish listener responses to action names, action frames, and modifiers:

(1) The events are responsible for the productive character of listener behavior and, via the transfer effect, of verbal behavior in general.

(2) Together with ostensive events, the events are responsible for most aspects, probably even for all aspects, of early listener behavior.

(3) Because ostensive learning does not require the repeated reinforcement of specific responses to vocal stimuli, the events are the main cause of the explosion in early verbal behavior.

Multiple variables.

The foregoing analysis deals only with the most basic aspects of the learning of action names, action frames and modifiers. Many subtle details have been ignored. Let me briefly mention just one of them. This issue points to a feature that plays an increasingly important role in listener behavior, and eventually in verbal behavior in general.

The action frames I have considered so far had only one variable. But a large part of listener behavior should be treated as deriving from action frames that have multiple variables. For example, the action frame underlying the response to "Give the book to John" should probably be treated as having the form "give x to y," where "x" corresponds to "the book," and "y" to "John" -- that is, as a frame with two variables. Moreover, not only action frames but also other kinds of verbal stimuli can take multiple variables. For example, the "descriptive" expression "Mary receives the ball from John" may be treated as an instance of the three place frame "x receives y from z."

Frames with multiple variables play a crucial role in grammatical behavior since they give origin to its structure dependence (Palmer, 1998; Stemmer, 1990). For example, listeners who have learned to respond to "The man who holds the book holds the coat" are usually also able to give correct responses to the "passive" sentence "The coat is held by the man who holds the book." In this passive "transformation," one of the occurrences of "holds" is changed into "is held" while the other not. This feature is a consequence of the structure that is determined by the main frame "x holds y," and of the substructure that is determined by the frame "x who y" where "x" is "the man" and "y" is "holds the book." The resulting structure determines that in the passive transformation, the substructure "the man who holds the book" is a closed unit that is transferred unchanged to its new position. (On this topic, see also Stemmer, 1994.)

I have analyzed here the very first stages of listener behavior. Other processes occur later, especially when listener responses to verbal items are established in intraverbal events. (See, for example, the brief discussion of Skinner's example of the intraverbal learning of "amphora" in Stemmer, 1992.) But I will not deal here with such further developments.

Contingency Specifying Stimuli.

Skinner (1966) uses the expression contingency-specifying stimuli in order to refer to verbal commands (or advises or rules) such as "Go west, young man." These verbal stimuli are supposed to specify certain contingencies. But, of course, since from a physical point of view a contingency-specifying stimulus S is nothing more than a series of sounds, people have to learn which is the contingency that is a specified by S. Therefore, in order to make a successful use of the notion of contingency- specifying stimulus we must investigate the processes that enable people to learn that a particular contingency-specifying stimulus S specifies contingency A rather than contingency B.

The present analysis contributes to this projects. It analyzes the processes that give to simple commands such as "Give shoe" the power to evoke response C rather than response D -- the processes that enable a child to learn that a particular contingency-specifying stimulus specifies contingency A rather than contingency B. Moreover, it is likely that further investigations of these issues will throw light on more complex processes such as those that give to commands like "Take the cake out of the oven before you start watching TV" the power to evoke behavior C rather than behavior D. (Without entering into a detailed analysis of this example, let me just point to some of the factors that should be examined. Consider the vocal stimulus "before" that occurs in the command. According to our analysis, one of the factors that determine the nature of behavior C is the occurrence of "before" in the command. More precisely, the events in which listeners of English have learned "before" determine that this vocal stimulus modifies action frames such as "[Do] x before y," and it modifies them in a particular manner. On the other hand, the events in which listeners of English have learned other modifiers, e.g., "after," determine that these vocal stimuli modify the relevant action frames in a

different manner. This, therefore, partially explains why the behavior evoked by commands such as "Take the cake out of the oven after you start watching TV" is usually different from the behavior evoked by "Take the cake out of the oven before you start watching TV.")

Conclusions

Early listener behavior is established by two types of events: (a) events that with the help of operant conditioning processes establish listener responses to action names, action frames, and modifiers; and (b) ostensive pairing events that with the help of processes of a Pavlovian variety establish ostensive expressions as additional modifiers. The behavior established in these events is productive; new combinations of old elements evoke appropriate responses. Moreover, since ostensive learning processes do not require the repeated reinforcement of certain responses to ostensive expressions, ostensive pairing events are the main cause of the rapid increase in the "lexicon" of young listeners.

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Footnote

1. Skinner (1957, pp. 359-360) gives an example of the transfer of listener behavior into speaker behavior. But Skinner does not discuss the mechanism that is responsible for the transfer effect. He merely states that it is the "end result of a long process of verbal conditioning" (p. 360). Nowadays the transfer effect is generally attributed to stimulus equivalence (e.g., Hall & Chase, 1991; Sidman, 1971; Sidman & Cresson, 1973; Sidman & Tailby, 1982; Sidman, Wilson-Morris, & Kirk, 1986; Sidman, Wynne, Maguire, & Barnes, 1989). It is important to note, however, that stimulus equivalence plays no role in the acquisition of listener behavior. This behavior, including highly sophisticated aspects such as grammatical behavior, only requires functional generalizations (Stemmer, 1990, 1992). Notice also that the acquisition of listener behavior with respect to a particular verbal item is a necessary (and frequently also a sufficient) condition for the acquisition of corresponding speaker behavior.

FROM THE CHAIR OF THE CLINICAL SIG:

Erik M. Augustson, Ph.D.

It is that time of year again when most of us who are going to the ABA annual convention are looking over the abstracts we submitted last fall, trying to remember exactly what we said we were going to be presenting, and are finally getting down to actually putting it all together. I would like to take this edition's column to distract you from your work for a few moments and encourage you to start thinking about some of the convention events you might attend.

For me, attending ABA is like being a kid in a candy store. One of the features of the ABA convention which makes it particularly valuable and stimulating for me is the breadth and depth of topics covered. However, there is so much to choose from and the number of possible talks, symposia, and posters can be overwhelming. The following is a partial list of some of the events which I feel might be of interest to Clinical Behavior Analysts. Although my primary goal at the convention is frequently to catch up on the current topics specific to Clinical Behavior Analysis, I also try to attend talks from other areas as well. In particular those related to either basic research or theoretical topics which help to round out my understanding of human behavior. I find that attending these types of talks improves my skills as a clinician in ways which are typically difficult to tact immediately but which pay off in the long run.

GENERALIZATION PROGRAMMING AND BEHAVIORAL CONSULTATION

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Generalization Programming and Behavioral Consultation

Behavioral consultation is a frequently used method for providing services to special education children within the school system (Gutkin & Curtis, 1999). One of the justifications for using consultation as a service delivery model in schools is its potential to be preventative; consultation aids a teacher in effective problem-solving and teaches specific behavioral skills to solve classroom problems. Many researchers have suggested that one of the most promising elements of consultation is that these skills, once learned, can be applied by the teacher to other children (Kratochwill, Elliott & Rotto, 1995). Meyers (1985) highlighted this concept by stating, "...consultation is viewed as a technique with the potential for influencing the behavior of the target child, other children in the child's classroom, and similar children which the teacher may work with in the future" (p. 3). This potential benefit is directly in line with Caplan's original concept that consultation can multiply the effectiveness of highly trained service providers by increasing the skills of lesser trained service providers. Later Meyers (1985) stated, "…The potential value of consultation lies in its ability to have this sort of generalized effect since this allows the consultant to influence more children than would be possible with a model based on one-to-one delivery of service to the child (p. 3)." This goal of consultation suggests that teachers who have experienced consultation have the potential to independently use the problem-solving techniques and interventions modeled in consultation. In theory, these teachers will be more prepared to teach other children experiencing academic and behavioral difficulties. Teachers with consultation experience also have the potential to be a valuable resource in the school for other teachers. Teachers with increased problem-solving skills should be able to apply those skills when other teachers need assistance with a problem student. While these are important goals, there remains much work to be done toward achieving generalization of teacher consultee repertoires so as to reap schoolwide benefits. This paper applies generalization programming tactics from Stokes and Baer (1977) and Stokes and Osnes' (1989) articles to training teacher consultees so as to foster generalization of their intervention skills. Attention to generalization will support the realization of the full benefits of school consultation.

Introduction to the Concept of Generalization

Generalization is a term that describes the occurrence of a relevant behavior across time, setting and target in the absence of the conditions that promoted acquisition (Stokes & Baer, 1977). In the first systematic examination of generalization, Stokes and Baer reviewed the history of generalization and provided nine methods of programming generalization. Historically, researchers did not think of generalization as something that needed to be programmed. Rather, generalization was thought to emerge after several pairings of stimuli or treatments. In other words, generalization was viewed as simply something natural and far more effort was placed into understanding how individuals could be trained to discriminate between stimuli rather than generalize across stimuli. Stokes and Baer challenged this belief and provided the first organized list of generalization techniques. Stokes and Osnes (1989) revised this list further differentiating 12 specific methods fostering generalization.

How does Consultation Currently Program Generalization?

Popular school behavioral consultation models tend to incorporate the effective problem-solving model and empirical behavioral intervention of applied behavior analysis. School consultation models typically do not actively program for generalization of consultation-related behaviors to other students or situations (Noell & Witt, 1996). It could be argued that proponents of consultation take a train and hope approach to generalization. Unfortunately there is little evidence that researchers and consultants actively measure the amount of consultee generalization behavior. Few research studies regarding school consultation provide data on generalization and thus, little is known about generalization of consultation-related behaviors (Sheridan et al., 1996).

Research on Generalization of Consultation Skills

In the 1970's and early 1980's there seemed to be considerable hope that generalization of problem-solving and intervention skills occurred from consultation. Unfortunately, only a few studies have been conducted that actively examine generalization of consultation related behaviors (Meyers, 1975; Curtis & Watson, 1980; Gutkin, Singer, & Brown, 1980; Robbins & Gutkin, 1994). Furthermore, none of these studies have provided support for the hypothesis that generalization of school based consultation occurs. In a critical re-evaluation of the assumptions of school consultation, Noell and Witt (1996) focus on this specific issue "...there is considerable empirical basis for assuming that teachers will not consistently generalize and accurately discriminate in the absence of some type of programming for this distal BC [behavioral consultation] outcome" (p. 199). What is this considerable evidence? First, Stokes and Baer (1977) and Stokes and Osnes (1989) suggest that for generalization of behavior to reliably occur it should be systematically trained. Thus, the current lack of generalization programming in school consultation suggests that generalization does not occur. Second, current researchers have started to note that many interventions are not even followed through during the consultation period (Noell and Witt, 1996). Therefore, if the intervention is never actually implemented, generalization of the specific skills to other students is unlikely.

Developing an Empirical Model for Programming Generalization of Consultation Based Skills

Noell and Witt (1996) when they stated, "Specific data on how to prepare teachers to generalize interventions to appropriate opportunities and discriminate these from topographically similar, but functionally dissimilar opportunities does not exist within BC [behavioral consultation]"(p. 198). Since there are no empirical models for programming generalization of consultation based skills, the first step in creating these methods is to apply past generalization research to the topic of school consultation. Past research on programming generalization has typically focused on how to enhance generalization of training programs. Due to the unique nature of school consultation, not all of the behaviors that are desired to be generalized are "trained." While specific intervention skills are modeled and taught to the consultee, the problem-solving behavior that is often targeted for generalization is not trained. Problem-solving behavior is at best modeled to the consultee. Therefore, one avenue to programming generalization of problem-solving behavior and specific intervention skills is to create a generalization training stage of behavioral consultation. This training stage would take the form of a fifth interview in which both specific intervention skills and effective problem-solving behavior could be trained and programmed for generalization. It has been postulated that Stokes and Osnes' (1989) and Stokes and Baer's (1977) generalization programming tactics are a good framework to create a consultation generalization program (Kratochwill, Elliott, & Rotto, 1995; Lentz & Daly, in press). Logical adaptations of these generalization tactics to school consultation should include tactics that train and hope, exploit current functional contingencies, train diversely, and incorporate functional mediators.

Train and Hope (Stokes & Baer, 1977).

While this is not actually a training model, it is an important step in understanding generalization. As stated above, current school consultation research rarely measures generalization of specific intervention skills or

problem-solving behavior (Sheridan et al., 1996). As a result, there is currently little evidence as to whether generalization of these behaviors occurs as a result of school consultation. A generalization program for school consultation must start with the systematic measurement of generalization of specific intervention skills and problem-solving behavior.

Exploit Current Functional Contingencies (Stokes & Osnes, 1989)

A second group of generalization techniques that logically could be used to promote generalization of consultation skills is exploiting current functional contingencies. This group of generalization techniques is focused on using the current system of natural and artificial functional contingencies that exist around the target. Four separate methods have been suggested for exploiting functional contingencies that can be applied to school consultation.

The first method of exploiting functional contingencies (i.e., contact natural consequences) is to chose generalization behaviors that are likely to have powerful consequences. For this method to work in a school setting it is imperative that the consultant know what contingencies exist in both the school environment and in the classroom of the individual teacher. Once these contingencies have been identified, generalization behaviors that are likely to come into contact with powerful contingencies should be selected. This method assumes that the teacher will understand the connection between generalization behaviors and consequences.

As suggested above, while natural consequences often exist for desired generalization behaviors, the consultee might not notice the behaviors. This could occur when either the consultee does not have the skills to notice the results of desired behaviors or potential positive effects of preferred behaviors are not occurring. Both of these areas have potential for generalization training (i.e., recruit natural consequences). First, consultees can either be taught to perceive the natural positive consequences of generalization behaviors or the effects of these desired behaviors can be pointed out to the consultee. Second, other people can be enlisted to provide reinforcing consequences to desired generalized behaviors. Both of these methods have the advantage of using natural contingencies to promote generalization behaviors. As stated above, natural contingencies have the advantage of being present after training has ceased.

It is also important to realize that contingencies typically exist that work against a consultee generalizing consultation related behaviors. These contingencies of desired generalization behaviors will either punish the consultee after the desired behaviors have been exhibited or reward the consultee for not exhibiting the desired behaviors. Several school factors can be used to illustrate this concept. Teachers have little time and thus are punished by doing extra work. Furthermore, many buildings promote service delivery models perceived incompatible with consultation. In these schools consultees may be persuaded not to maximize prereferral interventions. These and other consequences must be negated or minimized for consultation-related behaviors to be likely to generalize.

One final method of exploiting contingencies is to reinforce generalization behaviors when they occur. Logically, there are instances when teachers do generalize consultation behaviors. If this generalization occurs and is not reinforced then it is unlikely that the generalized behavior will continue. Consultees are subjected to the effects of reinforcement and lack of reinforcement. A consultant attempting to promote generalization should make attempts to highlight when the classroom teacher has exhibited generalization behaviors. This highlighting can occur through direct observation, self report or other methods.

Train Diversely (Stokes & Osnes, 1989).

School consultation is typically a highly focused activity. The consultee and consultant focus on one child and typically only on a few specific behaviors. This aspect of consultation results in several problems when generalization is considered. One of the methods of training generalization is to train the particular skill in a more diverse manner.

Consultation typically only focuses on one child in one situation. Thus, consultation typically only uses two stimulus exemplars. One method of making training more diverse is to use more stimulus exemplars. This could be accomplished by discussing how the intervention would be applied to another student, or to the target student with a different problem. Increasing the number of stimulus exemplars should be done cautiously. It is important to note that one of the reasons school consultation is effective is that it is highly focused. As a result, it might be more appropriate to use additional stimulus exemplars only in a training session after the normal course of consultation has concluded.

Incorporate Functional Mediators.

The final category that Stokes and Osnes focus on that can be applied to school consultation is the use of mediator stimuli that are present in both training and generalization conditions to promote generalization behavior. Stimuli can be created for the consultee to be used with other children or to be used to facilitate problem solving behavior outside of the consultation setting.

Throughout the stages of consultation the consultee can be provided with stimuli that aid in their understanding of the process and increase the chances of generalization. If these stimuli are created so that they can be taken back into the classroom with the consultee they can become self-mediated physical stimuli. Examples of consultation related self-mediated stimuli are self-monitoring sheets, a list of appropriate problem solving behaviors, and notes. These stimuli can be incorporated throughout training and then used by the consultee in the target setting to facilitate generalization. These mediated stimuli should also be general enough so they can be applied to other children or other problems.

Conclusion

For school based behavioral consultation to be considered a full preventative service delivery model, generalization of problem-solving and specific intervention skills must be programmed. While the above listed adaptations of generalization technology provides a logical framework to begin programming, there currently exists a dearth of empirical research regarding the efficacy such

work. Future research should directly assess the effectiveness of generalization programming in consultation. Furthermore, practitioners should actively program for generalization in consultation activities and measure the resulting effects. Only when researchers and practitioners actively embrace generalization programming as an essential component of behavioral consultation will the full benefits of this service delivery model be realized.

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FOUR TACTICS FOR IMPROVING BEHAVIOR ANALYTIC SERVICES

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Applied behavior analysts are developing and supplanting existing children's services in many states. While many elements may determine success and failure with a particular child, some practices will greatly enhance success with clients. Four tactics are considered here: (a) shared basic knowledge of behavior analytic principles (b) application of the correct behavior analytic model of child development (c) a functionalist perspective that allows for individualization of treatment; and (d) consumer profiling.

The Importance of Shared Basic Knowledge of Behavior Analytic Principles

Behavior analysis services are greatly in demand for work with children in school, home, and community settings. Behavior analysts work as members of a team. Typically, they design programs that are then implemented by other people. In a school setting, the behavior analysts may be working with teachers and teaching assistants. In home situations, they will be working with families and staff to implement programs. Usually the behavior analysts do not work directly with the children (or do so infrequently for assessment purposes). Instead, they function as consultants working with staff and family implement the programs.

For consistent and effective implementation of programs, it is essential that the individuals involved understand what they are doing and why. Therefore, it is imperative that the behavior analysts be able to communicate effectively about behavioral principles to people working directly with the child. Those implementing the plans must be able to identify the function(s) of the (problem) behaviors for the individual child and which factors in the environment are causing and/or maintaining the behaviors. It is not enough, for example, for a parent to follow a "recipe" for a token system, time out, or an incidental teaching protocol. Just as rote learning without understanding in children rarely generalizes to effective learning, so too individuals working to change problem behaviors will not be effective in doing so without understanding the principles involved. For example, using time-out

when problem behavior is maintained by escape from an aversive task would likely function as a reinforcer and thus would fail to decrease problem behavior. Furthermore, motivation to follow through on all aspects of a plan, (particularly aspects which may be boring for the helper or be met with resistance from the child), often depends on understanding why these procedures are important. The premise here is that when all involved have the same basic knowledge of behavioral principles, it is easier to plan together, implement, and reassess treatment plans as a team.

In order to take the role of team leader and educator of other team members, as described above, the behavior analyst should possess certain basic competencies. Shook and Favell (1996) list basic competencies which behavior analysts should be expected to demonstrate. This list was compiled through a national survey conducted by the Florida Department of Business and Professional Regulation as a means of updating the Florida Behavior Analysis Certification Examination. Two hundred fifty-six individuals from 35 states participated in this survey. All were certified behavior analysts in Florida or Oklahoma or full members of the Association for Behavior Analysis. The results were compiled into a list of 108 competencies (divided into 12 content areas) which were judged by the respondents to be important skills in behavior analysis. These competencies, (see Shook and Favell, 1996, or Shook, Hartsfield, and Hemingway, 1995, for the complete list), include skills relating to conducting a behavioral assessment using various methods to collect assessment information, summarizing and

interpreting this information and designing treatment programs based on these. In addition, credentialed behavior analysts must be able to identify the characteristics of behavior analysis (and distinguish between behaviorism, the experimental analysis of behavior and applied behavior analysis) and identify legal and ethical considerations (e.g., when to intervene, protect confidentiality, choose ethical and legal intervention procedures). Other competencies include: establishing and strengthening behavior (determining effective reinforcers, selecting appropriate schedules of reinforcement, using differential reinforcement, shaping , chaining, establishing operations and contextual variables), weakening behavior (identifying punishers, selecting appropriate punishment techniques, using extinction), and planning for maintenance and generalization of behavior changes.

Several states (California, New York, Oklahoma, and Pennsylvania) have followed Florida's lead and have adopted credentialing programs for behavior analysts. A national credential is being established (the first National credentialing examination will be given in May 2000. For more information, see the Behavior Analysts Certification website at: www.BABC.com). Individuals holding these credentials have met specific requirements of completed course work, work experience, and have passed a rigorous examination. This examination is given at two levels: one for masters and doctoral level consultants and a second for bachelor level people who work directly with recipients, (sometimes quite independently), but typically do not develop the treatment protocols.

Application of the Appropriate Behavior Analytic Model of Child Development

In addition to understanding basic behavior analytic principles, it is critical to be well-versed in empirically validated conceptual models for relevant developmental psychopathology. Models are important. The model allows those who are versed in it to: (a) speak the same language; (b) determine the playing field (i.e., service needs, problem definition, salient case features, critical players, and arguments for and against particular interventions); (c) target and fine tune the analysis; and (d) compare results through

critical short termed variables that predict outcomes. A comprehensive functional analysis includes referencing the developmental literature on the particular behavior patterns that a child is exhibiting. For example, those working with children diagnosed with Conduct Disorders or Oppositional Defiant Disorder should be familiar with behavioral models for work with these coercive family processes. Gerald Patterson and colleagues have been researching this area for over 30 years. His team at the Oregon Social Learning Institute has developed and tested this model. Practicing behavior consultants do not need to reinvent the wheel; instead they can devote their time to tailoring the model program to individual recipients.

Furthermore, it is inappropriate to apply Lovaas' autism model to a child without autism demonstrating aggressive behavior patterns that may better lend themselves to analysis from the conduct disorder literature. Applied behavior analysis has been practiced for several decades and the field has developed and tested models that have been found to be effective for particular patterns of behavior and less so for others. It is simply unethical to practice while blind to this accumulated wealth of information (see Van Houten & Axelrod, 1993, The right to effective behavioral treatment). Descriptions of some behavior development models include: autism (Lovaas, 1989), Asperger's syndrome (Attwood, 1998), language delays (Hart and Risley, 1995), conduct and oppositional defiant disorders (Patterson, Dishion, & Reid, 1994), mental retardation (Bijou, 1966) and attention deficit disorder (Barkley, 1998).

Once a relevant model has been identified, case conferences can demonstrate the application of the model and thus serve as more efficient teaching tools, since basic knowledge of the staff can be assumed. This allows for greater focus on application, synthesis and evaluation of the material. Smylie (1995) described factors contributing to the effective inservice training of teachers. The single most important factor was teacher's personal efficacy, that is, their feeling that they would be effective in producing improvement in their students. Teachers, parents, and support staff are more likely to adopt changes in their

programs when they feel that these will be successful. Sharing information about child development models with teachers that explain the relevant characteristics of the population and effective strategies and intervention practices that have been used with the population will help teachers to develop a sense that they, too, can be successful in dealing with these children in their classrooms. The same is true in home setting for parents and paraprofessionals.

A Functionalist Perspective Allows for Individualization of Treatment

The law mandates that programs and interventions developed in school programs be individualized; furthermore, current best practices dictate that these also be functional for the individuals involved. But what does this really mean? Individualized programs must be based on careful assessment of the child's strengths and areas of need. Two children may enact the same behavior pattern. A practitioner who simply picks a treatment protocol based on this superficial or topographical description is explicitly not individualizing their intervention. As mentioned in the first section, it is critical to determine the specific antecedent contexts (setting, curricula being presented, particular adults and children present) and typical consequences in order to determine the individualized function (what is often termed "meaning" in everyday speech) for each student. Given that they each have varying biologies and learning histories, people cannot be assumed to behave the same way for exactly the same reason, or function.

Kanfer and Saslow (1965) advocate using behavior analysis to gain a comprehensive view of the child by using functional analysis as an alternative to traditional diagnostic systems. They outlined an extensive assessment process whereby a detailed analysis of the context of the child's behavior patterns including an analysis of their social relationships and their socio-cultural-physical environment, as well as the more local context. Having this functionalist perspective allows the behavior analyst to design effective programs based on the needs of the individual child, tailoring the information gained from models of child development to the needs of the

individuals. This will result in more effective and stronger intervention treatments.

This principle of attending to the function of behavior for those who engage in it applies not only to the "target" of treatment, but also to their families and communities. Donnellan and Mirenda (1984) caution that professionals need to exercise care in their attitudes towards families. There will be times when family preferences or desires may not coincide with those of the professionals, and these need to be respected. This may be particularly the case when there are cultural differences between the behavior analyst and the family. When families express preferences or solutions which do not agree with those of the professionals, that must be acceptable and planning should be collaborative to develop a plan that they feel more comfortable with and thus will be more motivated to implement. Readers are directed to literature reviewing cultural differences (see Forehand & Kotchick, 1996).

Consumer Profiling

In large agencies where many people may need to come into contact with a client, consumer profiling may be an invaluable asset. Consumer profiling is a process in which pertinent data to a particular child and family is stored and can be accessed by all individuals working with the family. This information can be readily stored on a computer which eliminates the need for large volumes of paper storage. To protect confidentiality, appropriate measures are taken (e.g., passwords used by staff) so that only authorized persons could access the information. These profiles would include all the basic information about the client and family. In addition, current service issues could be logged with the child's goals and progress towards goals. Descriptions of all interventions implemented with the child could be stored as well. The information can be layered so that some parts of the database are accessed by only some staff while other information is accessible by other relevant staff. For example, considering this range of staff: accounting folks, case managers, clinical psychologists, behavior analysts, and therapeutic support staff, all involved may need access to basic information such as name, address, insurance, phone, school, emergency contacts, etc., while a

support staff person may benefit from quick access to updated treatment plans, case consults, as well as their prior progress notes to assess progress over longer periods of time. Finally, client views of the program can be monitored through satisfaction surveys that could be used to log the clients' and families' service likes and dislikes. Therefore, staff servicing these consumers can be more aware of concerns expressed by the family in service encounters. A clinical supervisor may use this information to assess consumer responses across clients to a particular provider and thus facilitate pinpointing of supervision goals for that practitioner. A profiling system like this can also be helpful in decreasing client drop out and increasing client and family satisfaction, thus having the potential for a powerful effect on social validity.

Unfortunately, it is a common reality that service providers often have a high rate of staff turnover. Having this information in a central location would facilitate new staff joining the team more quickly. This would help to alleviate the frustration and uncertainty that families may experience when there is a change in staff. Having information about previous interventions would prevent the duplication of ineffective programs, thus also contributing to more effective programming and increasing client and family satisfaction.

Summary

While it is by no means assured that the use of these four factors will always result in effective treatment for children and families, their use will greatly enhance successful treatment. Having team members trained in behavioral principles and behavioral analytic models of child development will allow teams to work towards consistent application of treatment programs because they will understand the basic principles involved. Developing individualized programs that are focused on the development of relevant skills will enable the individuals to function more successfully in home school and community environments. Being able to access all the information about a client and family quickly and easily will decrease wasted time and effort and result in more effective services. The end result of implementing these four tactics will be helping to improve the quality of life for children with special

needs and their families. Providing effective behavior analytic services will, in turn, strengthen the profession.

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RELATIONSHIP BUILDING AS A BEST PRACTICES APPROACH IN TREATMENT PLANNING

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A subject that has been of significant importance to us in various combinations over the past decade is that of relationship building. In the past, it has been taught to staff in residential facilities for individuals with Mental Retardation that one ought not to become too involved with the "patients" who live there. As we have moved to a system of respecting individuals' rights to choice and freedoms, regardless of presumed disabilities, and a system of "supports," we see the need to change our approach towards those we serve. A project that we began in our Devereux adult programs for individuals with mental retardation and developmental disabilities, referred to as "Reality-Based Approaches," begins the treatment process by actually first training staff in becoming close companions to those whom they serve. We identify staff to work in the program who demonstrate nurturing skills and who have an interest in getting involved in the lives of these individuals. We then provide training and support to the staff to carry out this seemingly unusual approach in a residential program with cottages on a campus.

As individuals are admitted to the facility, staff are encouraged to take an interest in the individual as a person, and are instructed to not look at the challenging behaviors first. Instead, the staff are encouraged to get the know the person as a human being with the same desires and need for attention and affection, and social contact, as anyone else. Through informal interactions in which staff become involved in various activities with the individuals, including going shopping, to restaurants, movies, and the like, the relationships are formed. It is important for staff to know and respect the person, and not to correct "inappropriate behavior." This is the very essence and foundation of the approach. We have discovered over the past several years in looking at the data for individuals we accept in the program, that those staff who have developed a mutually respectful relationship with

the individual has the best chance of "getting through" and being successful with that person. By this, we mean that we see a dramatic effect with regard to stopping or preventing the challenging behaviors from occurring to begin with. In addition, we have found that over time, that even the most challenging and dangerous behaviors of an individual tends to cease through the establishing of durable relationships or attachments.

Many of the individuals who are referred for such settings tend to have very extreme reputations for the most difficult behaviors to manage in prior settings over the years. These individuals were typically placed in a residential program, such as foster care or a congregate care setting since early childhood due to their parents' inability to care for them at home. As a result, we see the effects of this trauma in terms of the abandonment, and subsequent "attachment disorders." Use of controlling or punitive methods tends, in our experience, to exacerbate the behavioral difficulties and is often counterproductive.

Once the relationship has been established, stimulus control over behavior becomes easier based on our data and direct observations. The individual is more willing to cooperate with someone whom the person simply likes and respects, and who they know respects and likes them in turn. This is a rather simplistic recipe, but one which is very humane, effective, and long overdue in human services settings, whether it is with individuals with mental health concerns, or mental retardation. Caring about and for other human beings, and making such "connections" should not be foreign to any of us as health care professionals. Hence, I make the plea to behavior analysts to consider this important finding in devising systems to address the needs of individuals identified as having these handicaps. When done well and with sincerity and

commitment, relationship building is a powerful tool. We then are able to utilize applied behavior analysis methods to teach new skills, allow the individual to learn adaptive skills to achieve desired outcomes or consequences, enhance independence in the community and community integration, increase job skills and job opportunities, and return individuals to the communities from which they came with the skills to be "successful."

We have been systematically implementing and studying this approach (RBA) for more than six years in our residential programs at Devereux in Pennsylvania with an excellent record of success. Our method has been presented to various groups, including parents, professionals, and direct care staff of various organizations. Our data indicate virtual elimination of dangerous behaviors to self and others, and prevents the need for any more restrictive intervention, in approximately 80% to 85% of the cases. Most of these individuals no longer require any formal behavior treatment or intervention plan, are able to work in various job settings although often with job coaches for assistance, participate in regular activities in the community, and belong to one or more social clubs or organizations. In our view, the use of RBA, and particularly relationship building, should be considered in any Best Practices approach to providing supports for individuals with mental retardation, developmental disabilities, and mental health diagnoses. We believe that there is more than ever before a convergence of methods and ideas in the clinical practice of behavior

analysis and other traditional methods. When we conduct a functional assessment of behavior (O'Neill et al., 1988) we are hopefully tapping into the person's "wants" and "needs." Individuals with disabilities tend to seek affection and attention from others, particularly staff or family members. Providing such affection and attention non-contingently appears to have some very dramatic, lasting effects in behavior and the progress and growth of the individual.

We will be presenting a symposium on the details of RBA methodology, along with our data, at the upcoming Association for Behavior Analysis conference in Washington, DC in May, 2000. Please check your program book for details. We look forward to seeing you there to discuss this approach. For more information on this approach and supporting materials, Email Michael Weinberg, Ph.D. at fl1mwein@ devereux.org, or check the RBA web site at: www.klx.net/mweinberg/~RBA.web.

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TOUCH PURPLE

Susan Hemenway LaBrier

I gently rub the skin on my forearm with its deep dark blue and reddish purple trying to escape from the once tiny, now seemingly too large pores surrounded by an ugly fading green into putrid brown and yellow...a wrong yellow, a sick yellow. And in the midst of the chaotic colors is the formation of his tiny opening that holds my healthy skin. A place void of the sharp stinging anger and overwhelming frustration of this child...who...what? ...cannot recall the color I ask of him? Cannot discriminate the shades or variations in the rainbow that exists within my vision? Cannot dig up the collective letters that make up the sound assigned to it. If only he could describe this fusion of tones on my arm with the very lips, tongue and teeth that created them — then he no longer would. And, as this trauma fades into normalcy my distress turns into a peaceful knowing someday he just might.

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BEST PRACTICES FOR THE ADMINISTRATION OF BEHAVIORAL HEALTH REHABILITATION SERVICES (WRAP AROUND) IN PENNSYLVANIA: SIX BASIC PROBLEMS AND THEIR SOLUTIONS

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Many behavior analysts in Pennsylvania currently work as Behavior Specialists in early periodic screening diagnosis and treatment (EPSDT) funded Behavioral Health Rehabilitation Programs (BHRP). These services were devised originally to serve low income children's medical needs within their local communities. Over time these services have been expanded to mental health diagnoses and have the potential to help prevent many of the dire consequences typically found for children with untreated or undertreated disruptive disorders and developmental disabilities. For a variety of reasons BHRPs, commonly referred to as "wrap around" services, are often chaotic and poorly organized. Many programs fold within the first five years of their existence. However, rather than a problem with the constraints of EPSDT-funded programs, we see this as a program management issue. This paper introduces ways to improve BHRPs from a behavioral systems perspective.

The Problems with BHRPs

The development of Behavioral Health Rehabilitation Services (BHRS) for children and adolescents followed from the Scott vs. Snider decision (1991) critiquing the adequacy of then current services. In 1994, request for particular services, namely the Behavior Specialist Consultant, the Mobile Therapist, and the Therapeutic Staff support services, to be offered in home, school, and community, were requested so many times, that the PA Office of Medical Assistance Programs (OMAP) decided to place the services on the medical assistance fee schedule. This led to the beneficial effect of services being offered to a greater number of children more quickly.   On the other hand, having structured positions on the fee schedule, each with limited roles and functions, has hurt innovation in service design.

While the funded positions became more structured, the general call, at the state level, for programs to be innovative led many agencies to be lulled into a sense that 'anything goes' with little preference given to interventions demonstrated to be effective for the various children being served. Even worse, many agencies were attracted to the flexibility of programming because of the range of services

for which they could bill; wrap around has become known as a "cash cow" which can support other agency programs and larger salaries. In addition, many agencies opened their doors without adequate institutional support. Finally, the positions specified in the OMAP regulations are beyond the present skills of many among available pool of potential staff. Unfortunately, rigorous training in the interventions shown to be effective for the types of problems that children being served is severely lacking, as attested to, in part, by the complaints of numerous schools who interact with these staff. All of these problems have led to generally poor quality services and the poor image that BHRPs have developed.

Thus BHRPs suffer from a host of problems from program quality to integrity. Despite these problems, we argue that simple structural and functional solutions can achieve the goal of setting community-based BHRPs back on track.. As the reader will see many of these suggestions are critical to the development of any successful program. The six major problems that BHRPS suffer from are: (1) lack of qualified personnel and specificity of role and daily functions; (2) Poor training and supervision of staff; (3) lack of consumer knowledge of the program and informed consent; (4) lack of institutional

support (i.e., lack of needed functional roles and staffing of those support roles) (5) poor forecasting of incoming clients and management of intake; and (6) economic contingencies from institutions to increase growth before proper institutional supports exist. This paper analyzes each of these problems and offers simple management techniques to these eliminate problems, restoring quality and integrity to most programs. **Lack of qualified personnel and specificity of role and daily functions**

BHRPS in Pennsylvania have three primary positions: Behavior Specialist Consultant (BSC); Mobile Therapists (MT); and Therapeutic Staff Support (TSS). We will explore each of these positions and suggest ways to enhance the level of functioning in each position.

Behavior Specialist Consultants

Behavior Specialists function primarily as consultants as defined by Bergan and Kratochwill (1990), "consultation refers to a process through which a consultant works with a consultee (e.g., a professional, a paraprofessional, or a parent) to provide services to a client (a child)" (p. 4). Unlike therapy, including the mobile therapy position, consultation is a way to indirectly help children by working with their caregivers. Thus the BSC may collaborate with the teacher to develop a classroom management system for the child and/or teach the parent to execute the treatment. Why employ this model? Unlike many other ideas about how to help children, behavioral consultation has demonstrated effectiveness in the socialization of children (Bergan & Kratochwill, 1990; Brestan & Eyberg, 1998). Failure to have BSCs who are trained in behavioral consultation leaves open the possibility that BSCs will practice mental health consultation instead of behavioral consultation. While this may not seem like much of a difference on the surface, the mental health and economic implications are massive. The mean effect size for Mental Health Consultation for behavior and attitude change is .55 for consultees and only .39 for the mean effect size for clients (see Medway & Updyke, 1985). In contrast, behavioral consultation offers a mean

effect size of .60 for behavior and attitude change of consultee and .91 mean effect size for clients (Sibley, 1986, cited in Bergan & Kratochwill, 1990). Since the consultation model differs substantially from the therapy model, good therapists are not necessarily good consultants. Therefore all BSCs should have formal training in consultation.

To insure proper execution of treatment, the BSC should hold a masters degree or Ph.D. level training in a relevant field. Furthermore, to eliminate the problem of underqualified personnel, the positions should be offered to only professionals with extensive background and experience with behavior modification. Many people trained in other theoretical orientations believe they can simply read behavioral interventions like a cookbook recipe and follow the instructions. However, our experience is that people who practice this way are unable to effectively tailor the interventions to the children they work with, leading to ineffective and even unethical treatment. For example, when implemented properly, token or point systems have demonstrated effectiveness as motivational systems for children with disruptive disorders, attention deficit/hyperactivity, and developmental disabilities. Points help by directing caretakers to focus immediate, positive attention on steps toward the behaviors that the treatment plan is designed to increase. The concept is simple but requires considerable finesse to work well. Fine tuning should be theoretically driven and is needed in areas such as deciding which behaviors to target first, the number of baby steps to get there (too few will frustrate), what to say when the points are delivered or not, how to handle tantrums related to point systems, when to inflate the points-to-earning ratio, when and if to use the system to teach self-management (where the child/youth keeps their own record), when to target new behaviors (and how many), and finally when and how rapidly to fade the system. Given all of these factors, it is no wonder that token systems can be implemented poorly. When untrained professionals use them, they create a problem for everyone in the field; after a teacher or parent has seen a poor trial fail, they are naturally skeptical about this potentially

effective intervention. This is but one example, the same can be described for other behavioral techniques such as peer tutoring, shaping, planned ignoring, discrete trial, incidental teaching, and time outs. Therefore we suggest that the BSC position be held by Board Certified Behavior Analysts (BCBAs), a credential which helps to ensure that BSCs have understanding and training in behavioral interventions. In addition, because implementing these interventions with one type of problem is not the same as with another, we suggest at least two years of experience working with the population in which they specialize (e.g., attention deficit, disruption, major depression or autism).

The BSC should be hired after extensive behavioral interviewing on how they handle specific programming issues common for the population that they wish to deal with (i.e., family coercion for children with conduct disorder or prompt dependency for children with autism), including sample work of writing treatment plans. Interviewing should consist of specific case examples and ask how the potential BSC has handled such situations in the past. In addition, BSCs working on socialization issues with children with behavioral disorders should have background and experience writing de-escalation procedures such as those outlined by Walker, Colvin, & Ramsey (1995) in their book on decreasing antisocial behavior in the schools. Research has shown that social skills and self management programs, (including cognitive interventions), are not effective *until* such programs are embedded into contingency management programs. This way, incentive systems help motivate the child to perform the skills learned in treatment to the natural home, school and community environments. Without well-designed programming, we find that temporary reductions in problem behavior are more due to the TSS becoming a "body guard" than the child learning self management. With this type of dependency on Wrap Around, staff cannot decide when to terminate services since the child has not actually been taught to handle such situations. This leaves children dependent on artificial incentive systems which are meant to be temporary scaffolds. This has led, in part, to the problem which funders have found:

nobody seems to want to end the expensive intensive programming.

Another important area of training for BSCs is in case conceptualization. Behavioral or environmental case conceptualization looks at the function of the child's misbehavior in its ecological context. Diagnoses are based on problem behaviors, but a functional approach assumes that even the child's problem behavior has a function, or reason and it is important to understand this reason so that the child can be taught a more positive and acceptable behavior that serves the same function. An example would be a child who is highly self-destructive when angry. Everyone gets angry sometimes and this child may have reason to be angry, so the goal would not be to just reduce the self-destructiveness, but to teach more positive ways to handle anger. These might include teaching the child to identify various levels of anger, to learn to recognize other feelings beside anger (sadness, hurt, jealousy), to develop a group of safe people to go to with feelings, ways to talk about these feelings, increased assertiveness to negotiate more of their needs, and problem solving to think through the consequences of various ways to handle the anger producing situation. Thus the treatment plan should focus on teaching any of these skills that child does not have. In doing so, the plan should build on the child's strengths to compensate for areas of weakness.

In addition to a functional approach to case conceptualization and good knowledge of tailoring behavioral techniques, the BSC should take a developmental approach to treating the range of problems that the Wrap Around services are employed to remediate (readers are directed to Bijou & Baer, 1965). We find that many BSCs with little training in working from a developmental approach simply go through their "bag of tricks" without a systematic approach or theory guiding why they would prioritize treatment goals as they do. In order to take a developmental approach, clinicians must be familiar with research on the developmental trajectory or pathway that a child with a particular diagnosis will tend to follow. They must also be familiar with normal child

development. The goal of intensive treatments such as Wrap Around should be to help the child back toward a normal developmental pathway, as much as feasible. Taking a developmental approach therefore will guide the clinician to tackle one set of problems first, will help determine age appropriate criteria for achievement of objectives, and will help with evaluation of interventions, answering questions concerning whether treatment, after a particular amount of time, has helped this child to do better than untreated (or less intensively treated) children with similar difficulties.

Finally, it is critical to take a data-based approach to evaluation of treatment including the baseline levels of positive and negative behaviors. It is highly likely that treatment professionals will have a confirmatory bias in their estimation of the benefits of their work. It is also likely that at points, various members of the team will not see eye-to-eye on whether a particular intervention is working. While a child is more than simplified numbers about a small set of identified target behaviors, children in receiving Wrap Around services have unusually severe problem areas that typically do not change overnight. Data help all involved to look at the facts around a specific set of agreed upon targets to see if they are improving over time, or not. At a programmatic level, they assist supervisors to evaluate the overall effectiveness of staff and design better trainings to address their needs.

As an example of taking such a comprehensive approach, we explore the treatment of a child with a disruptive disorder. These children should have treatment which focuses on building verbal skills, as well as social problem solving skills since developmental research shows that strong verbal skills predict better outcomes in early adulthood (see Cautilli & Tillman, 2000). Treatment likely to be successful will use a contingency approach since most of these children do not start out as concerned as typical peers with social attention and praise. Thus plan will be to help the child or adolescent to gain positive experiences (whatever is agreeable to the team and something the child likes) contingent on their

appropriate behavior (see Lewinson, Youngren, & Grosscup, 1979). These programs should place considerable weight on increasing competence-enhancing and pleasurable activities, particularly where there are specific performance and skill deficits. Finally, the treatment plan should contain a de-escalation procedure with a half-hour breakdown of the TSSs daily activity. This breakdown must detail when skill-training programs are to be conducted and how the behavior management procedures are to be delivered to develop academic survival and other social skills. Finally, a good treatment plan should contain when and how long the BSC will consult to parents and teachers on a weekly basis.

One final area of training bears mention. No matter how excellent the treatment plan, issues still tend to arise in the implementation of the program. What has been called "resistance" to treatment by families or TSSs or school personnel basically involves an impasse where involved people do not want to participate in the manner or at the level the BSC believes is helpful. All BSCs would benefit from training to work with resistance. While a detailed analysis of this phenomenon is beyond the scope of this paper, readers are referred to an excellent example of a functional assessment of five types of resistance by Munjack and Oziel (1978).

In summary, all behavioral treatment plans for children with specific disorders should meet best practice standards for the treatment of the identified problems. This means that each treatment plan should be based on a thorough Functional Behavioral Assessment, and should be designed to build functional/prosocial academic survival skills, contain a de-escalation procedure (if there are any dangerous behaviors), have measurable goals to focus the direction and evaluation of treatment, and have a design guided by developmental norms. In a consultation model, the BSC will bring this experience to the team planning (during the interagency meeting) where teachers and parents must be full partners in the adaptation of best practices to their specific child/student. In addition, the protocols that all staff, but particularly the TSS, are to execute should be

described in sufficient detail that they will be able to translate these protocols into active treatment.

Mobile Therapist

The second position is that of the mobile therapist (MT). In our experience, there is much less confusion about the role of the MT than the BSC or TSS, perhaps because our society is more familiar with therapists. Since much more has been written about the therapy process and because the BSC, when one is assigned, is the treatment team leader who writes the treatment plan (for the MT), we give much less specific information regarding the MT role.

The MT position is a psychotherapy position. Psychotherapy is the process by which the therapist works directly with both the individual child and the family as the client. The therapist uses him or herself (and techniques that they have been trained in) as the instrument of behavioral change. They typically also conduct interventions which require greater training than the BSC can provide to the TSS (for example, systematic desensitization or family communication training).

The position should be held by a person with *background and experience working specifically with children*. In addition, the person should be trained as a therapist and should have graduated from a recognized clinical program in either clinical or counseling psychology, family therapy or a clinical social work program. This program should be at least a forty-eight hour program and should leave the recipient as licensed eligible in the state of Pennsylvania (licensing is likely coming for masters level counselors in 2001). The person should subscribe to a clinical theory of demonstrated value to the type of problems that the treatment is designed to ameliorate, such as system theory, cognitive theory, behavior theory, functional family theory, or multisystemic theory. Emphasis should be placed on performing therapies with empirical validation. Many of our comments above for BSCs regarding the importance of sticking to one's expertise area, taking a developmental approach, learning to work effectively with resistance, and

quantitative evaluation of interventions also applies to MTs.

Therapeutic Staff Support

The final direct care position is that of the Therapeutic Staff Support (TSS). The TSS is a bachelor level position, which focuses on providing proactive child management strategies and emotional support for children in the program. The TSS follows the treatment plan designed by the BSC. One of the biggest challenges that we have encountered in BHRS is poorly trained TSSs. When we hear of staff engaging in "McDonald's therapy," it becomes evident these staff have exhausted their repertoire of ways to treat a particular child or family. Here we hypothesize that the TSS takes the child to the local restaurant to maintain a relationship with the child and make the treating paraprofessional feel as though they are doing something. However, this process is non-therapeutic and on some level insulting to the family, saying in effect "all your child needs is some attention and good times."

To counter these non-therapeutic practices which have led several to accuse Wrap Around of being a costly "babysitting" service, it is our belief that all TSSs should receive a forty hour orientation in which sixteen hours of training are in behavior management systems with the population that they will work with. This training should be followed by an additional two days (16 hours) of hands-on mentoring. The first day, the new TSS will be assigned to a child with a senior TSS to observe. On the second day with that senior TSS, they will execute the treatment protocols for that child and the master TSS will give them constructive feedback.

We suggest direct experience with a senior TSS because research by Smylie (1988) provides convincing evidence that traditional, staff development activities in the form of in-services, workshops, and consultant-based supports do not bring about significant or durable changes in staff behavior. This presents a problem for programs that rely primarily on workshops or in-services for staff training. Thus we strongly suggest that programs include hands

on training in the field with the workshop training.

Poor Training and Supervision of Staff

In a review of the literature, Gersten and Woodward (1990) identified three critical factors regarding staff-training procedures: (1) collegiality, in terms of staff working together; (2) a comprehensive framework or shared philosophy, and (3) the concreteness of the proposed plan. Each of these guidelines have been considered in the development of this program, especially with respects to hiring those with a strong behavioral or ecological orientation.

To increase collegiality, one factor that is often observed is the opportunity for clear communication. To facilitate clear communication, programs should have consultant mailboxes in an easily accessible area. Staff at all levels should be required to attend workshops/in-services and be given the opportunity following these services to network and talk about cases with each other. This behavior is considered essential to building a sense of community between team members that would otherwise have very little connection with each other.

All TSS workers should receive 40 hours of orientation before beginning a case assignment. At least 10 of these hours should be training in techniques in proactive child management (i.e. point and level systems and other positive reinforcement techniques) and strategies for building appropriate social skills (i.e. direct instruction, modeling, role-play and feedback). Additionally, 1 hour of the training should be on legal and ethical issues in children services and 1 hour of training on the basics of working collaboratively in schools. In addition, these TSS workers should receive at least 2-3 hours of training per month on proactive child management and service delivery. These trainings should be active and involve the TSS workers in role-playing in which they receive feedback in the execution of various techniques. This type of training will insure that the TSS workers have the necessary training to work with children requiring their service A letter

testifying to the above effects should be signed by the supervisor and presented to the school and be available for parents to review.

All TSS workers should receive on-going supervision of at least 1 hour/week from clinical supervisors at the agency they work. Supervision should help the TSS to develop professionally and be clinical in nature, not just administrative. This number is in addition to the hour per week of direction that they receive from the BSC with whom they work collaboratively. Agencies in which the supervisor's phone number is given to school personnel and that have supervisors who are responsive to schools should be given preference.

BSCs should receive a 40 hour agency orientation. This orientation should cover at least 5 hours in Behavioral Analysis and Consultation, 2 hours in Functional Behavioral Assessment,1 hour in treatment plan design, 1 hour in writing de-escalation procedures, and one hour in program evaluation. In addition, BSCs should receive four hours per month of on-going training. A Letter signed by the BSCs supervisor to the above effect should presented to the school and be available for families.

All BSCs should receive one hour a week of supervision. Supervision should be clinical in nature, not just administrative and should focus on developing the BSCs ability to conceptualize cases and tailor treatment for children with the difficulties that the BSC is treating. Supervision should be case specific.

Informed Consent and Consumer Knowledge of the Program

Consumers come to BHRPs from a variety of sources and various levels of understanding of what it can offer. Understanding of the program is critical to truly "informed consent." Therefore, prior to the enrollment of their children into BHRP, parents should receive a brochure that describes the orientation and practices of the program. The program should outline the process by which children come into the program and how they are evaluated. The brochure should highlight

the need for parental involvement and the rights of parents to remove their children from the program at any time. This helps parents to understand that treatment is for them as well as their children, not because they are to blame, but because they are an important part of making adjustments to facilitate their child's improvements and to maintaining them once intensive services are completed. The brochure should also outline the grievance procedure and suggest ways that families may seek additional help for their child and themselves. The initial brochure should define the roles of possible team members. In addition, more specific information on members who are assigned to the child's team should be given to the parents, as members are assigned. It is our belief that the more defined each of the above factors are, the less the chance for misunderstanding.

Underservicing occurs when the number of hours determined to be medically necessary (by a psychologist or psychiatrist) are not being met by staff. For example, a BSC may be assigned four hours per week and consented to by school and family during an interagency meeting. However, when they arrive, the parent is too busy to meet for two hours each week; they feel that the child has the problem and that the professional should be working with their child. While the parents' view is completely understandable, it is not effective to leave parents out of treatment, and the fact that they are often surprised by what the BSC then tries to belatedly explain indicates that they did not understand the way Wrap Around functions or what they were consenting to. Following each of the above factors will cut down on underservicing by clearly defining the role and expected function of all the team members.

Lack of Consumer and Community Understanding of Program

The key to BHRS is the same key that we tell many of the families in our programs: open lines of communication in the establishment and evaluation of goals and interventions, clear communication of the rules of behavior that we wish to see, monitoring and supervision of that behavior with rewards being rendered contingently on behavior that we value.

Many agencies, including schools, involved in BHRS do not understand the roles and functions of each of the team players, in part due to a lack of consistency that they have experienced across agencies and staff. This creates tension between Wrap Around staff and other organizations involved with the family or child. When there are not clear goals, this leaves the door open for poor use of staff time so that we find TSSs acting as general aides in the classrooms or BSCs working directly with the child in a therapy role instead of teaching the parent to work with their child. There fore, we suggest that BHRS agencies clearly define and communicate the staff roles to all they work with through a variety of structures described below.

Accurate representation of Wrap Around programs leads to street validity (i.e., a sense of respect for what the program does). To facilitate this, BHRS agencies should give their own staff a handbook on the role and function of the three key players in the BHRS program. Second, BHRS agencies should present the school and other outside agencies involved (such as social welfare agencies, after school programs, outpatient therapy or psychiatry centers, or physicians) with a brochure describing the program goals as well as the role and function of the TSS, MT, and BSC (see Cautilli & Clarke, 2000). This should be backed up with outreach programs by the BHRS which facilitate understanding, as well as timely and appropriate referrals. BSC and TSS staff should be coached to become fluent in explaining these services to families and school staff. All staff should have picture identification cards with contact information for their home agency. Finally, BSCs and MTs should have business cards which also function as appointment cards to facilitate adherence to appointments.

Lack of Institutional Support

Not-for profit agencies could facilitate better performance were they to more often take a page from the for-profit sector. For example, we recommend that agencies practice generous use of rewards for following best practices. For example, bonuses can be given to BSCs for x number of treatment plans submitted in a timely

manner which address key aspects of treatment in plain language. TSS workers who submit documentation requirements on time and accurately could be entered into a weekly lottery for movie tickets. Evaluators could be given bonuses for the completion and submission of the written psychological evaluation within a certain time frame. Programs could highlight team members as TSS, MT, or BSC who show exemplary treatment practices on a monthly basis. Staff problem behaviors should be addressed, not just at the individual level, but with a comprehensive functional analysis of the system in which they occur (Pipes & Merger, 1980).

Agencies should provide active case management that assists children and families in finding necessary resources but ensure that this is not a duplicate services. The team members, BSC, MT, and TSS, are not to be performing case management roles. Resource coordination is needed by many families in these types of programs. When team members go outside the role for which they are hired may result in role confusion for the team members as well as the clients and families they serve.

Poor Forecasting of Incoming Clients and Management of Intake

Intake management is an essential aspect of BHRS today. A BHRS agency should intensify each step in its intake chain. It should trace the flow of clients through the process backward from the first date of actual treatment being delivered through the system of treatment planning and interagency team meetings, through the evaluation process, and the coordinated interviewing, hiring, and training of staff, all the way back to the receipt of the referral. Each point should be examined for ways to facilitate smoother, swifter paths to more effective interventions. We highlight a few common trouble spots in the process, beginning with intake.

A large company will have several referral sources. Management of these referrals and formulation of a case mix for an agency can mean the difference between high staff burnout and low staff turnover. The acceptance of a

particular family at a particular time should be based on the availability of specialized staff for that child's problem area. For example, if a BSC has a mental health background and does not have experience working with children with developmental disabilities, then that staff person should not be pressured into accepting a case outside their expertise. This will not benefit the client and may actually be harmful if a window of opportunity for teaching is missed because of incompetent treatment planning. We also find that many BSCs do not have experience working with conduct disordered children which becomes a major problem because this is a difficult (though not impossible) problem to treat and those that simply generalize their skills from work in another area are unlikely to be successful; they get into the same power struggles with the families and children that teachers and other family members have already experienced. Training staff can be a way to solve this problem, but cannot be accomplished completely on the job. We hasten to add that this is in no way means a discriminatory intake process so long as the agency actively recruits staff to meet a diverse client population.

There are several reasons for understanding the referral process. First, the total time it takes to staff a client can be considerably long. For example, an agency that can lower its total process time from one month from receipt of referral to two weeks would have a substantial competitive advantage with potential clients. Since the movement of clients is often a batch flow, and there is uncertainty regarding how many of the clients referred will actually receive services, the more an agency can reduce the length of the process, the greater competitive advantage the agency will have when compared to other agencies. This also important for staff retention since fee-for-service staff who are waiting for cases might move along to another agency wasting our training efforts. As well if they are staff employees this waiting time could be a cost that is hard to recover. Furthermore, clients who start the process may drop out for one reason or another resulting in loss of potential revenue.

A second basic key to good management is to control demand. Demand management is a survival skill that many agencies that deliver BRHS need to understand. An improper customer can be very damaging and costly to an agency. For example, if a child belongs in residential treatment and Wrap Around intake staff accepts them, either trying to increase census, or through ignorance, there is a strong likelihood that they will exhaust staff with little chance of success. Placing children in the wrong level of care is simply a bad marketing practice. Marketers refer to this as having a "bad customer." But we all know that families that are inappropriate for the program burn out good staff, just as inappropriate staff often burn out good families. Given the above, BRHS programs need to understand the level of care that they provide and know when a client is outside their area of expertise and/or beyond their ability to render appropriate care. Programs need to actively manage referral sources to allow an adequate case mix to develop.

In addition, agencies need to plan, from entry, an estimated length that a client will be in the program. This will help to know approximately when the team or members of the team will become available to transfer to new clients. A related specific problem to manage is that agencies often suffer a 20% decrease in daytime TSS hours during the summer months when children are not in school. This often leads to forced growth in the summer and a shortage of services in the fall when children return to school. Some programs attempt to manage this by taking in a percentage of children who qualify for an extended school year and by having large orientation of team members at the end of the summer. However, the ability to forecast accurately can reduce the number of un-staffed children in the fall.

In conclusion, intake is a highly interactive system in which many things need to come together to complete client packets and assign team members so services can begin. Decisions made in one part of the admission cycle affect other parts. The effect is accelerative for demand changes. Upstream elements must carefully be planned so as not to overreact to potential clients. This occurs even if the information is perfect through the system at all levels. This is due to the training time for new team members, so one must hire accordingly. The best way to improve intake is to reduce the total time from the hiring of staff to their first date of service and to increase feedback as to the actual number of cases waiting to be serviced at all levels. The better the forecasting, the less overall stress to the system. In addition, a critical factor is the creation of internal and external feedback systems. This calls for strong coordination within the agency and among organizations making referrals to the agency. In the table below, covering supervisory staff role and time allocation, the importance of meeting to trouble shoot this type of problem becomes apparent.

Economic Contingencies from Institutions to Increase Growth before Proper Institutional Supports Exist

Currently, extreme pressure rests on BHRS. These services tend to have good revenue potential because of the large number of service hours that can be provided by paraprofessional staff (i.e., TSS workers). Many agencies exert pressure on this department to bring in more and more clients without taking into consideration the overall resources required to do it successfully. To remain effective under these conditions, we suggest the following: strong collaboration, constant survey of satisfaction of all stakeholders, and providing an agency structure through supervisory, auditing, and case management methods.

Agencies need to have collaborative and on-going discussion with schools and families in the program. For schools, all TSS workers should be required to sign in their hours and should be cosigned by the teacher/counselor/principal confirm attendance. Agencies should be faxed a copy of the sign in sheet each week. Agencies should quality control for discrepancies between the sign in sheet and billing sheets. All agencies should provide the district with copies of ACT 33 & 34 clearances (Child Abuse and Criminal Record checks) before the TSS and BSC begin working

in the school. In addition, we suggest that each program have a supervisor to enhance the program's infrastructure, to manage the capacity of the program to effectively treat children in its care, conduct formative and summative evaluation, and to generally oversee the program.

Program supervisors have three primary functions (1) increasing program quality and integrity through, (2) ensuring that administrative functions on cases are completed in a timely fashion, and (3) to help the staff and the program to continue to develop. Each supervisor is responsible for twenty cases. This is critical to maintaining control of who is attending supervision. The supervisory position is one that ensures program integrity. The supervisory position holds down underservicing by ensuring that staff understand and can perform prescribed treatments.

The supervisor helps staff to understand their role and function and to remain within the role that they are assigned by the treatment plan. The position ensures this integrity through both administrative and clinical means. The supervisor's functions break down to supervision (clinical, disciplinary, and administrative), administrative functions, training, interviewing, and program/professional development. If each supervisor holds 20 cases,

then the hours break down as follows. (These hours are averages for functions and not all supervisors will perform each function).

Supervision

Administratively, supervision should review all documentation with TSS, MT, and BSCs. Also all timelines should be reviewed for the case and case completion. Supervisors should ask questions such as: 1. When is the treatment plan due for the child? 2. When is your child scheduled for an evaluation? 3. Have you filled out the form with your recommendations for the next treatment cycle and the treatment team's recommendations for the child?

In clinical supervision, the supervisor a strong case conceptualization. Clinical supervisors should review all cases material including testing/evaluation data, BSC monthly summaries, TSS weekly summaries, MT monthly summaries before the staff present into supervision. If the child is failing to make progress the goal of supervision should be an action plan to remedy the situation.

General Activity	Description of Activity	Estimated hours
Supervision		**16 hours per week total**
	5 BSCs for 1 hr/week of individual supervision	5 hours/week
	5 MTs for 1 hr/week of individual supervision	5 hours/week
	20-25 TSS for 1.5 hours/week of group supervision provided as 3 groups (5-7/group)	4.5 hours/week
	Review all clinical outcome measures for each child including standardized data, teacher, parent, and child satisfaction surveys, BSC monthly summaries etc.	1.5 hours/week
	Corrective action supervisions	As needed
Administrative Functions		**8 hours per week total**
	Incident report investigation/ grievance investigation	As needed
	Variance reports and investigation	2 hours/week

	Developing the clinical report (summarizing BSC monthly summaries & identify need for action plans w/BSC in supervision for any children failing to progress)	4 hours/month
	Review staff documentation / daily case notes with quality control measures and follow-up with staff	2 hours/week
	Review of treatment plans to ensure active and quality treatment (use checklist)	1 hr/week
	Meeting with other supervisors to discuss intake, clinical, and administrative issues	1hr/week
	Meeting with case management to discuss packet and servicing issues	1 hr/week
HR/Interviewing		**2 hours per week total**
	Interviewing of new staff and developing new behavioral interviewing processes	1 hours/week
	Other HR functions such as recruitment strategizing, going with HR to recruiting at local Universities and encouraging staff professional development (especially TSSs who need minimal re-training to become BSCs)	As needed
	Reviewing staffing records to ensure personnel are not working greater than 40 hours/wk	As needed
	Reviewing personnel satisfaction surveys for program development	As needed

General Activity	Description of Activity	Estimated hours
Training		**5 hours/week/supervisor (trainings are divided over the body of supervisors)**
	BSC trainings	4 hours/month
	MT trainings	3 hours/month
	TSS trainings	2 hours/week
	TSS aide trainings	2 hours/week
	2 new staff Orientations/month- 70 hours/month (Each Orientation is 40 hours but some of the programming in orientation needs to be done by outside specialists such as CPR) • 3 hours/orientation cultural diversity • Three - 16 hour orientations; Each 2-day program is specific to TSSs, MTs, or BSCs.	(35 hours x 2 trainings/month) 70 hours/month
	Case conference	3 hours/month
Program and professional development		**6.5 hours per week total**
	Attending supervision with clinical director	1 hour/week
	Designing new trainings to meet staff needs	2 hours/week
	Reading literature on Behavioral Psychology, Organizational behavior management, etc.	1 hour/week.
	Attending agency trainings	2 hours/month
	Attending monthly staff meetings	3 hours/month
	Developing treatment integrity measures	As needed
	Outreach/In service training for schools & other agencies to explain TSS/BSC role and function	3 hours/month
Grand Total		**37.5 hours per week**

The supervisor should train skills in the supervisory process through the use of role-playing and feedback. Questions are critical to prompting new learning. For example some questions asked of the BSC should be: 1. Developmentally where is the child/adolescent? What is the child's current performance? What are the performance levels of the child's peers? What are the specific excesses and deficits of the child? Can his excesses be remediated by resolving a specific deficit? What are the specific antecedents and consequences of the excess? What are the factors that have led to the child's deficit? Has the child ever had to perform the skill before? Has he received

specific training and feedback on the use of the skill? Are their any negative consequences to performing the skill? Is the excessive behavior more efficient, than the new behavior we wish to train?

2. What types of self-management skills or relapse prevention skills can be taught to the child/adolescent to help lessen the probability of returning to the old pattern of behavior?

3. What is the function of the behavior in the family context? How does the behavior fit into the child's and family's life? What does your theoretical orientation (e.g., radical

behavioral, contextually behavioral, behavioral ecology, social learning) suggest about this disorder? Does this orientation suggest a developmental model for this problem? What are the triggers for the problem behavior? Have you read the appropriate literature to understand this pattern of behavior?

4. What repeated, predictable patterns of family's interaction have you observed that might explain the class of problem behaviors?

5. How are the parents interacting with the school, community, church employers, neighbors, and peers? Which interactions suggest strength in the relations between systems (e.g., family-school and family-peer), and which interactions seem to contribute to the problems? Which seem to lessen the problem?

6. What is the evidence supporting your idea that any [clinicians hypothesis about why things do or do not happen in the family or at school] is contributing to the problem? What evidence weighs against it? How can you test this hypotheses you have about what contributes to what?

7. What are the strengths of the parent(s) caregivers, child, and naturally occurring supports (relatives, neighbors, friends of parents, etc.)? How can we build on those strengths? How can we increase this child and families adaptive fit into the environment? How can we use those strengths to help change aspects of the family's and child's life that contribute to identified problem?

8. What are the child's goals for treatment? Will the goal result in the acquisition of new skills for the child and the parents? Will the skill increase the child's ability to interact with people and objects within the daily environment? What are the objectives that you have developed from those goals? Is the objective a short term developmental sub skill or step thought to be critical to achieving the long term goal? Will the objective skills need to be performed by some-one else if the child cannot do them? Does the skill represent a generic process or a particular response class? In what

context should this skill be performed? Can the skill be adapted or modified for a variety of disabling conditions? Can the skill be taught in a manner in which the skill will be used in the daily environment? Can the skill be elicited easily by the parent or the teacher? Does the skill lend itself to performance criterion?

9. What are the families goals for treatment? What skills can you impart to the family to help them achieve those goals?

10. Are the parents on board with the goals and interventions in the plans? Are you giving the family choice of the interventions to be used? What other things can be done to add value to the interventions?

11. If not, what are the barriers to getting a parent on board? What have you done to cultivate an alliance or working? If any parental resistance exists have you conducted a functional analysis of that resistance?

12. What have the case mangers, clinician on the case, etc. done this week to help the family achieve their goals? Is there any evidence that achieving these goals is leading toward the attainment of ultimate goals?

13. What are your treatment interventions? Are their any places that the team is stuck in executing the protocols? Lets analyze the protocol problems?

14. When interventions are partly implemented, not implemented at all, or not successful, what are the barriers to success? What is the evidence supporting your assessment that these barriers are the ones that interfered with the interventions implementation or success? How can you test which are the greatest barriers to change?

15. Have you consulted with the teacher? What is the child's behavior in the classroom like? What occurs just before the behavior? What occurs just after the behavior? Describe the sequence of the behavior leading up to the event.

16. What is the function of that behavior? Is the curriculum appropriate for the child? Is the child receiving proper support in the classroom? Have you developed treatment goals for that behavior and helped the teacher to implement the plan? Have you used group contingencies recognizing that the teacher will not have the opportunity to deliver a program based on only one child's needs when the whole class needs intervention?

17. Is the treatment pan written at a level that the child and family can understand? Lets look at your treatment plan.

Common supervisory questions for TSS workers might be: 1. What areas is the child progressing in? Where is the child failing to progress? 2. What are the particular goals and objectives for this child? In your opinion is the child achieving the goals and objectives? How would you know if he child was meeting the goals and objectives? 3. What protocols are you using to teach the particular skill? Do any barriers exist to executing these protocols? Are there any problems occurring with the skill being learned from the protocols? 4. What sort of rewards are you using for the child? Have you conducted a reinforcer preference survey? What were the results? 5. What does the de-escalation procedure look like? 6. What does the child's activity schedule look like?

The Role of the Clinical Coordinator/Clinical Director

For every three supervisors a clinical coordinator position should be open. The clinical coordinator should be responsible for assuring the clinical excellence of the program and of ensuring that the program meets best practice standards, state, and local and funder requirements. He/she develops, coordinates and conducts staff orientation and training. The clinical coordinator should provide individual and group clinical supervision to program staff, including therapeutic staff support, mobile therapists and behavioral specialist. He/she is responsible for establishing and growing a clinical internship program and for providing interns with clinical supervision and training. The clinical coordinator supports the program

director and shares such functions as intake, treatment and discharge planning, recruitment and selection of staff, with the program director. Minimum requirements for such a position should be a masters or doctorate degree in psychology. Reports to the program director. Program Director   The program director should be responsible for the overall management and functioning of the program both administratively and clinically. He/she develops and improves administrative systems, budgets, policies and procedures for the program. He/she develops and maintains relationships with funders and referral sources. The program director is responsible for reviewing referrals, admitting clients to the program, assigning staff to each case, and reviewing treatment for each child or adolescent in care. He/she provides administrative supervision for program staff and is responsible for all utilization review and quality assurance functions for the program. Minimum qualifications include an advanced degree in social work, applied behavior analysis, clinical psychology, school psychology or related field.

Institutions should develop an auditor position. Mobile Behavioral Auditors should visit the school or home at least once each month on a random basis to determine if the TSS is at work and conducting the treatment accurately. The first step in correcting performance problems in the organizational behavior literature is by doing what is called a behavioral audit. Such audits should be done by a person with a High School Diploma or a Bachelor's degree. Such audits would first check that the TSS is in the school or home. Second, such audits would check to determine if the TSS is following the treatment plan according to specification. This could be accomplished through a treatment integrity checklist. This position is not a major requirement for agencies. If an agency has one auditor/100 cases, and that auditor randomly checked on 5 cases/day , this would mean that 25 cases would be audited/week and every case was audited every month.

Conclusion

We began by noting that EPSDT-funded programs, though beautifully designed to be flexible and potentially beneficial to children who might otherwise be differentially placed in residential treatment, often fall short on their idealistic promise. Rather than a problem with the structure of EPSDT services, we describe the problem as one of organizational management and proposed many solutions based on our experience working with such funding sources and our clinical training and experience. It is our hope that readers will, from their own organizational vantage points, be able to see, in these recommendations, the parts that they can contribute to successively implementing the managerial practices that will operationalize a vision of behavioral rehabilitation as an effective set of cultural practices.

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