

Volume

2

Issue Number 1

THE BEHAVIOR ANALYST TODAY

A Context for Science with a Commitment for Behavior Change

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Most contributions are by invitation and all are then peer-reviewed and edited. The editors, however, welcome unsolicited manuscripts, in which case, we suggest potential authors send an abstract or short summary of contents and we will respond as to our interest in a full manuscript submission. In all cases, manuscripts should be submitted electronically saved in "rich text format"(.rtf) to BOTH Beth Rosenwasser at ibrosie@aol.com and Joe Cautilli at jcautill@astro.temple.edu Please adhere to APA format and use "Times New Roman" font in 11 pt. throughout. In references, however, please *italicize* the places where APA format would have you underline. Headings are encouraged and must follow APA format.

BAT is the joint publication of the Clinical Behavior Analysis Special Interest Group (CBA-SIG) of the Association for Behavior Analysis, the Behavior Analysis SIG (BA-SIG) of the Association for the Advancement of Behavior Therapy, and the PA Behavior Analyst Credentialing Board.

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THE EDITORS SPEAK OUT WHY WE NEED TO BECOME A PROFESSION:
ON INTELLECTUAL BIGOTRY

Beth Rosenwasser, M.Ed., BCBA, CAC
Joseph Cautilli, M.Ed., M.Ed., BCBA, NCP

Before introducing the contents of BAT 2 (1), we'd like to introduce a topic for debate. Over the next several issues, the **Behavior Analysis Today** is welcoming a community debate on the certification of behavior analysts. Certification has both pros and cons. Both sides have critical points to contribute to the debate. We want to hear your views. We will print both sides of the issue. Here's our starter conversation. Of course there are several other costs and benefits to credentialing and licensure and we hope you will write us with your thoughts (e-mail BOTH jcautill@astro.temple.edu and iBRosie@aol.com).

One concern is that certification may hinder development in the field. The greatest fear here is that once behavior analysis becomes systematized into briefer trainings, limited written exams, and treatment manuals that it will no longer innovate so that our technology becomes self-justifying and stagnant. In this way, certification could lead to calcification of our practices, which may become disconnected, from its roots in basic principles and ongoing research. This is an issue that worries much of the community and is why credentialing took a while to get here. It is our belief that through continued communication in all formats, this pitfall can be avoided. How does one hear about and disseminate innovations? Through talking to colleagues in and out of our discipline, taking and presenting data on our work, always teaching basic principles along with technology, reading journals, attending conferences, and more. Indeed, it may be that by highlighting the importance of behavior analysis through the certification process, more money will flow into its research and development and allow us to flourish.

On the other side of the issue are the benefits of increased recognition of our field through certification by parents, professionals

and institutions (as well as increased ability to self-regulate quality). However, this recognition can function as a double-edged sword. One event exemplifying the stimulus control that the BCBA generates occurred last year to the second author. While on doctoral internship interviews, a common theme emerged: at some point in the interview, (usually within the first 3-5 minutes of arrival), the interviewer would make a statement like, "we want to know if you are open to other approaches. We are worried that you might be too behavioral." Their prompt was the proud acknowledgment of my certification at the top of my resume. The first author recalls a behavior analytic professor relaying a similar story within the academic arena prompted by an abundance of publications in behavior analytic journals; this professor recommended not labeling oneself as a "behavior analyst" and when asked, to first probe the interviewer as to what they mean by the term, giving you the opportunity to disavow and dispel myths.

WHAT TO DO?

One solution would be to walk away from psychology, standing as our own discipline – certification, and perhaps our own licensing eventually, may help by allowing us to become a discipline that others feel the intellectual need to get to know. Nothing succeeds like success. The idea is that if we remain separate and successful, people will come to us to learn what we do. Less radical is to push within APA for the development of more behavioral psychology programs. This way our programs will compete in open market with other psychology programs. Both routes could lessen the intellectual bigotry that our students contend with everyday. One of our aims with BAT is to improve communication and foster innovation within the field. We cover a range of issues relevant to the practicing behavior analyst in each issue from politics to new research, literature reviews to best practice guidelines, organizational updates

and behavior management topics to personal experiences as practicing behavior analysts.

Exemplifying the importance of recognizing that behavior analysis is a profession and that we must fight for the right to implement treatments that have been shown empirically effective and superior comes in a letter we publish by Richard Hunter. We applaud his successful work via APA to influence federal laws regarding the appropriate training and use of behavior interventions where chemical or physical restraints might otherwise be used. He helped establish terminology (and avoid language) in the law that would have constrained some best practices known to behavior analysts. We present this as a model and ideal for other areas within our field. Then there is an article from E. Thomas Dowd, Ph.D., ABPP President, American Board of Behavioral Psychology, Inc. about Board Certification as a Diplomat in Behavioral Psychology.

Two data-based articles are featured covering successful programs at well-known treatment centers. First is a report from the May Institute on their delivery of behavioral consultation services to improve discipline practices in public schools. Second is from Bancroft NeuroHealth exploring the topic of treatment integrity with a review of JABA articles and the general literature as well as data from their own efforts to enhance procedural integrity. Next is a review article looking at the current thinking on stimulus overselectivity among those diagnosed with autism with directions for future research indicated. Fiorello presents a position paper inclusive school practices, appropriate as a hand-out to school administrators or students who may be headed in

that direction. Given that inclusion came out of the civil rights movement rather than out of research, it is important to study the influence of this practice, particularly since IDEA only requires inclusion to the maximum extent possible so that the child makes adequate progress. In each case the test requires that the schooling arrangement accrue benefits to the child... more data are needed on how to include children with identified disabilities successfully and how to determine when mixed or non-inclusive settings will be more beneficial. This is another area where we do not want to become procedurally rigid, but to communicate information that benefits children.

Finally there are three articles regarding organizational development and practice. The first tells the story of a new listserv that has had amazing growth on the Internet. In our continuing series on best practices, the last two articles present suggestions for community-based treatment programs – a wonderful idea which requires many skills and excellent training to accomplish effectively. The first is a timely follow up to the Kirk T. case from Pennsylvania which will help to insure prompt assignment of staff to children identified in need, but which also establishes the need for training guidelines. This article looks at issues in the training of paraprofessionals for home-based practice. The second presents strategies to provide a real continuum of care based on specializing services through proper assessment, ongoing training, and linking pay raises to skills acquisition. Finally, in our Issues for the Consulting Behavior Analyst section we have a piece about considering the treatment team as a part of the client's ecology. Enjoy. Let us hear from you.

IMPROVING OUTCOMES REQUIRES MORE, NOT LESS, FROM PSYCHOLOGY

Richard H. Hunter, Ph.D. Clinical Outcomes Group, Inc.

Over the past 15 years, many public and private providers of inpatient psychiatric services have reduced the availability and sophistication of psychological and behavioral interventions while the concentration of people with comorbid psychiatric and behavior disturbances has increased. This has resulted in a move away from providing direct treatment of behavior dysfunction and an increase in the use of high dosages of psychoactive medications, leading in many cases to unnecessary chemical restraints, mechanical restraints, and seclusion (see Hunter, 1995; Hunter, 1999; Hunter, 2000).

An overdependence on neurobiological and biochemical theories of mental disorders, a society oriented to quick-fix medical and chemical solutions to complex problems (Hunter, 2000), and beliefs advanced by the massive promotion of drugs by the pharmaceutical industry (Valenstein, 1998; Glenmullen, 2000) have contributed to restricted case formulation strategies that have been described as little more than “drugs and TV therapy” (Hunter, 1999; Hunter, 2000). These limited case formulation strategies have resulted in poor outcomes and increases in restrictive and coercive interventions. Deaths and other adverse reactions from, often unnecessary, restraints and seclusion have led to action by Congress and several public and private organizations (e.g., HCFA, DOJ, JCAHO, SAMSHA).

During 1999 and 2000 there was much legislative activity on Capitol Hill attempting to regulate the use of restraints and seclusion. Numerous bills and legislative proposals, at one time or another, contained language that would have eliminated many psychological and behavioral interventions (e.g., Time-Out, hand-over-hand guidance, graduated physical guidance, physical redirection) and excluded psychologists from providing the necessary leadership for case formulation decisions, writing orders, or training and directing staff in implementing appropriate psychological and behavioral interventions. The American Psychological Association’s Practice Directorate took an active role in advocating for appropriate inclusion of psychologists and attempted to protect psychological interventions when they were unintentionally (or intentionally) impacted by various definitions of terms. For example,

the wording in several definitions of seclusion would have impacted the procedure Time-Out in a way that in order to use Time-Out, the behavior would have had to rise to the level of imminent dangerousness.

In September 2000 the restraint and seclusion language of various bills and amendments were rolled into the Children’s Health Act of 2000 (HR 4365), which passed the Senate on September 22nd and the House on September 27, 2000. President Clinton signed the bill into law on October 17th. This law, although not entirely written as APA or its consultants would have preferred, contained language allowing for physicians or *other licensed practitioners* (psychologists) to write seclusion or restraint orders, required staff of facilities using restraints or seclusion to train staff in alternatives to the use of these restrictive procedures, exempted Time-Out from the definition of seclusion, attempted to limit the use of chemical restraints, and exempted “physical escort” from the restraint stipulations.

Prior to the legislative activity in 1999 and 2000 resulting from the reports of deaths from restraints and seclusion, HCFA was revising its children’s residential facility regulations. After HR 4365 passed, HCFA completed its revisions on its RTF < 21 regulations and published them in the Federal Register on January 22, 2001. These new HCFA regulations contained language that: would do little to expand psychological and behavioral services; limited case formulation decisions and the writing of orders to physicians, psychiatrists, and nurses; mischaracterized the procedure Time-Out From Reinforcement making it practically useless; and, failed to

emphasize the importance of training staff in less restrictive behavioral and psychological interventions that would prevent unnecessary restraints and seclusion. The American Psychological Association's Practice Directorate began communicating with HCFA concerning the adverse impact of these new regulations and requested that interested psychologists write HCFA expressing their concerns.

The following is a letter written by this author and distributed to members of the American Psychological Association's Task Force on Serious Mental Illness and Severe Emotional Disturbance at the request of the Practice Directorate.

Clinical Outcomes Group, Inc.
February 26, 2001
Health Care Financing Administration
Department of Health and Human Services, ATTN: HCFA-2065-IFC
P.O. Box 8010
Baltimore, MD 21244-8010

**RE: CHILDREN'S HEALTH ACT OF 2000
REGULATIONS**

I would like to register my concerns with the regulations just published in the Federal Register (Vol. 66, No. 14, pp. 7147-7164) on "Use of Restraint and Seclusion in Psychiatric Residential Treatment Facilities Providing Psychiatric Services to Individuals Under Age 21." I believe these regulations need to be amended in several important ways if they are to have the intended effects of improving practice.

Recognize Least Restrictive Interventions

It has long been held that people in psychiatric treatment have a right to the least restrictive/intrusive interventions that will meet their needs. This protection applied to people with mental retardation as well. The least restrictive criterion was declared a constitutional minimum standard of care by a Federal Court in *Wyatt v. Stickney* (MI-344 F.Supp.373(1972); MR-344 F. Supp.387(1972)). The requirement for facilities to provide the least restrictive interventions has been a standard consistently included in both JCAHO and HCFA regulations since the 1970s. Even the most recent decision by the Ohio Supreme Court (October 19, 2000) severely limiting a patient's right to refuse

medication included a clause about less restrictive alternatives.

Prior HCFA regulations included the requirement for the least restrictive/intrusive intervention as follows:

483.450 Condition of participation: Client behavior and facility practices

(b)(ii) Designate these interventions on a hierarchy to be implemented, ranging from most positive or least intrusive, to least positive or most intrusive;

(iii) Insure, prior to the use of more restrictive techniques, that the client's record documents that programs incorporating the use of less intrusive or more positive techniques have been tried systematically and demonstrated to be ineffective;

HR 4365 contained language requiring comprehensive treatment and "active treatment" (Part H, Section 593). Further, HR 4365 states specifically that less restrictive interventions must have been determined to be ineffective prior to the use of restraints or seclusion. Very few residential facilities today offer anything resembling comprehensive services and few provide much more than medication and activities. Medication and activity therapy are not considered active and comprehensive treatments for behavior disorders, yet aggressive and dangerous behaviors are what result in decisions to use restraints and seclusion.

People who have behavior disorders that co-occur with a mental illness or mental retardation are the ones at risk to receive chemical restraints, physical restraints, mechanical restraints, and seclusion. Medications are not the least restrictive intervention for the treatment of aggression and

other behavior disorders. Psychological and behavioral interventions that directly treat behavior disorders are considered the less restrictive and most effective interventions. People who exhibit dangerous and aggressive behavior deserve to be provided both less restrictive and the most effective treatment. Medications designed for treating the acute symptoms of medical or mental disorders are not appropriate first line interventions for aggressive individuals. Yet, when HCFA wrote its January 22, 2001 rules, it authorized only psychiatrists, physicians, and nurses to determine if restraints and seclusion were necessary and only these medical providers were authorized to write orders for restraint and seclusion (thereby making a clinical determination that less restrictive and intrusive psychological and behavioral interventions were ineffective). HCFA should rethink its position that clinicians trained primarily in the administration of psychoactive medications are the appropriate people to make clinical determinations that less restrictive behavioral and psychological interventions are ineffective for people with behavior disorders. Limiting orders for restraint and seclusion to people trained in medicine eliminate the inclusion of people trained in less restrictive alternatives at the time at which the r/s decision is being made. This permits the continuation of "closed loop" thinking and when their medical interventions don't prevent the dangerous behavior they have nothing left to rely on except coercion and control. This point was painfully displayed in the Texas Charter Hospitals scandals exposed on national television last year. Psychiatrists, physicians and nurses were repeatedly restraining and secluding people without ever considering psychological or behavioral treatment alternatives. These interventions were outside their areas of expertise and since they controlled all decisions they never considered psychologists a relevant part of the treatment process. Yet, psychologists could have developed interventions that eliminated the need for most of these harmful and unnecessary interventions. HR 4365 purposely included language permitting other licensed practitioners to write restraint and seclusion orders, yet HCFA chose to overlook this safeguard in

preparing the children's regulations. This position is even more objectionable when viewed within the context of an ongoing national concern over the overuse of pharmacological interventions with children and adolescents.

Clinical and behavioral psychologists are the only doctoral-level clinicians trained to directly treat people with behavior disorders. Psychologists perform functional assessments of behavior; determine the influence of contextual stimuli; study both antecedent and consequence conditions that prompt behavior; determine the communicative intent of behavior; write behavioral intervention plans; identify functionally appropriate replacement behaviors; provide training and reinforcement paradigms for replacement behaviors; assess relevant social and instrumental skills that support behavior change; design specific interventions for behavior change; and train treatment staff in the appropriate observation, data collection, and interventions when behavior problems emerge. Psychiatrists, physicians, and nurses do not, except perhaps in rare situations, receive training in these areas and do not utilize these skills in residential settings. Psychiatrists, physicians, and nurses are at a distinct disadvantage when asked to intervene with a patient who exhibits severe behaviors. Without the help of a psychologist, they are left to attempt to manage the client with medications and when that does not work, they resort to the much more intrusive procedures of restraint and seclusion.

The loss of psychological expertise over the past 20 years in psychiatric residential settings (see Hunter, R.H. *Treatment, Management, and Control: Improving Outcomes Through More Treatment and Less Control. New Directions For Mental Health Services: The Role of Organized Psychology in Treatment of the Seriously Mentally Ill* (H. Richard Lamb, Editor-In-Chief; Frederick J. Frese, III, Issue Editor). San Francisco: Jossey-Bass. Number 88, Winter 2000, pp. 5-15) has left many public and private providers without a comprehensive array of service options that has resulted in an increase in the use of coercive procedures, including the overuse and misuse of chemical restraints, physical restraints, mechanical restraints, and

seclusion. Treating people with severe behavior disorders using least restrictive and most effective interventions are not options available in many settings today. Both HCFA and JCAHO have failed to take note of this alarming condition. That is the primary reason for the misuse and overuse of restraints and seclusion and the reason there are so many deaths today from those procedures. HCFA should reconsider its regulations related to services to people with co-occurring behavior disorders and not promote a narrow, medically oriented perspective for the management of dangerous behaviors. Although Congress and the President approved a law (HR 4365) that permitted other independent licensed clinicians (psychologists) to intervene with these patients, HCFA disregarded that portion of the law and permitted only psychiatrists, physicians, and nurses to write restraint and seclusion orders. If this rule stands, only clinicians who lack direct training in less restrictive psychological and behavioral treatment protocols will be making the determination that these less restrictive interventions would not be appropriate, and thereby may order the most intrusive of interventions—restraints and seclusion.

There is another prior HCFA regulation that is appropriate to consider.

483.420 Condition of Participation: Client Protections

(a)(6) Ensure that clients are free from unnecessary drugs and physical restraints and are provided active treatment to reduce dependency on drugs and physical restraints.

This standard has backing from the United States Supreme Court. In *Youngberg v. Romeo* (102 S.Ct.2452 (1982)) the court held that people have a right to reasonable treatments that will ensure freedom from undue restraints. The ruling stated, "...liberty interests require the State to provide minimally adequate or reasonable training to ensure safety and freedom

from undue restraint" (at 2460). Further, the court ruled, "Respondent thus enjoys constitutionally protected interests in conditions of reasonable care and safety, reasonably non-restrictive confinement conditions, and such training as may be required by these interests" (at 2463). Today, people with mental illness or mental retardation, who also have challenging behaviors, frequently are in residential settings that offer little more than treatment regimens consisting of "drugs and TV therapy." Restraints and seclusion are overused in these settings primarily because clients no longer have access to reasonable treatments for behavior disorders. Comprehensive services that include psychological and behavioral interventions directed at the causes of behavior are rare in today's public or private hospital or residential treatment center. HCFA's position promoting a "closed shop" of psychiatrists, physicians, and nurses will do nothing to improve the treatment of people with behavior disorders and promoting this narrow approach to treatment will not have the effect of reducing the use of these dangerous and restrictive procedures. HCFA should demand that if psychologists are available at a residential treatment facility, they should be consulted prior to a psychiatrist, physician, or nurse writing an order for restraint or seclusion, except for an initial emergency order. Further, for any client who exhibits dangerous or aggressive behavior, a psychologist should be actively involved in developing and approving his/her plan of care. Attached is a Record Review Protocol that can be used when reviewing a record of a client with a history of aggression or violence or other threatening behaviors to determine if comprehensive treatment has been provided for the specific behaviors of concern.

A more appropriate rule, and one HCFA should propose is as follows: If a psychiatrist, physician, or nurse orders restraints or seclusion three times for an individual within a six month period, a psychologist trained in treating behavior disorders must be called in to examine the plan of care and determine if less restrictive alternatives should be implemented. The psychologist should write a treatment plan that

has the potential to reduce the individual's risk for further restraint and seclusion.

HCFA's restriction of restraint and seclusion orders to psychiatrists, physicians, and nurses will lead to continued inadequate treatment for people with behavior disorders and the continued misuse and overuse of these control interventions.

Time-Out From Reinforcement Mischaracterized

Since the early 1970s HCFA has understood the procedure Time-Out from Reinforcement (Time-Out) and has published appropriate regulations for its use. However, the January 22, 2001 interim final rule significantly mischaracterizes the procedure and confuses it with a procedure commonly referred to as Quiet Time.

Quiet Time, or voluntary relaxation, is a general coping strategy taught to people who occasionally become over-aroused in a particular setting. Clients are taught to self-monitor their levels of agitation or arousal and when they experience over stimulation in an environment or notice themselves becoming increasingly agitated, they request "quiet time." They voluntarily go to a less stimulating setting (their bedroom, outside, etc.) and attempt to relax. When they feel better they return to the activity. This is an entirely voluntary process. It may be prompted by staff, but removing oneself from the setting and returning is completely voluntary.

Time-Out from Reinforcement is something quite different than Quiet Time. Time-Out procedures are defined as either exclusionary or non-exclusionary. HCFA introduced the term "inclusionary" Time-Out (Section 483.368, p. 9 of 34, FR p. 7151) in its January 22nd regulations. There is no such thing as "inclusionary time-out." "Inclusionary" would suggest the client would continue to have access to the social reinforcers that the procedure Time-Out prohibits. A short definition of Non-Exclusionary Time-Out and Exclusionary Time-Out will follow (a more

complete definition of Time-Out will be attached).

Non-Exclusionary Time-Out (TO):

Withdrawing the opportunity to earn positive reinforcement or loss of access to positive reinforcers for a specified period of time, contingent upon the occurrence of a behavior, while the individual remains in the same general environment. Examples include contingent observation, planned ignoring, time-out ribbon, and withdrawal of access to a specific reinforcer. The individual may be physically separated from ongoing activities.

Exclusionary Time-Out (ETO):

Removing the individual from a reinforcing ongoing activity to a location where he/she is unable to participate or observe other individuals engaged in the activity.

The overall purpose of Time-Out is to intervene early in the development of inappropriate behavior by identifying a link between social reinforcers and the escalation of an unwanted behavior. When it is determined that the behavior appears linked to social reinforcers (e.g., an adolescent's swearing and acting up linked to attention and giggling in a classroom), a plan is written for Time-Out. This plan must specifically identify the observable behavior, identify the reinforcers of the behavior, specify whether a Non-exclusionary Time-Out or an Exclusionary Time-Out should be employed, the length of time of the time-out, what staff are to observe during the Time-Out, and the exit criteria. A typical Exclusionary Time-Out interval would be 9 minutes in the Time-Out room, with a one-minute calm, exit criteria. When the specific behavior was observed, staff would escort the client to the Time-Out Room, close the door, constantly observe the client during the procedure, then after 9 minutes release the door if the person were calm. If the person was not calm, then the time-out would proceed until the client was calm for one minute. Careful records are kept and observation notes that describe the client's behavior throughout the time-out procedure and

his/her reaction upon return to the activity are required.

A typical Non-Exclusionary Time-Out would involve removing the individual from the table and require him/her to sit away from the group in a location where he/she loses access to the identified social reinforcers. Non-Exclusionary Time-Out allows the client to observe others receiving reinforcement for socially appropriate behaviors, but it will not be effective if the client continues to receive attention and reinforcement while still in the same room.

Time-Out procedures are carefully designed for each client and specific to the behavior of concern and the environment in which the behavior occurs. Time intervals are usually short, since the procedure is intended to teach the person the relationship between appropriate behavior and positive reinforcers. A period of absence from reinforcement following inappropriate behavior has been shown to be a powerful learning technique. However, when the person is removed from the group, it is not usually voluntary. HCFA for years has understood this. Interpretive Guidelines for ICFMRs published by HCFA stated, "S 483.450(c)(1) Guidelines: The use of time-out rooms is effective only if the individual does not like to be removed from an activity or from people."

In the January 22, 2001 interim final rule, HCFA inappropriately redefines time-out. Section 483.368 (a) A resident in time out must never be physically prevented from leaving the time out area. This new constraint on the procedure is not supported by behavioral research. Prior HCFA regulations were very different and followed the prevailing research.

**Section 483.450(c)
Standard Time-out rooms. (1)
A client may be placed in a
room from which egress is
prevented only if the following
conditions are met**

- (i) The placement is part of an approved systematic time-out program as required by paragraph (b) of this section (Thus, emergency placement of a client into a time-out room is not allowed.)**
- (ii) The client is under the direct constant visual supervision of designated staff.**
- (iii) The door to the room is held shut by staff or by a mechanism requiring constant physical pressure from a staff member to keep the mechanism engaged.**

Key, or latch locks, were never permitted on Time-Out room doors, although they may be used when seclusion is ordered. It should be noted that Time-Out and Seclusion are completely different procedures. Seclusion is a control procedure that can only be used in situations of imminent dangerousness while Time-Out is a treatment procedure that is utilized long before a person becomes dangerous to self or others. Clients are under constant observation while in Time-Out and the intervals are short. Time-Out room door latches that require constant physical pressure to engage the locking mechanism have never been considered by HCFA to represent a locked room. When staff release the door mechanism, the door opens freely.

When Non-Exclusionary Time-Out can be used, then it is not an issue whether a door can be temporarily secured or not. However, when an Exclusionary Time-Out procedure requires the use of a designated Time-Out Room, then preventing the client from leaving the room is essential to the success of the intervention. With the new HCFA regulation,

what does one now do with a 17 year old who is aggressively defiant and will not voluntarily remain in the time-out room? The behavior will escalate and most likely lead to restraint, a much more severe and dehumanizing procedure. HCFA should immediately suspend the language in Section 483.368 regarding Time-Out in the new interim rule and revert back to their previously appropriate standards.

Emphasize Training In Alternatives To Restraint and Seclusion

The language of HR 4365 made it clear that to “promote the rights of each resident, including the right to be free from physical or mental abuse, corporal punishment, and any restraints or involuntary seclusions” that “appropriate training be provided for the staff of such facilities in the use of restraints and any alternatives to the use of restraints.” This is perhaps the most important statement in the law that has the potential to reduce the inappropriate use of restraints and seclusion. HCFA did not provide sufficient direction to that important requirement in its new interim rule. HCFA should have devoted several pages to a training curriculum that included information concerning proper staff attitudes, values, and roles; clients’ involvement in choice and decision making; psychological and behavioral interventions; functional assessment and analysis procedures; outlined biopsychosocial case formulation strategies that uncover reasons for violent behavior and outline steps to take to effectively treat behavior disorders; discuss rehabilitation-friendly psychopharmacology; the importance of social and instrumental skill development; and environmental and contextual factors that promote aggression and violence. Training in these alternative treatments would do more to improve the safety of clients and staff and do more to stop the unnecessary use of restraints (chemical, physical and mechanical) and seclusion than any other component of the law. Section 483.376 on education and training concentrates on de-escalation techniques,

training in the safe administration of restraints, and monitoring the client while in restraints or seclusion. Most public and private providers have training in de-escalation techniques, in safe administration of restraints, and in monitoring clients’ vital signs during restraints. Very few have any training at all in alternative interventions that provide direct treatment for behavior disorders and reduce the need for de-escalation procedures and restraints. HCFA should take advantage of this opportunity to require training in effective alternatives to the use of restraints.

Seclusion and People With Mental Retardation

Seclusion has long been prohibited as an intervention for people with mental retardation. HCFA did not include this prohibition in their new interim rule. There are an increasing number of people with mental retardation and co-morbid psychiatric and behavior disorders seeking residential treatment. HCFA should support the continuation of the prohibition of seclusion for people with mental retardation. Further, HCFA should provide close supervision over any facility that uses this procedure. When active treatment is provided that includes psychological and behavioral services, seclusion is rarely needed in any psychiatric population.

Thank you for inviting comments on HCFA’s interim final rule on use of restraints and seclusion in psychiatric residential facilities serving people under age 21. I would be happy to provide additional information if requested.

Sincerely,

Richard H. Hunter, Ph.D.

Record Review Protocol Richard H. Hunter, Ph.D., Clinical Outcomes Group, Inc.

NAME: _____ ID# _____ UNIT: _____

Restraints _____ Seclusion _____ STAT/PRN _____ Assaults _____

Injured _____ Elopement _____ Other: _____

	PROBE	YES	NO	PARTIAL
1	Target behavior (s) operationally defined?			
2	Baseline data on target behavior?			
3	Ongoing data across treatment intervals?			
4	Replacement behavior (s) defined?			
5	Baseline data on replacement behavior (s)			
6	Ongoing data across treatment intervals for replacement behavior?			
7	Functional Assessments done?			
8	Contextual issues identified?			
9	Antecedents identified?			
10	Consequences identified?			
11	Behavior Intervention Plan developed?			
12	Behavior Intervention Plan includes plan for replacement behaviors?			
13	Client's recovery goals understood by staff?			
14	Strengths/assets identified?			
15	Strengths/assets related to key treatment issues?			
16	Strengths/assets development part of the treatment process?			
17	Social Skills assessment done?			
18	Skills deficit assessed?			
19	Performance deficit assessed?			
20	Instrumental Skills assessment done?			
21	Skills deficit assessed?			
22	Performance deficit assessed?			
23	Aggression identified as a problem? If yes, Identify interventions attempted:			
24	Medication			
25	Token Economy			
26	Differential reinforcement schedules (DRO, DRI)?			
27	Assertiveness training			
28	Activities of choice in schedule			
29	Behavioral contracting with response cost			
30	Extinction			
31	Contingent observation			
32	Nonexclusionary Time-Out			
33	Exclusionary Time-Out			
34	Overcorrection			
35	Restraint			
36	Seclusion			
37	Other:			

Time-Out Definition: Richard H. Hunter, Ph.D., 11/15/1999

I. General:

Time-out is a procedure where the opportunity for reinforcement is removed for a period of time contingent upon a specific maladaptive behavior. Appropriate Time-out use requires that the “time-in” environment contains adequate opportunities for positive reinforcement for appropriate behavior.

There are two types of Time-out: 1. Non-exclusionary Time-out, which is considered a Level I Procedure since it does not involve the restriction of rights; and 2. Exclusionary Time-out, which is considered a Level II Procedure since it involves a restriction of rights (freedom of movement), but does not involve controversial and/or noxious or painful stimulation.

In ICF/DD facilities Exclusionary Time-out as a Level II Procedure requires review and approval by the Behavior Intervention and Human Rights Committees prior to implementation and subsequent re-review and approval at least every 6 months for continued program implementation. The individual (if legally competent) or the individual’s court appointed guardian must provide informed consent prior to the implementation of a program that includes a Level II Procedure.

Time-out Procedures shall only be used in accord with an individualized written program. Time-out shall never be used for the convenience of staff. Exclusionary Time-out shall not be used before other less restrictive behavior intervention procedures have been considered and, if applicable implemented, based on the function of the behavior and research literature unless it has been determined that the Exclusionary Time-out Procedure is the least restrictive, most effective method.

II. DEFINITIONS

“Time-out” (from positive reinforcement): A procedure wherein the individual is not afforded the opportunity to obtain positive reinforcement for a period of time contingent on engaging in a target behavior. Time-out intervals are short (average 9 minutes or less) and involve pre-specified exit criteria (e.g., 1 minute of calm).

“Non-Exclusionary Time-out”: Separating the individual in a manner that precludes reinforcement, yet affords the individual the opportunity to observe others engaging in appropriate behavior and receiving positive reinforcement.

When Non-Exclusionary Time-out is used, the individual is not removed from the environment.

“Exclusionary Time-out”: Removing the individual from a reinforcing ongoing activity to a location where he/she is unable to participate or observe other individuals engaged in the activity. Exclusionary Time-out includes removal from the room or removal to another room.

“Time-out Room” is a room from which egress is prevented by holding the door shut by staff or a mechanism requiring constant physical pressure and reinforcement is not available.

Locked Time-out Rooms (utilizing a key lock and/or latch system not requiring staff directly holding the mechanism) are prohibited.

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Several US Department of Education sponsored traineeships – full waiver of tuition and fees plus annual stipend of \$12,000 – are still available for Ph.D. students who enroll and begin the program Autumn Quarter, 2001. Doctoral students earn support during their second and third years of the program by working as a Graduate Research or Teaching Associate.

CURRICULUM – The doctoral program at Ohio State prepares leadership personnel for special education whose research and teaching are guided by the philosophical, scientific, and technological principles of applied behavior analysis. An intensive curriculum of required and elective courses, special topic seminars, research activities, summer internships, college teaching experiences, and non-credit-earning requirements (e.g., co-advising masters students' thesis research, conference presentations) develops each student's knowledge and skills in six competency areas: (1)conceptual analysis, (2)research, (3)design and application of educational interventions, (4)professional communication, (5)administration and collegial relations, and (6)teaching and advising.

A description of the faculty's philosophy of advanced graduate training, the program's objectives, student competencies, and featured curriculum components can be found in:

Heward, W.L., Cooper, J.O., Heron, T.E., Gardner III, R. & Sainato, D.M. (1995). Training leadership personnel for special education: The Ohio State University doctoral program in applied behavior analysis. *Teacher Education and Special Education*, 18, 192-204.

PREREQUISITE – To be considered for admission to the Ph.D. program, an applicant must: (a)hold a masters degree in special education or in a closely related discipline (e.g., adaptive physical education, psychology); (b)have at least 3 years relevant professional experience; (c)be able and willing to commit to an intensive, 3-year program of full-time study; and (d)have the desire to obtain a leadership position in special education.

FOR MORE INFORMATION – Address questions about the program or requests for an application packet to: Bill Heward, Special Education Program, School of Physical Activity and Educational Services, The Ohio State University, 373 Arps Hall, 1945 N. High St., Columbus, OH 43210-1172. E-mail: Heward.1@osu.edu, Phone/Voice: (614)292-3348.

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BOARD CERTIFICATION (DIPLOMATE) IN BEHAVIORAL PSYCHOLOGY

E. Thomas Dowd, Ph.D., ABPP President, American Board of Behavioral Psychology, Inc.

This article describes the American Board of Behavioral Psychology (ABBP) and how it can assist you in maximizing your potential as a behaviorally-oriented professional psychologist. The mission of the board is to grant board certification in Behavioral Psychology to qualified behavioral psychologists after a competency-based examination. As a board certified psychologist (Diplomate), you will be on a par with board certified physicians and other similar professionals. Furthermore, possession of the diploma makes it easier for psychologists to be licensed in many other states. Some managed care companies increasingly look for the possession of credentials such as board certification and other employers recognize such specialty credentialing as well. In some employment settings, increased pay schedules may be possible for board certified psychologists. Finally, possession of the diploma informs the professional community that the holder is a recognized specialist in behavioral psychology as demonstrated through a competency-based examination presented by peers. Because of this competency-based assessment, a diploma from ABBP is recognized as the "gold standard" of professional practice in this specialty.

In order to provide behaviorally-oriented psychologists with the opportunity to demonstrate their specialty competencies, the American Board of Behavioral Psychology was formed in 1987 and incorporated shortly thereafter. After an initial phase of negotiation with and monitoring by the American Board of Professional Psychology (ABPP), ABBP was incorporated into ABPP as a specialty member board in 1992. ABPP has been certifying psychological specialists since 1948. I was the first Behavioral Psychology representative to ABPP's Board of Trustees, serving from 1993 through 1996. Dick Suinn, former AABT President and Past President of APA, was the Behavioral Psychology representative from 1997 through 2000. Christine Nezu began her term this year as the third Behavioral Psychology representative.

The *General Eligibility Criteria* for the Diplomate in Behavioral Psychology are as follows:

1. Psychologists must be of good moral character, scientific integrity, and professional standing. Their conduct must be in accordance with the prevailing ethical principles of the American Psychological Association or the Canadian Psychological Association, as appropriate to the location of their practice.
2. An earned doctorate in psychology is required that is APA accredited or met equivalent standards at the time the degree was awarded.
3. State or regional licensure or certification at the level of independent practice is required in the state in which the psychologist practices.
4. Three years of experience in one or more aspects of behavioral psychology; one of which may be pre-doctoral, as well as appropriate supervision in behavioral psychology is required. The board recognizes that not all of a candidate's experience may be in behavioral psychology.
5. Membership and participation in professional organizations which have identifiable purposes that are congruent with those of ABBP.

The process of acquiring board certification in Behavioral Psychology consists of three phases. In Phase One (Application Phase), the candidate obtains the ABPP application packet from the ABPP Central Office, completes it, and submits it with copies of the following documents:

- Current psychology license
- Current curriculum vita
- Official school transcripts
- Supervisor rating forms from two former supervisors
- Colleague rating forms from two or three current or past colleagues/peers
- Candidates who are members of the National Register of Health Service Providers in Professional Psychology are presumed to have met the General Eligibility Criteria.

In Phase Two (Work Sample Phase), candidates are invited to submit four copies of at least one work sample of his/her typical practice as a behavioral psychologist. The sample most commonly consists of a verbatim report of professional interactions (e.g., a behavioral psychology session or supervision of a new behavioral psychologist). Occasionally the nature of the candidate's work dictates a different type of work sample and this can be arranged. The important point is that the work sample should reflect what the candidate actually does in professional practice. The work sample materials are evaluated by a committee of ABPP diplomates and this committee decides whether the candidate should be admitted to the next phase.

Phase Three (Oral Examination Phase) consists of three parts; an *in vivo* work sample (typically either a client or supervisee), an examination on the previously approved work sample, and an examination on ethics and

professional issues. The *in vivo* examination covers the following four interrelated areas:

- Realistic assessment of the problem
- Effectiveness of the candidate's efforts toward constructive interventions
- Awareness of theory and research in the area of behavioral psychology
- Sensitivity to ethical implications of professional practice

Examinations have been and continue to be conducted at professional conferences. In addition, they can be conducted in most areas of the country at any time mutually convenient to the candidate and the examiners.

The board recognizes that the practice of behavioral psychology today is broad in scope and multifaceted. Therefore, we examine candidates in one of four practice areas. However, we expect all candidates to have some knowledge in the other areas. The four areas are:

- Applied behavioral analysis
- Behavior therapy
- Cognitive-behavior therapy and modification

1. Cognitive therapy

ABPP has done well in encouraging newer professionals to apply for board certification in Behavioral Psychology. However, many professionals who received their degree a number of years ago have, for a variety of reasons, been reluctant to apply. I should note that this situation has been faced by other ABPP specialties as well. Therefore, some specialties have created a senior examination procedure. These senior examinations, while retaining the

rigor and thorough process characteristic of all ABPP exams, allow for flexibility of approach and tailoring of the examination process to reflect the unique status of senior professionals. The American Board of Behavioral Psychology has a senior examination procedure which is available to those professionals who meet the following criteria:

- At least 15 years postdoctoral experience as a behavioral psychologist.
- Continuous contributions to the field of behavioral psychology as evidenced by at least two of the following criteria:
 1. Fellow status in APA in a professionally relevant division.
 2. Publications of books and/or articles in the field of behavioral psychology.
 3. Service on behaviorally-oriented journal editorial boards.
 4. Presentations at professional conferences on behavioral psychology topics.
 5. Case consultations on behavioral psychology.
 6. Behavioral psychology supervision of students, practitioners, or employees.
 7. Conducting training sessions in behavioral psychology.

- Known and respected by colleagues in the field of behavioral psychology by the above activities and/or involvement in professionally appropriate organizations.

The initial application procedure and basic requirements for application are the same as that for all behavioral psychologists. However, the professional statement, the work sample, and the *in vivo* examination are all tailored specifically to the competencies and professional activities of the senior behavioral psychologist. In particular, the work sample need not be prepared specifically for the ABPP examination but may consist of previously prepared writings or other materials.

For a complete set of application materials, please contact the ABPP Central Office as listed below. If you are interested in the senior examination, please request in addition a copy of the Format for the Examination of Senior Behavioral Psychologists.

The American Board of Professional Psychology
514 East Capitol Ave.
Jefferson City, MO 65101
1-800-255-7792
<http://www.abpp.org>

The American Board of Behavioral Psychology cordially invites and encourages all behavioral psychologists, including senior psychologists, to apply for board certification. If you would like to discuss any aspect of your professional background or the application and examination process, please contact me by phone at 330.672.7664, by E Mail at edowd@kent.edu, or by letter to the Department of Psychology, Kent State University, Kent, OH 44242.

IMPROVING DISCIPLINE PRACTICES IN PUBLIC SCHOOLS: DESCRIPTION
OF A WHOLE-SCHOOL AND DISTRICT-WIDE MODEL OF BEHAVIOR
ANALYSIS CONSULTATION

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We describe the delivery of behavioral consultation services to improve discipline practices in public schools. The components of a whole-school and district-wide consultative model are discussed, with an emphasis on preventive interventions, multimethod measurement, and empirical outcome evaluation. Data from several consultation projects are presented to illustrate the types and scope of intervention.

IMPROVING DISCIPLINE PRACTICES IN
PUBLIC SCHOOLS: DESCRIPTION OF A
WHOLE-SCHOOL AND DISTRICT-WIDE
MODEL OF BEHAVIOR ANALYSIS
CONSULTATION

Behavioral consultation is a four-stage process that provides technical assistance to practitioners in a variety of applied settings (Bergan & Kratochwill, 1990). Following this model, a consultant interacts with a service provider (consultee) to effect change in one or more "clients." Consultation is implemented through consultant-consultee meetings that include (1) problem identification, (2) problem analysis, (3) intervention plan analysis, and (4) intervention plan evaluation phases. This consultative model is distinguished by an applied behavior analytic orientation and a commitment toward empirical outcome evaluation.

As it relates to public school settings, the recipients of behavioral consultation would be teachers, principals, administrative personnel, and parents. These individuals receive direction from a consultant and they, in turn, apply and evaluate interventions to improve academic achievement and deportment of students. Behavioral consultation is a collaborative effort between consultant and consultee whose "success is going to hinge largely on

communication and relationship skills" (Gutkin & Curtis, 1982, p. 822).

Several authors have written about the practice of behavioral consultation to public school settings (Luiselli, 1997; Martens, 1993; Witt & Elliot, 1983). For many reasons, a behavioral consultative model is well suited to the demands confronted by public schools. First, with the evolution of inclusive educational services (Fuchs & Fuchs, 1994) increasing numbers of students who have developmental disabilities and disruptive behavior disorders are now served in the nation's public schools. This population of children and adolescents frequently requires specialized services to address academic and social skills challenges. As such, behavioral consultants can offer expertise to public school personnel by helping them formulate, implement, and evaluate intervention plans.

A second and related influence supporting the efficacy of behavioral consultation to public schools is the 1997 re-authorization of the Individuals with Disabilities Education Act (IDEA). IDEA '97 mandates that when a student with a disability has challenging behavior that interferes with his or her instruction, or the learning opportunities of peers, a school's educational team must "consider when appropriate, strategies, including

positive behavioral interventions, strategies, and supports to address that behavior” (IDEA Amendments, 20 U.S. C. § 1414(d)(3)(B)(I)). In addition to decreasing challenging behavior, the educational team also must introduce procedures to improve a student’s social skills. Integral to these requirements is the completion of functional behavioral assessment (FBA), preparation of a positively oriented behavioral support plan (BSP), and identification of measurable goals to evaluate intervention effects (Drasgow, Yell, Bradley, & Shriner, 1999). Therefore, in order to meet the IDEA 1997 guidelines, most public school districts will require consultation from behavioral specialists.

Finally, our public schools continue to experience a high rate of student discipline problems and antisocial behavior (Dwyer, Osher, & Warger, 1998; Rose & Gallup, 1998). Serious rule infractions such as aggression, vandalism, and weapons possession impact negatively the academic attainment of the entire school community. Clearly, occurrences of violence and similar offending behavior creates an at-risk and unsafe environment that is not conducive to learning. An additional factor is that chronic student discipline problems at school including poor attendance, academic failure, and frequent expulsions, predict criminal behavior and societal maladjustment in adulthood (Henggler, Melton, & Smith, 1992). For these reasons, public schools can benefit from behavioral consultation that encompasses tertiary, secondary, and primary prevention efforts.

Most behavioral school consultation has concentrated on the academic and social problems of individual students. Northrup, Wacker, Berg, Kelly, Sasso and DeRaad (1994), for example, described an exemplary model of technical assistance consultation to public school students with developmental disabilities and challenging behaviors. More recently, consultation services have expanded to include whole-school and district-wide applications. To illustrate, Sugai, Sprague, Horner and Walker (2000) referenced a three-tiered structure of school-wide discipline strategies comprised of *universal, selected, and targeted/intensive*

interventions. A universal system of behavior support is delivered to all students “to prevent problems before they start.” Selected interventions are aimed at students who appear to be “at-risk” for emergence of intractable discipline problems. These strategies are focused more on single classroom and small-group contexts. The targeted/intensive interventions are reserved for individual students who present the most difficult challenging behaviors and disorder to the school environment. Sugai et al. (2000) estimated that 85-90% of students are suitable for universal interventions, 7-10% of students require selective interventions, and 3-5% of students demand targeted/intensive interventions.

This article describes a behavioral consultation model to improve discipline practices in public schools. The approach to consultation is geared toward whole-school and district-wide applications, based on principles of applied behavior analysis, and committed to empirical outcome evaluation. We discuss components of the model and present data from several projects to illustrate intervention efficacy. Issues related to implementation of consultation services, evaluation, and “best practice” procedures are reviewed, followed by recommendations to enhance professional practice.

OVERVIEW

School consultation services are managed by The May Institute Inc., a non-profit behavioral healthcare agency serving children, adolescents, and adults with developmental disabilities, psychiatric disorders, acquired brain injury, and medically compromised conditions. Many contracts are established with public school districts to assess, evaluate, and design behavior support plans with individually referred students. In addition, consultants address large scale projects in public schools such as, instituting whole-school discipline practices, developing interventions within an entire classroom, and conducting comprehensive efficacy reviews of district-wide protocol. One example of this more expansive approach to consultation is the institute’s Positive Schools

program. Positive Schools is a system-wide method that initially works with school personnel to evaluate their already existing methods of student discipline. They then are trained to perform functional behavioral assessments, use effective strategies, and improve academic instruction. Consultants from the Positive Schools program work directly with educators and administrators to create prosocial, positive, and preventive interventions applicable with all students attending school. To date, Positive Schools has been introduced in 10 elementary and middle schools across 7 states.

Consultants include masters-degree and doctoral level psychologists, post-doctoral fellows, and fourth-year graduate students enrolled in the institute's predoctoral clinical psychology internship program. Administration, supervision, training, and research responsibilities for consultation services are coordinated by the authors.

DESCRIPTION OF CONSULTATION SERVICES

The following components comprise the major foci of whole-school and district-wide consultation:

School-Based Teams

Consultants work with educational and administrative personnel to establish school-based teams that will be responsible for implementing and monitoring behavior support interventions. The teams include teachers, counselors, curriculum specialists, school psychologists, the school principal, and others who have a role in defining school discipline practices. A first step following team formation is to identify academic, social, and behavior concerns which will be the focus of intervention. Typically, consultants seek out information that will help determine objectively the educational priorities raised by the team. For example, most public schools document office discipline referrals, truancy records, suspensions, and expulsions. These natural data sources can be used as baseline and outcome measures to evaluate the efficacy of subsequent interventions (Sugai et al., 2000; Wright & Dusek, 1998).

Another initial objective considered by consultants is to review a school's pre-intervention discipline policies. Most schools have a "student discipline handbook" or related documents. This information, in concert with team discussion, permits a breakdown of procedures that might be retained and those that should be abandoned or revised. Furthermore, consultants observe directly in classrooms and common areas of a school (e.g., cafeteria, corridors, outside locations) to gather additional data on instructional and discipline practices.

A final task completed by consultants is to assist school-based teams in selecting intervention priorities. Consistent with the three-tiered structure articulated by Sugai et al. (2000), this translates to a delineation of student-specific, classroom, and whole-school plans.

Intervention Formulation and Implementation

Many procedures are developed for classroom-wide and whole-school behavioral support. It is beyond the scope of this article to discuss these strategies in detail but instead, to highlight customary practices:

1. Using a "constructive discipline" orientation (Mayer, 1995), students and staff identify behavior expectations ("rules") for the school population. The rules are described with clarity, stated in positive terms, and usually, posted conspicuously in classroom and public locations around the school building. A critical role for consultants at this stage is guiding school staff to ensure that students know and can demonstrate these behaviors.
2. A basic tenet promulgated by consultants is that effective behavior support in public schools is accomplished by emphasizing student academic, social, and problem solving

- skills. To this end, procedures are designed to strengthen core competencies and cooperation among peers and staff. Some of the directions in this regard are training teachers to increase their positive recognition of students, preparing written classroom behavior support plans, instituting direct social skills instruction, and providing academic support and remediation.
3. A critical component of all behavior support interventions is the programming of positive reinforcement contingent upon skills achievement and adherence to discipline standards. The school-based teams and classroom teachers develop incentive systems that enable students to earn privileges, tangible items, and personal acknowledgements. As examples, pleasurable consequences include having a "homework free" evening, earning free passes to after school events, spending extra time on preferred classroom activities, and being entered in a lottery for "prizes" such as movie tickets and coupons at "fast-food" restaurants. Letters of praise from the principal, public posting of accomplishments, and recognition in a school's newsletter are other consequences that can serve as positive reinforcement.
 4. Staff are trained to complete functional behavioral assessments for students who pose significant discipline problems. These assessments are conducted using indirect and descriptive methods according

to "best practice" guidelines (Scott, Meers, & Nelson, 2000).

Personnel Training

As discussed previously, effective consultation is determined by a collaborative relationship between consultant and consultee. Teacher training is emphasized by delivering "hands on" direction and supervision in a manner that gradually "shapes" staff performance. Consultants conduct initial training seminars with teachers but then, follow up with observation in the classroom, individual meetings to review procedural implementation, and feedback sessions that document outcome in relation to predefined criteria. Training also incorporates positive reinforcement of teacher behavior. Thus, teachers receive appreciation notes from administrators, recognition announcements at school assemblies, and congratulatory remarks from consultants. These contingencies are important because we have found that teachers benefit most from consultation when their efforts and accomplishments are monitored, acknowledged, and "rewarded."

Measurement and Evaluation

Several dependent measures are incorporated to evaluate process and outcome (Table 1). Direct observation by consultants in the classroom targets student task engagement, student disruptive behavior, teacher praise and approval, and teacher implementation of discipline procedures. Classroom engagement of students is documented by recording on-task responding and in some situations, integrating curriculum based measurement (CBM) (Putnam & Jefferson, 1998).

School-wide measures focus on student attendance, office discipline referrals, and suspensions/expulsions. Another evaluative strategy has been an analysis of how schools prepare Individualized Educational Plans (IEPs) for students who have developmental disabilities (Putnam, Luiselli, & Jefferson, 2001). In many cases, IEPs do not adequately identify learning objectives, define teaching methodologies,

describe objective measurement, and reference written behavior support plans. By conducting an IEP analysis according to “practice guidelines,” consultants can train school-based teams to prepare better educational plans.

Social validation concerns the assessment of intervention satisfaction and acceptability. Consultants routinely survey

Finally, our consultation with entire public school districts has examined cost- efficacy measures as an evaluative index of performance (Putnam, Luiselli, Sennett, & Malonson, 2001). Specifically, we have analyzed the financial expenditures required to educate students outside of the school district by virtue of their placement in private day program or residential settings. These data, in turn, are

Table 1

Dependent Measures Incorporated in Public School Behavioral Consultation

<u>Category</u>	<u>Examples</u>
Classroom Measures	Student engagement Academic permanent products Teacher praise and approval Teacher disciplinary procedures
School-Wide Measures	Office discipline referrals Student attendance School suspensions and expulsions Achievement of student IEP objectives
Social Validation Measures	Student satisfaction ratings Staff satisfaction and acceptability ratings
District-Wide Measures	Cost expenditure for out-of-district placements Cost expenditure of utilizing consultation services

student and staff satisfaction with consultation services. The acceptability of program recommendations also is assessed to ensure that interventions are practical, contextually appropriate, and suitable to the unique characteristics of each public school. The social validity measures are obtained using questionnaires that are based on simple Likert-type rating scales.

compared to the cost of providing educational services “in district” with the addition of specialized technical assistance consultation. Our findings have demonstrated that by improving and fortifying instructional and behavior support school-based practices, fewer students are referred to out of district programs. This result yields significant cost savings for a public school district which in consequence, allows for better resource allocation at the local level.

FINDINGS

Data from several consultation projects are presented to illustrate the scope of intervention. Figure 1 shows the average number of office discipline referrals issued each day, per month, by a fifth-grade classroom teacher in a

The plan included increased visual monitoring of students by the teacher, designation of positively worded classroom “rules,” formation of classroom teams that received “points” for adhering to rules, public posting of point earnings, and exchange of points for daily and weekly preference activities. Three months of this intervention was associated with a decrease to 1.4 referrals per week that encompassed 5 students. A third intervention then was added to the classroom-wide protocol. This plan targeted one student who had the highest number of office referrals. He received individualized instructional support during “high demand” activities that appeared to set the occasion for disruptive behaviors, a self-monitoring chart to document prosocial responses, increased teacher praise, noncontingent “breaks” from academic assignments, and access to preferred activities contingent upon accurate self-monitoring. This intervention eliminated office referrals with the

public elementary school (Putnam, Luiselli, Handler, & Jefferson, 2000). During the baseline phase the teacher adhered to prevailing school discipline policies, resulting in an average of 3.2 referrals per week among 13 students. A classroom intervention plan subsequently was developed by a consultant and the teacher. student and overall, teacher referrals dropped to one every 3-4 weeks applicable to only 2 students.

Figure 2 depicts presents the percent of recording intervals during which student engagement and disruptive behavior occurred in fifth-grade classroom at an inner city public school. Following training of the classroom teacher by a consultant, student academic engagement increased 76% and student disruptive behavior decreased by 69%.

Data shown in Figure 3 represent the average number of student suspensions each day at one school in an urban community featuring a large proportion of single-parent households. Suspended students often were left alone at home or found in the community without supervision. A whole-school intervention that emphasized positive reinforcement by classroom teachers and in-school alternatives to suspension

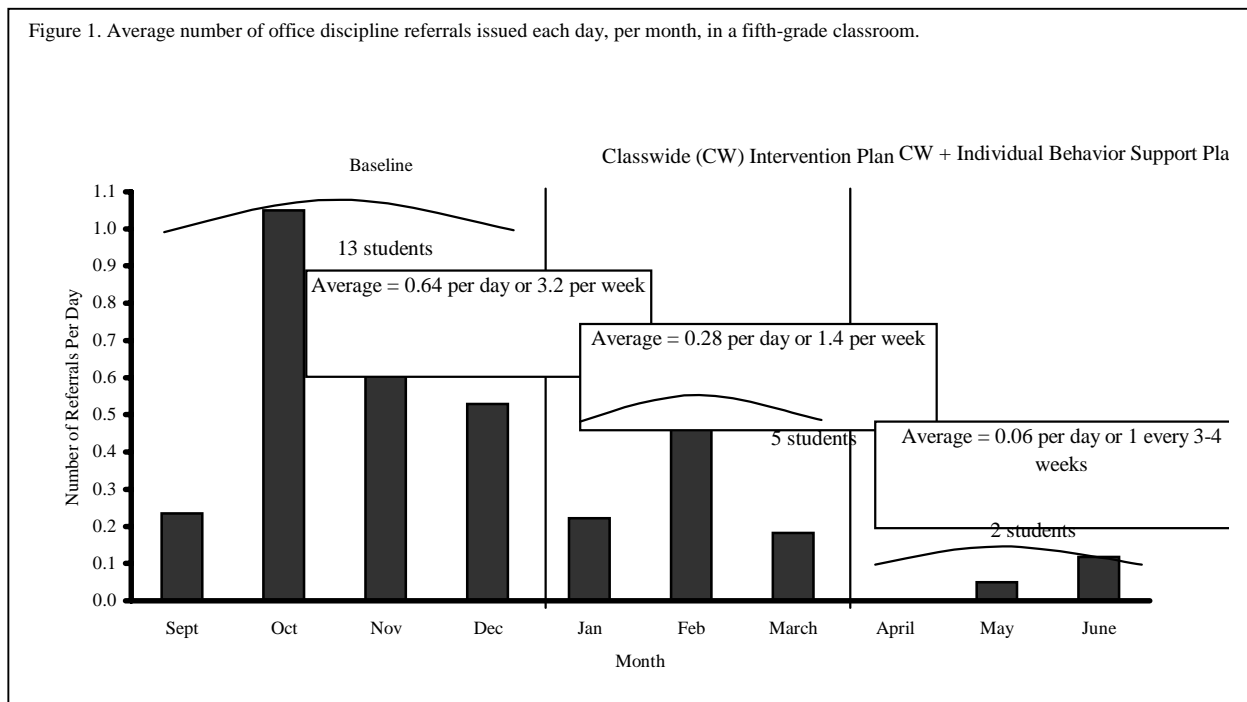


Figure 2. Percent of recording intervals of student academic engagement and disruptive behavior in a fifth-grade classroom.

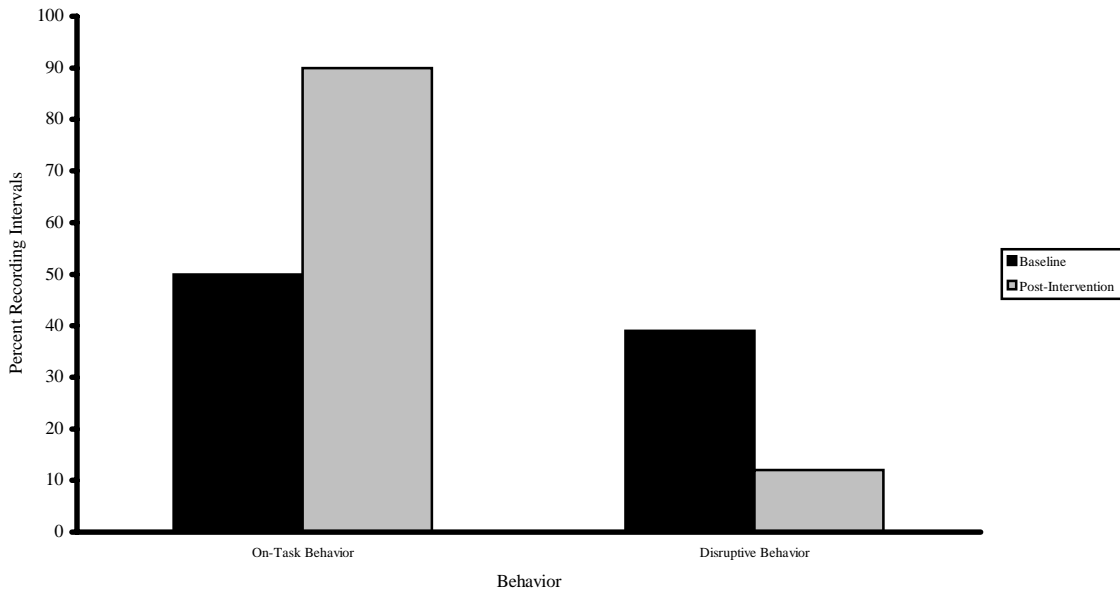
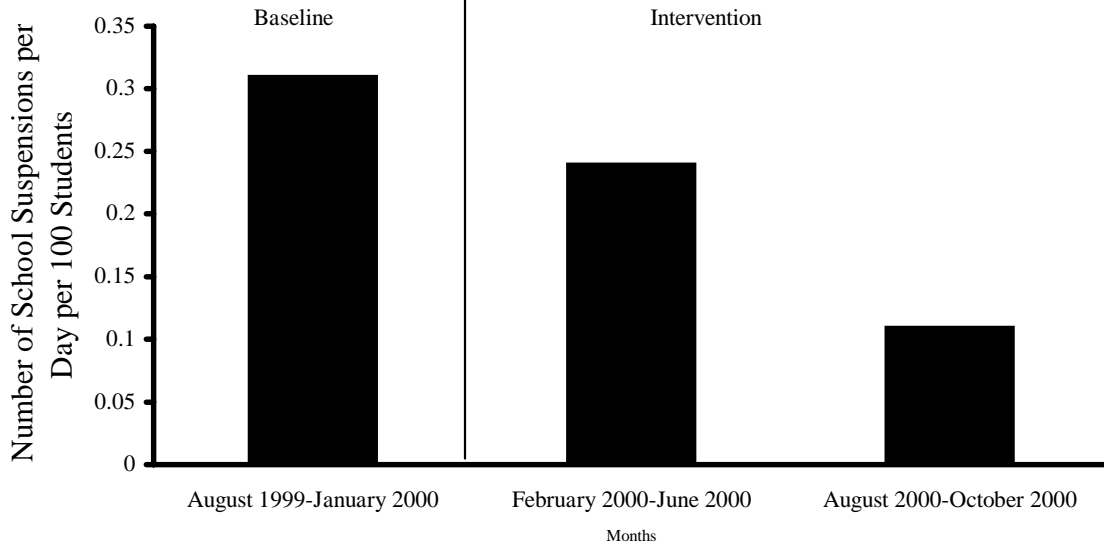


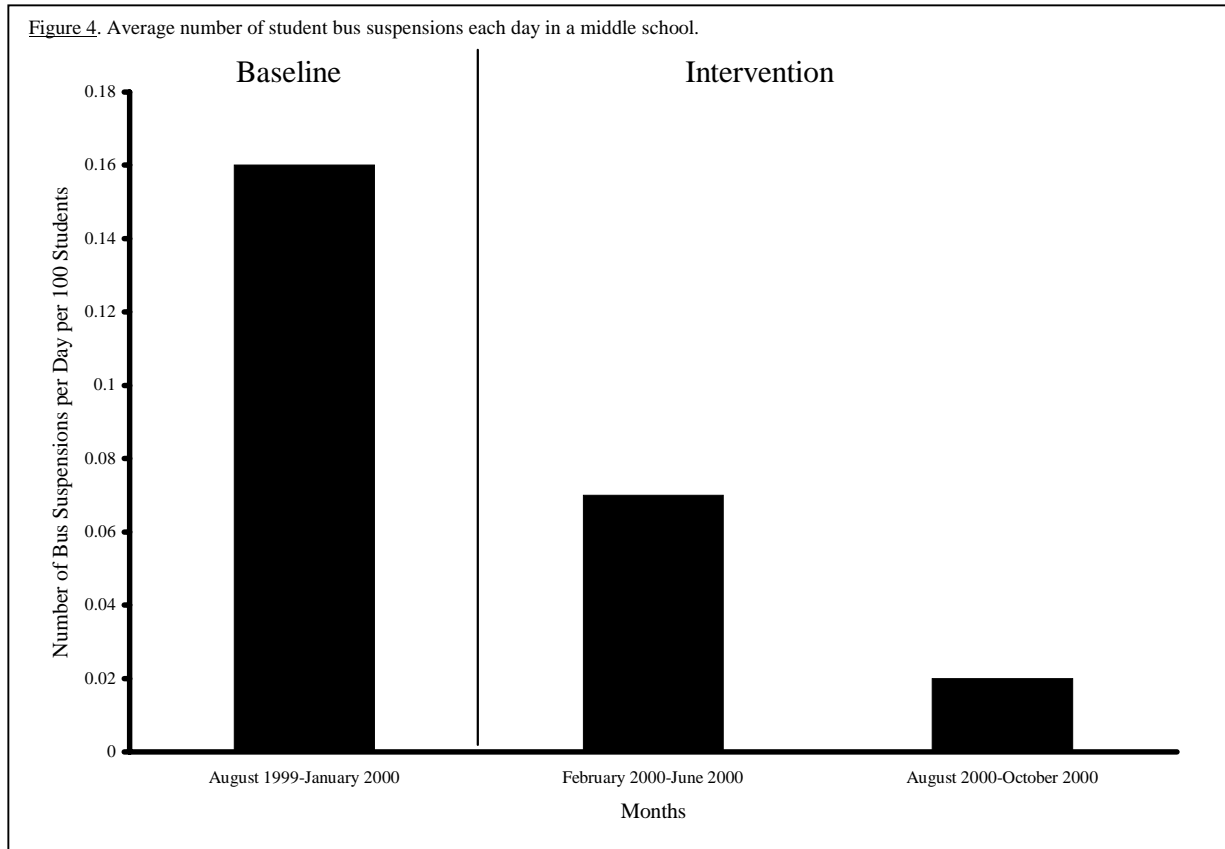
Figure 3. Average number of student school suspensions each day in a middle school.



was rapidly effective, resulting in a 62% decrease.

Finally, in Figure 4 we show the average number of bus suspensions per day for all students attending the same school identified in Figure 3. The suspensions were invoked when students exhibited disruptive, at-risk, and dangerous behaviors during transportation to and

from school. The intervention included training bus drivers to implement a “caught being good” supervision procedure, a method of token reinforcement where students received “slips” for exemplary bus riding. The “slips” were entered in a school-based lottery that earned “prizes,” privileges, and recognition. As seen in Figure 2, bus suspensions were reduced by 85%.



Discussion

This article reviewed briefly a consultation model to improve discipline practices in public schools, with an emphasis on whole-school and district-wide behavioral intervention. Although consultation frequently is sought for students who display seriously challenging behaviors, we focus equally on those who are at-risk (secondary prevention) and who have not evinced problems (primary prevention). In keeping with contemporary standards (Sugai & Horner, 1999), this large scale consultation encourages preventive approaches toward school discipline through a systems-integrated methodology that is positively oriented, outcome focused, and empirically validated.

Beyond the obvious requisite of knowledge and technical competencies possessed by consultants, effective service delivery is governed by several other factors. Earlier, we discussed the organization of school-based educational teams and indeed, this

component of consultation is crucial in utilizing consultation successfully. A cohesive team expedites the process of defining the objectives of consultation, recruiting key staff for administrative roles, reviewing prevalent discipline policies, selecting dependent measures for outcome monitoring, and implementing intervention recommendations. Because consultants are only present periodically in a school building, the educational team must assume responsibility for the day-to-day oversight of behavior support practices. Careful definition of roles, combined with a predetermined schedule of consultation visits, ensures coordination among school personnel.

The interpersonal skills and conduct of a consultant also contribute importantly to program implementation. Although there are many points of emphasis, we would highlight that interactions with consultees are most effective when a consultant (1) avoids technical jargon in verbal or written communications, (2) accepts school staff as the "local experts" governing decision making, (3) responds to

inquiries (e.g., telephone calls, e-mails, faxes) in a timely manner, (4) demonstrates sensitivity to the cultural and ethnic diversity comprising a school population, and (5) maintains a positive, supportive, and facilitative attitude.

The dependent measures used in consultation are intended to enhance intervention selection, assess implementation process, evaluate efficacy, and refine strategies. Individual student data (e.g., academic gains, frequency of challenging behaviors), whole-school indices (e.g., office referrals, suspensions), and district-wide markers (e.g., expenditure costs) are integrated to reveal the most comprehensive profile of discipline practices and their effectiveness. In the initial stages of consultation, many school personnel are unfamiliar with the purpose, methodology, and application of data collection procedures. A typical responsibility for a consultant is to acquaint staff with the advantages of objective measurement and empirical evaluation. As such, multi-source data are shared routinely with educational teams through distribution of written progress summaries and outcome sharing meetings at which time graphs and other quantified measures are presented.

As our consultation and other “constructive discipline” programs continue to evolve, many questions remain unanswered. What, for example, are the long-term effects of systematic behavior support consultation to public schools? Presently, our own work, and that of other investigators, suggests that improved discipline practices can lead to success that is sustained over many school years (Nakasato, 2000; Luiselli, Putnam, & Sunderland, 2001; Taylor-Greene & Kartub, 2000). A second concern is to maintain focus on the *prevention* of discipline problems and to gather data longitudinally that justifies the desirable effects from such intervention. Finally, how do we best train behavior analysts to deliver consultation services to public schools? Like technical assistance itself, we believe that the training of consultants also should undergo empirical evaluation that reveals the most efficacious approach toward personnel

preparation and produces the most competent professionals.

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TREATMENT INTEGRITY: SOME PERSISTENT CONCERNS AND SOME NEW PERSPECTIVES

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Treatment integrity, or procedural fidelity measures, is a critical yet often overlooked aspect of clinical interventions, research endeavors, and staff training within the field of applied behavior analysis. Yet, a relative paucity of data exists in the literature on treatment integrity. Treatment integrity typically refers to the correct delivery of the independent variable (e.g., therapist prompts or reinforcer delivery) or to staff training issues concerning the delivery of the independent variable (Peterson, Homer, & Wonderlich, 1982).

Roughly 20 years ago, two conceptual papers on treatment integrity were published (Peterson et al., 1982; Yeaton & Sechrest, 1981). Gresham, Ganslie, and Noell (1993) more recently reported on treatment integrity issues for articles in the *Journal of Applied Behavior Analysis* (JABA) with children as the participants. Our paper seeks to update practitioners and researchers on the current status of treatment integrity. The paper is divided into four sections. In Section 1, data from a sample of the first 5 years of JABA and the most recent 5 years of JABA will be reported. In Section 2, a brief review of the literature will be provided with a special emphasis on treatment integrity as a research issue in its own right. In Section 3, an overview of a treatment integrity model developed at Bancroft NeuroHealth will be discussed. Finally, in Section 4, a summary and interpretation will be provided, with a cautionary, yet optimistic prescription offered.

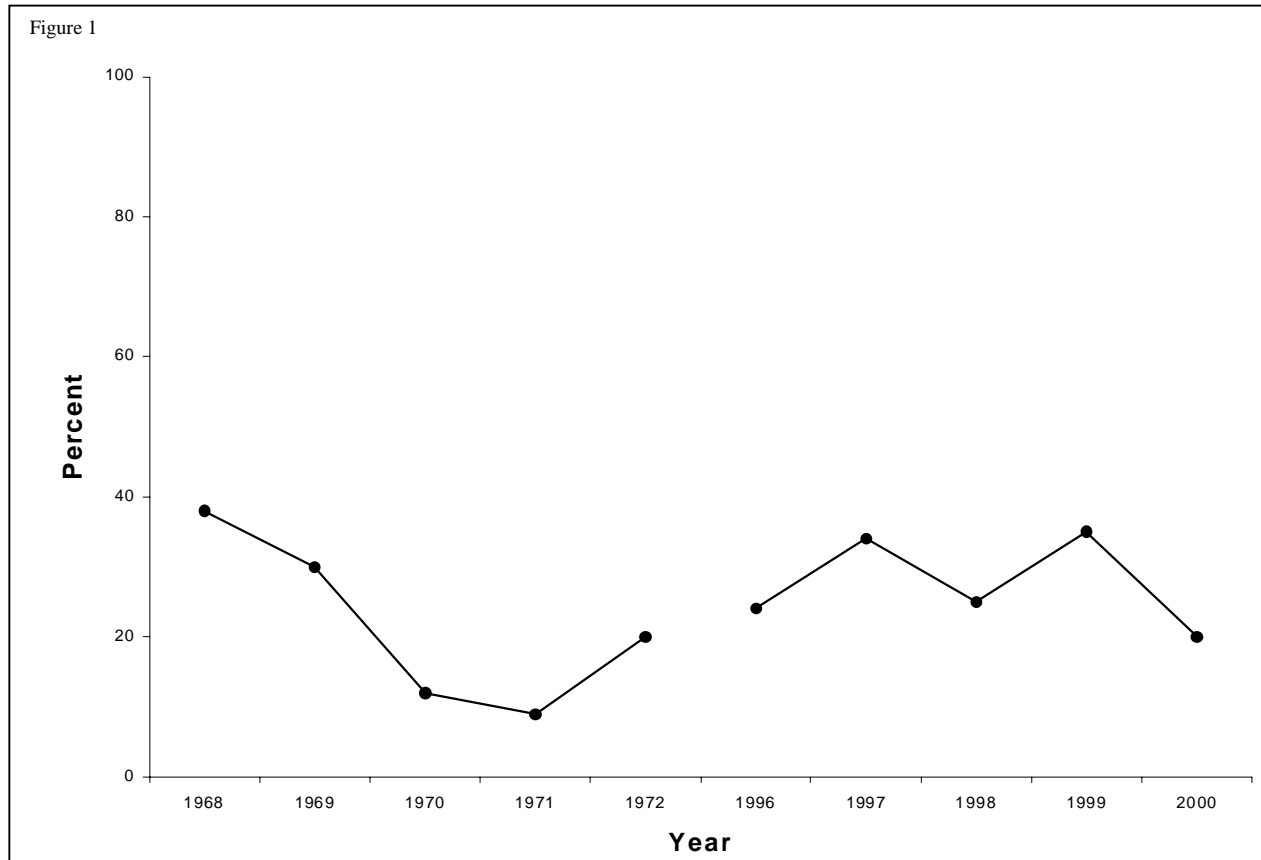
REVIEW OF JABA

Two observers independently rated a selection of JABA articles. The selection included the first five years (Volume 1 No.1 through Volume 5 No. 4) and the last five years (Volume 29 No.1 through Volume 33 No. 4). The primary observer rated every year and the reliability observer rated 3 years (30%). All research articles and reports were included in the

rating. All technical articles, conceptual articles, and book reviews were excluded.

Each research article and report were rated for whether the independent variable in the experiment was measured. This included any article where the author mentioned treatment integrity, independent variable integrity, or that observers collected data on the independent variable. Articles were counted regardless of whether independent variable data were actually reported in the article.

Table 1 presents the results of the review. While the number of articles reporting treatment integrity has increased in the past 5 years, the total number of articles has also correspondingly increased. The percentage of articles mentioning treatment integrity is presented in Figure 1. The data indicate that over the past three decades there has not been an increase in the percentage of articles that include a measure of the independent variable. These data are slightly different from the results reported by Peterson et al. (1982), possibly due to a change in operational definition. Also, in the second reporting period, JABA distinguished between full-length articles and reports. It is possible that treatment integrity issues are omitted in reports due to space limitations.



CURRENT RESEARCH ON TREATMENT INTEGRITY

While the data in the previous section suggests that treatment integrity is reported in approximately the same percentage of articles in JABA from 1996 – 2000 as it was from 1968 – 1972, significant changes in the approach to treatment integrity have occurred. That is, recent research on treatment integrity represents a new, more pragmatic, and data-based approach. For example, Northup et al. (1994) closely monitored treatment integrity for local school staff responsible for the implementation of behavioral interventions. They found that treatment integrity varied widely across individuals, yet treatment outcomes were quite successful.

Others have examined the training of therapists in functional analysis methodology (Iwata et al., 2000), procedures to increase treatment integrity among elementary school teachers (Witt, Noell, LaFleur, & Mortenson,

1997), and a comparison of strategies to maintain treatment integrity (Noell et al., 2000). Noell et al. found that treatment integrity quickly decreased to low levels following one day of training. Treatment integrity increased as a result of follow-up meetings, performance feedback, or, for one teacher, a reminder that the parents of the child and the principal would soon be attending a follow-up meeting.

In a seminal article, Vollmer, Roane, Ringdahl, and Marcus (1999) specifically manipulated “failures” in treatment integrity. That is, sometimes the reinforcer was delivered less than 100% of the time and sometimes the problem behavior was not placed on extinction 100% of the time. In a typical therapeutic setting, appropriate behaviors are reinforced 100% of the time, whereas problem behaviors are never reinforced. Vollmer et al. found that treatment was successful, even if the treatment was not correctly implemented 100% of the time. They also found that treatment gains could be quickly recovered following periods of time when the treatment was not implemented

effectively, suggesting that a bias existed towards behaving appropriately.

Taken together, these results suggest that treatment integrity has become a topic of interest in its own right in the past 10 years. The literature also suggests an increasing awareness in the field of treatment integrity issues and issues of maintenance and generalization of treatment gains. In the next section, the Bancroft NeuroHealth model of treatment integrity is presented.

THE BANCROFT NEUROHEALTH MODEL OF TREATMENT INTEGRITY

Assessment and maintenance of treatment integrity is a critical component of service delivery at Bancroft NeuroHealth. Most importantly, ongoing measurement of treatment integrity allows the interdisciplinary team to identify if treatment failure is due to an ineffective treatment or to poor integrity (Peterson et al., 1982; Yeaton & Sechrest, 1981). This information guides the team on how it should proceed. If the treatment is implemented incorrectly, data derived from supervisor observations are analyzed and interpreted to identify training needs. If the treatment is implemented accurately, subsequent changes in the independent variable are systematically introduced. Another advantage of measuring treatment integrity is to limit “therapist drift” when an effective treatment has been established. Therapist drift occurs when a treatment agent gradually alters treatment from the prescribed regimen. The period of observation by the employee’s supervisor facilitates the opportunity for the employee to provide suggestions regarding the treatment protocol and to receive performance feedback. Ongoing measurement of treatment integrity also ensures that supervisors are on site for a minimum daily duration of supervision and training.

At Bancroft NeuroHealth, treatment integrity is maintained by a system that consists of frequent supervisor observations, feedback and reinforcement for accuracy of treatment implementation, feedback and reinforcement for

the supervisors’ completion of the observations, and participatory management strategies. Each residential supervisor is required to observe the therapist interacting with the person served for a 10-min duration once per week as a checklist is completed. Some components of the treatment protocol may be scored using a partial interval recording method and others as whole interval recording. The percentage of treatment components implemented accurately is calculated, and the therapist is provided with this feedback as the supervisor reviews the checklist. A minimum of 90% accuracy is required or a subsequent assessment must occur immediately. In addition to measurement of the independent variable during these observations, the supervisor also obtains interobserver agreement on data collection of the dependent variable.

Because participatory management strategies have been useful in designing and implementing behavioral technology (Johnson, Welsh, Miller, & Altus, 1991), this type of approach is also facilitated by the Bancroft NeuroHealth model. The supervisor encourages the therapist to provide suggestions about the treatment protocol and the evaluation tool for review by the interdisciplinary team, therefore integrating participatory management strategies. The percentage accuracy of treatment integrity is entered into a database and reviewed weekly by the program director and quarterly at the executive level. Anecdotal data suggest that an integral component of the system affecting completion of integrity checks is that the supervisors receive weekly graphic performance feedback on the percentage of checks submitted to the program director. The behavior of monitoring treatment integrity is at least partially maintained by negative reinforcement contingencies. That is, supervisors who complete 100% of integrity checks for the week receive attenuated work responsibilities the following week.

SUMMARY AND INTERPRETATION

The present paper summarized data on the prevalence of treatment integrity measures for two 5-year periods in JABA, provided a brief overview of some recent advances in treatment

integrity research, and presented a model of treatment integrity currently being implemented at Bancroft NeuroHealth. Several results are quite clear. Treatment integrity measures continue to be reported approximately 25% of the time in JABA. However, there has been a recent upsurge in research involving treatment integrity. The model for treatment integrity being implemented at Bancroft NeuroHealth suggests a sensitivity to these issues at an organizational level.

Previous reviews (Gresham et al., 1993; Peterson et al., 1982; Yeaton & Sechrest, 1981) viewed the low level of reporting of treatment integrity in the literature as problematic. How concerned should we be? Peterson et al. (1982) discuss the potential cost to clinicians in terms of treatments that are effective but appear to be ineffective, or treatments that are ineffective but appear to be effective due to problems with treatment integrity. Is this as telling of a concern as it was 20 years ago? Or, has the advent of functional analysis methodology made our clinical judgments much more sophisticated? Perhaps the more critical concern is not the level of treatment integrity in isolation, but rather the level of treatment integrity and whether a function to the behavior has been determined, among other factors. The results obtained by Vollmer et al. (1999) and Northup et al. (1994) suggest that treatment integrity does not have to be perfect to maintain, or re-establish, behavioral control. This does not mean that treatment integrity is unimportant but rather that as long as protocols are implemented with a fair amount of accuracy, they are likely to succeed. Clearly, this is a fertile area of research. One area for inquiry would involve challenges to treatment integrity at various stages of treatment and in follow-up assessments. That is, are there some critical periods where high treatment integrity is especially important?

Given the growth of the field over the past 20 years, we must be doing something right. Therefore, some of the concerns over the lack of treatment integrity being reported may be unwarranted. Certainly, the most cautious approach would be to always report, or require to be reported by editors, data on treatment

integrity. Again, while the percentage of articles that report treatment integrity has not increased substantially, the mere fact that articles continue to report it, and in some cases, study it, suggests that we as a field are aware of its importance.

Another cautionary note concerning treatment integrity concerns the data being reported. Typical treatment integrity issues concern the number of verbal prompts being delivered, the number of reinforcers delivered, or the duration of some event. Unfortunately, these are just a few of the variables that could be measured. Green and Reid (1996) have demonstrated that it is possible to measure, with a high degree of agreement, whether a client is happy or unhappy. We often assume that tone of voice, facial expression, or other subtle therapist behaviors remain constant. That may not always be the case. Perhaps additional therapist behaviors should be monitored and reported if necessary.

To summarize, it appears that we are indeed concerned with treatment integrity as a field, even though we do not always report it. While it would be nice to always report these data, the trend in JABA suggests that this will not happen. Another conceptual paper on the topic, such as this one, is unlikely to produce those changes. The limited research that has been conducted on treatment integrity actually suggests that even if treatment integrity is not perfect, treatment gains can be maintained. This result may partially be due to the rise in functional analysis methodology. Low or moderate levels of treatment integrity in the absence of a functional analysis may be a prescription for disaster. Moderate levels of treatment integrity combined with a functional analysis appear to be a less problematic situation. Future research should examine "failures" in treatment integrity across a variety of treatments, treatment phases (e.g., early in treatment versus maintenance), and across settings and therapists.

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STIMULUS OVERSELECTIVITY AND GENERATIVE LANGUAGE INSTRUCTION FOR STUDENTS WITH AUTISM: AN ISSUE THAT NEEDS TO BE REVISITED

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Stimulus overselectivity, or the selective responding to narrow or irrelevant cues, may partially account for difficulties that students with autism face with generative language production. A body of literature exists that provides suggestions for its remediation. However, much of the research in this area has been basic in nature, with arbitrary stimuli presented in a discrete trial format. Research questions remain as to what role overselectivity plays in the natural environment. If overselectivity does play a significant role in language production in that setting, procedures need to be developed to evaluate, remediate, and prevent stimulus overselectivity in the natural environment. This article reviews the literature on overselectivity and makes suggestions for future research.

There are several goals that educators and clinicians set for children with autism when teaching them a new skill. The first goal is that the response should be reliably emitted in the presence of the discriminative stimuli. The second is that the skill generalizes to new environments and similar stimuli. At times, the skill is acquired, but does not generalize. For example, a student learning to sort items such as spoons may be able to do so with 100% accuracy in the classroom, but when the task is presented in the cafeteria, responding quickly decreases. Professionals then seek the root of the breakdown.

It is possible that the stimuli that control responding in one environment are not present in the new environment. In the example presented earlier, the items to be sorted are functionally similar (e.g., they are still spoons); however, perhaps the spoons sorted in the classroom are metal while the spoons in the cafeteria are plastic. In this case, the metal, not the shape of the spoon, was the discriminative stimuli for responding. The problem may also lie in the prompting strategy selected. Individuals acquiring new skills are often prompted in order to insure accuracy. For some students, this prompting becomes the discriminative stimulus for responding. Attention is given to the prompting stimulus as opposed to the relevant stimulus. These are examples of stimulus overselectivity; a narrow or irrelevant

component of a complex stimulus gains stimulus control over responding to the exclusion of other stimulus features (Rosenblatt, Bloom, & Koegel, 1995).

OVERSELECTIVE RESPONDING DEFINED

Stimulus overselectivity was first identified in the literature by Lovaas, Schreibman, Koegel, and Rehm (1971). Groups of children with autism, mental retardation (MR) and typical development were trained in a discrimination task involving complex stimuli. The participants with autism required more trials to learn the discrimination than those with MR or typical development. When each of the stimulus components was presented individually, it was revealed that individuals with autism often responded to only one component of the complex stimulus to the exclusion of other stimulus components (Lovaas, et al, 1971).

A number of studies have replicated the Lovaas et al. (1971) finding that children with autism often selectively respond to a limited number of stimuli in the environment – however, this phenomenon has also been seen in young, typically developing children, individuals with severe and profound MR, and individuals with learning disabilities (Bailey, 1981; Lovaas, Koegel, & Schreibman, 1979). Wilhelm and Lovaas (1976) found that groups of

children with lower IQs were more likely to respond to narrow cues than those with higher IQs. Rincover and Ducharme (1987) also found that developmental level was associated with overselective responding. These studies indicated that the lower the individual's developmental level, regardless of diagnosis, the more likely overselective responding will be observed. Gersten (1983) found that as chronological age increased, however, stimulus overselectivity decreased for participants with autism, MR, and typical development (this was independent of developmental level).

Individuals who display overselectivity often attend to preferred sensory modalities (e.g., auditory versus visual) to the exclusion of other modalities. Kolko, Anderson, and Campbell (1980) assessed sensory preference for 5 children with autism and 5 children with typical development. A discrimination was then taught involving complex auditory and visual stimuli. For the participants with autism, stimulus overselectivity was associated with preferences in sensory modality (e.g., if the participant preferred auditory stimuli, that participant would show increased correct responding to auditory stimuli). However, there is no evidence that students with autism as a group prefer any one sensory modality to the exclusion of others (Hedbring & Newsom, 1985; Kolko et al., 1980; Lovaas et al., 1979; Schreibman, 1975). Burke and Cerniglia (1990) taught a combination of visual and verbal discriminations to four students with autism. As the stimuli became more complex, the participants' correct responding decreased.

The quality of the stimuli seems to also affect overselective responding as well. Schreibman, Kohlenberg, and Britten (1986) assessed the responding of 10 participants with autism to auditory stimuli. Their responding was compared to 6 typically developing peers. The participants with autism and echolalia were likely to selectively respond to alterations in intonation; participants with autism and no speech were likely to selectively respond to phonological differences. Half of the typically developing participants showed no overselective responding; those who did, responded to

phonological alterations of the stimuli (Schreibman, Kohlenberg, & Britten, 1986). Anderson and Rincover (1982) assessed how stimulus dimensions affect discrimination on visual tasks. Participants with autism and typical development were taught to discriminate between a circle pattern, a random pattern of dots, and a blank card. The size of the dots was then altered and discrimination was assessed. Larger dots led to more overselective responding for individuals with autism than smaller dots (Anderson & Rincover, 1982). These studies suggest that it is the qualities and complexity of the stimuli that engender overselective responding, and that these qualities are student- and sometimes situation-specific.

OVERSELECTIVITY AND ITS EFFECT ON GENERATIVE LANGUAGE

Stimulus overselectivity has been hypothesized to contribute to difficulties with the production of generative language as well. Teaching communicative responses that serve the same function as problem behavior have been linked to decreases in problem behavior – decreases that generalize to novel environments and people (Carr & Durand, 1985; Durand & Carr, 1992). However, selective attention to narrow and irrelevant stimuli may interfere with the acquisition of socially appropriate communicative responses. For most children, especially children with autism, discrimination becomes more difficult when more stimulus components are introduced (Burke & Cerniglia, 1990). The stimuli that control our communicative responses are extremely complex. In order to actively participate in a communicative exchange, an individual must be able to attend to several complex stimuli presented both simultaneously and in succession (Dunlap, Koegel, & Burke, 1981). The child must be able to discriminate facial expression, intonation, what words are spoken, and other stimuli in order to develop a relevant response. If the child is attending to only one of these dimensions, her/his communicative competence will be severely limited. Selective responding, especially to cues with several components, may result in the child missing relevant cues essential to identifying the correct response. In addition,

missing important stimuli due to responding only to preferred stimuli early in development may lead to more and more deficits as the child becomes older. That is, prerequisite responses necessary for social and language competency may be absent from the child's repertoire, widening the gap and affecting later learning (Rosenblatt, et al., 1995). However, it is unclear why this affects students with autism more profoundly than those with MR and typical development. As time passes, it is likely that these difficulties are compounded, leading to further delays in language production (Rosenblatt, et al., 1995). Therefore, it is crucial that stimulus overselectivity be examined when developing communication interventions for students with autism.

REMEDICATION OF OVERSELECTIVE RESPONDING

Extra-Stimulus Prompts

The most common method for teaching generative language is the use of an errorless learning prompting strategy (e.g., least prompts). Often, this takes the form of a verbal prompt (e.g., "if you want a cookie, hand me the cookie card"). However, there has been some debate as to which type of prompting sequence is the best, or if these types of prompts should be used at all. Yamamoto and Mochizuki (1988) found that modeled responses generated very little discrimination between stimulus items. Simic and Bucher (1980) found that generalization of verbal mands was not established when the participant was taught by imitation. The authors suggested that the participant's response is not a mand at all, but a tact to the cue (i.e., the participant is describing the mand by the therapist).

Schreibman (1975) attributed lowered discrimination to the presence of an "extra-stimulus prompt," which is an additional prompt presented in conjunction with the stimulus being trained (e.g., pointing to a bottle while presenting the discriminative stimulus "Go pick up the bottle"). This extra-stimulus prompt is expected to increase the saliency of the discriminative stimulus. However, when overselective responding is observed, the prompt

becomes the discriminative stimulus to the exclusion of the stimulus being trained (Schreibman, 1975). Instead of facilitating responding, in some cases extra-stimulus prompting may lead to decrements in responding. Koegel and Rincover (1976) found that extra-stimulus prompts were less effective than trial-and-error learning for teaching discriminations across multiple stimulus dimensions for both participants with autism and typical development. Therefore, many teachers and clinicians attempt to avoid the use of extra-stimulus prompts when attempting to teach discriminations to students with autism.

However, Matson, et al. (1993) found that when extra-stimulus prompts are used in a component treatment package (i.e., one that teaches discriminations of multiple stimulus dimensions), overselectivity to the prompt is less of an issue. Burke and Cerniglia (1990) also found that teaching students to attend to multiple component stimuli was more effective in teaching generalized responding than attempting to teach single components individually. Therefore, it may not be the prompt itself that is responsible for the students' overselectivity, but the way in which it is used that may contribute to overselective responding. This opens the door to several research questions. For example, will more selective responding be observed in a discrete trial format (where stimuli are presented in a controlled environment, often one at a time) as opposed to an incidental teaching situation (where multiple component stimuli are present during teaching situations), even though the stimuli, reinforcers and prompting strategies are constant across both settings?

Within-Stimulus/Distinctive Feature Prompting

Overselectivity may account for lack of generalization of skills as well as difficulties with observational learning (Dunlap et al., 1981; Lovaas et al., 1979). Exaggeration of a relevant stimulus components, referred to as within-stimulus prompting, has been shown to be effective in drawing the student's attention to relevant component stimuli. For example, a child learning a discrimination between POT and HOT may be presented with flashcards

where the P or H are much larger than the other letters. As the discrimination is learned, the size of the P or H are gradually reduced until they are the same size as the rest of the letters on the card. Schreibman (1975) compared within-stimulus prompting to extra-stimulus prompting for teaching both auditory and visual discriminations. Regardless of sensory modality, within-stimulus prompts were more effective in teaching discriminations to students with autism. Extra-stimulus prompts were often detrimental to the maintenance of previously learned discriminations. It is hypothesized that the use of within-stimulus prompts draws the learner's attention to stimuli that will always be present when s/he needs to discriminate between that stimuli and others in the environment, whereas extra-stimulus prompts involve the introduction of stimuli, which will be removed when the student reaches the criterion for discrimination. Therefore, the decrement in responding when extra-stimulus prompts are used is actually another example of overselective responding – that is, that responding did not generalize in the presence of other types of cues.

Thinning the Schedule of Reinforcement

Thinning the schedule of reinforcement also has been shown to reduce overselective responding. Koegel, et al. (1979) trained 12 students with autism in a discrimination task involving complex visual stimuli. Once the child reached the criterion for correct responding, the schedule was then successively thinned to a variable ratio (VR) schedule. Tests of the component stimuli showed that students showed less overselective responding when exposed to a thinner schedule as opposed to a continuous reinforcement schedule (CRF). Koegel, Schreibman, Britten, and Laitinen (1979) hypothesized that since not all of the correct responses were being reinforced, students were forced to attend to more of the component stimuli in order to obtain reinforcement.

Teaching Multiple-Cue Discriminations

Inherent to the definition of stimulus overselectivity is that the individual responds to selected cues. Teaching discriminations that involve responding to multiple cues but not to components of the cues presented individually may decrease the amount of overselectivity that an individual exhibits. This is achieved by teaching conditional discriminations (that is, teaching the child to emit a response to stimuli only in certain conditions). By teaching the discrimination in context, it is hypothesized that responding will be under stimulus control of the multiple cues that are available, rather than the narrow cues to which the individual is currently responding (Schreibman & Koegel, 1982).

Huguenin (2000) investigated the effects of pre-training single stimulus components on overselective responding by three adolescents with MR. Participants that were exposed to compound stimuli in which one of the components had a prior reinforcement history tended to overselectively respond to those stimuli. This selective responding became more apparent as the individuals were exposed to repeated trials (Huguenin, 2000). This seems to indicate that in order for multiple-cue discrimination training to be effective, individual stimulus discriminations should not be taught individually initially; instead, all stimulus components should be present from the beginning of training to decrease or avoid overselective responding.

FUTURE DIRECTIONS FOR RESEARCH AND APPLICATIONS

Although procedures have been developed that examine the best way to reduce overselectivity for students with autism, there are very few articles addressing how to avoid overselective responding when teaching functional communicative responses. To date, in-vivo studies that specifically address stimulus overselectivity as it relates to language acquisition have been sporadic at best. Therefore, procedures that attempt to teach the child with autism to attend to multiple stimulus dimensions when learning generative

communicative strategies must be developed and examined.

The bulk of the research on stimulus overselectivity was conducted in the 1970's and 1980's, which may lead researchers interested in the topic to believe that questions surrounding overselectivity have been adequately addressed. This would be a false conclusion. Many research questions exist concerning how overselectivity affects responding by students with autism, especially with regard to teaching generative communicative responses in the natural environment.

Most of the research conducted on both overselective responding, as well as remediation of difficulties with overselective responding for students with autism, has been conducted in a discrete trial format with arbitrary stimuli. An examination of the articles reviewed for this manuscript revealed that nine of the articles assessed overselectivity in a discrete trial format utilizing arbitrary stimuli (cf. Dube & McIlvane, 1999), and three utilized functional stimuli but in a discrete trial format (cf. Burke & Cerniglia, 1990). With the exception of Matson, et al. (1993), overselectivity has not been examined in more naturalistic environments, such as incidental teaching environments. Although stimulus overselectivity has the potential to affect response acquisition, generalization, and maintenance of adaptive skills for children with autism, very little research has been conducted in applied, naturalistic settings. Although anecdotal evidence does exist to the contrary, the lack of empirical examples of overselectivity in applied environments may lead individuals to assume that overselective responding is merely an artifact of discrete trial teaching itself. More research needs to be conducted in more applied and naturalistic environments to determine what effect stimulus overselectivity has over responding in the "real-world" of children with autism.

Increased knowledge of how children with autism interact with their environment has the potential to affect how communicative responses are evaluated and taught. For example, the Picture Exchange Communication

System (PECS; Bondy & Frost, 1994) avoids the use of verbal prompts in the first stages of training to reduce the likelihood that responding will come under the stimulus control of the verbal prompts as opposed to the reinforcing stimulus. Gestural and modeled prompts are used to facilitate response acquisition. However, it is interesting to note that there is no available evidence that overselectivity is particular to any sensory modality (Hedbring & Newsom, 1985; Lovaas et al., 1979; Schreibman, 1975). If stimulus overselectivity is shown to be an issue for naturalistic language teaching, procedures for testing individual sensory preference and remediation strategies based upon these results should also be developed and scrutinized. More research in the assessment of overselective responding may result in individualized teaching plans based upon sensory and stimuli preferences.

Another area of research may be to examine the role that establishing operations play in overselective responding. Establishing operations, as defined by Michael (1983), are environmental events that make a reinforcer more potent, and in turn make a response more probable. These differ from discriminative stimuli in that the stimuli are more general – hence, more complex (Michael, 1983). For example, a student who previously did not interact with a toy may exhibit communicative behavior that serves the function of obtaining that toy (e.g., pointing or yelling) when s/he sees another student playing with that same toy. Overselective responding may have some effect on what becomes an establishing operation for generative language production. For example, Joint Action Routines (Snyder-McLean, Solomonson, McLean, & Sack, 1984) are often used as an intervention for eliciting generative language for children with autism. Routines are built around a certain activity (such as playing with a toy); the therapist then "sabotages" the routine in some way (for example, replacing the toy with a kitchen item) in an attempt to elicit some sort of communicative response. In effect, the therapist has attempted to set up an establishing operation in which a communicative response may be reinforced with the presentation of the correct toy. However, if the

student was responding to one dimension of the toy (for example, a shiny bumper on a firetruck), and the novel stimulus has a similar dimension (such as a shiny steel saucepan), the expected communicative response may not occur. In actuality, no establishing operation was created. How does this affect the therapist's response? How should this problem be assessed and remediated? These are questions that need to be asked, as well as investigated.

Overselective responding for individuals with autism has the potential to affect the acquisition of basic skills, especially language acquisition. There is an extensive body of literature that has defined what overselective responding is and is not, and provided suggestions for remediation. This literature has far-reaching implications as to how we program instruction for students with autism. However, more research is needed in more naturalistic and applied settings to determine the true effect that stimulus overselectivity has on the day-to-day functioning of individuals with autism.

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INCLUSION: INFORMATION FOR SCHOOL ADMINISTRATORS

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WHAT IS INCLUSION?

While definitions vary, inclusion (sometimes referred to as full inclusion) usually refers to the placement of students with disabilities in a regular (general education) classroom, with all or most special services provided in that classroom. Here are some other aspects of the definition that you may encounter:

Home school

Students with disabilities attend the school that they would attend if they did not have a disability.

Natural proportions

Students with disabilities are present in the same proportions that are found in the general population; large numbers of students with disabilities should not be ‘clumped’ into one classroom.

Age-appropriate

Students with disabilities are placed in classes with other students of about the same age, not the same developmental level.

Supports and services

Students receive special educational services, and have access to appropriate supports, in the general education classroom; students are not ‘dumped’ into a regular classroom without appropriate help. Supports may also be necessary for the classroom teacher, including staff development time for training and planning, team teaching with the special educator, and collaborative consultation with special education staff, behavioral consultants, school psychologists, or other specialists.

HOW DOES INCLUSION DIFFER FROM MAINSTREAMING?

Mainstreaming implies that the student should be ready for the general education classroom before being placed there. For example, a student with a disability might attend a special class until his/her skills are advanced enough to allow success in the general education classroom. *Inclusion* implies that the student has a right to be in the general education classroom, and that the classroom should be modified and made ready for the student.

Does the law mandate inclusion?

What IDEA (the ‘special education’ law) actually says is that students with disabilities must be educated in the regular classroom with supplementary aids and services to the maximum extent appropriate. Supplementary services may include resource room and itinerant instruction. However, a full continuum of services, including special classes, separate schools, and residential programs, must be available if education in regular classes cannot be achieved satisfactorily. The courts have interpreted satisfactory performance as making more than minimal progress. In addition, education is broadly defined as including social as well as academic outcomes.

What services and supports are associated with inclusion?

Each student identified as having a disability will have an Individualized Education Plan (IEP) that will spell out what services they will receive, what their goals are, and how their progress will be evaluated. The IEP is written by a team that includes the parent, the general education teacher, the student if appropriate, and the special education staff, administration, and other specialists. During the IEP meeting, you will discuss whether the student will receive all services within the general education classroom, or if any services are needed that require the

student to be removed from the classroom. The goals for the student will be developed and the techniques for teaching and evaluating progress will be outlined. Goals should include social and behavioral outcomes as well as academic ones. It is important to remember that the goals and services depend on the student's individual needs, not their disability label. In addition, any student, regardless of label, who demonstrates behaviors that interfere with their own learning or the learning of peers, should have a Functional Behavioral Assessment (FBA) and a Behavior Improvement Plan (BIP) developed and implemented.

Positive behavioral interventions may be implemented by the teacher with consultative support or may require a paraprofessional in the classroom. Paraprofessionals should always be trained and supervised by qualified professionals, especially when implementing behavior plans and collecting data that will be used to determine the effectiveness of an intervention. If documentation that a BIP was properly implemented and monitored is not kept, a school or district may have difficulty down the line during a hearing or lawsuit.

Inclusive classrooms often use collaborative learning techniques such as cooperative learning, active learning techniques such as learning centers and the use of manipulatives. Alternative assessments such as portfolios and performance-based assessment are also frequently employed. In addition, whatever modifications are necessary, including alternative formats (such as Braille or large print texts, books on tape, etc.), assistive technology, special instruction, therapies, behavioral supports, and so on will be incorporated into the student's program. Again, the services provided do not depend on the student's disability label, but on what they need.

What does the research say about the outcomes of inclusion for students with disabilities?

Outcomes for students with moderate to severe disabilities in inclusive settings (with appropriate services and supports) have been found to be positive with respect to both

academic and social arenas. Students spend more time on academic skills and do at least equally well on standardized tests. They may, however, spend less time in the community and on vocational skills. Students have more social interactions, initiate interactions more frequently, and show an increase in independence. However, inclusion does not guarantee that students will make friends. Further structured interactions and instruction in social skills may also be necessary.

Outcomes for students with mild disabilities (such as learning disabilities) are more mixed. Some research shows better academic progress for inclusion, some shows better academic progress with a resource room (pull out) model. Inclusion exposes students to broader academic content, and students may benefit from higher expectations. However, if appropriate modifications and services are not provided, students fall behind. There have been no comparisons of social outcomes for students with mild disabilities. However, students with learning disabilities who are fully included do not differ from their classmates in motivation, attitude toward school, or self-concept.

WHAT DOES THE RESEARCH SAY ABOUT THE OUTCOMES OF INCLUSION FOR CLASSMATES WITHOUT DISABILITIES?

A well-designed inclusion program can be beneficial for the classmates as well as for the students with disabilities themselves. Most research shows no negative effects of inclusion on the achievement of the non-labeled peers. In some cases, the changes in the curriculum benefited other students, especially the low achievers. (High achieving students may require additional modifications in order to continue to progress rapidly.) In the few cases where achievement was lower in the inclusive class, it was for one of two reasons: the included student had extremely disruptive behavior that was not effectively controlled, or there were very many students with disabilities (about 50% of the class). This again underscores the importance of providing appropriate services and supports, especially behavioral interventions, whenever a

student with disabilities is included in general education.

It is important to evaluate the outcomes of inclusion objectively. Teachers who were interviewed after having a student with a disability in class were concerned about loss of instructional time and slowing the pace, but achievement testing indicated no losses in learning. In addition, the effects of actually including students with disabilities should be separated from the effects of changes in the curriculum. One study found changes in achievement level after a curriculum change to support inclusion (with average and low achievers benefiting and high achievers making less progress than formerly), but no changes as a result of actually having students with disabilities in class. Social outcomes for the classmates of students with disabilities have also been positive, teaching compassion and acceptance of people with disabilities.

WHAT PROFESSIONALS CAN PROVIDE SERVICES AND SUPPORTS IN AN INCLUSION PROGRAM?

Start by looking at professional staff members you may already have. As you move to a more inclusive system, special education teachers and paraprofessionals may have more time to consult or team teach with general educators. Remember, though, that inclusion is *not* a way to save money on staff salaries—you will not be eliminating teachers, just changing their roles. Additional support staff such as school counselors, social workers, and

psychologists, learning disabilities consultants and behavior specialists may be able to provide services as well. Possible services include assessment (both traditional and FBA), direct intervention for students (implementing BIPs, providing social skills training, and counseling), and indirect intervention (training for teachers and paraprofessionals, supervision, and consultative support).

Outside professionals may be called in, especially when a student's behavior is not responding to interventions. A behavior consultant specialist can complete a more thorough Functional Behavioral Assessment and Analysis, develop a behavior plan, train teachers and paraprofessionals to implement the plan and collect data, and monitor implementation, troubleshooting until the program is running smoothly and effectively.

Three good resources for implementing inclusion

- Bunch, G., & Valeo, A. (1997). *Inclusion: Recent research*. Toronto, Canada: Inclusion Press. This book is a current summary of research on inclusion, including outcomes and strategies.
- Stainback, S., & Stainback, W. (1992). *Curriculum considerations in inclusive classrooms: Facilitating learning for all students*. Baltimore, MD: Paul H. Brookes. This book is a helpful resource for teachers and other school personnel who are implementing inclusive schooling.
- Zions, P. (1997). *Inclusion strategies for students with learning and behavior problems: Perspectives, experiences, and best practices*. Austin, TX: Pro-Ed. This book includes "how to" information for schools.

DTT-NET: WHAT IS IT AND HOW DID IT GET STARTED?

Rhonda Miga

In November 1999, I attended a workshop presented by Dr. Vince Carbone and Dr. Patrick McGreevey. It was titled "Teaching Language to Children with Autism." As a parent of a child with autism, we had been implementing a home-based ABA program for almost 3 years. While we were making significant gains academically, we were not progressing with spontaneous language. Dr. Carbone introduced me to Skinner's Functional Analysis of Verbal Behavior. His workshop consisted of how to implement training procedures to enhance verbal behavior through discrete trial teaching, at a more natural pace than we were accustomed using in our already existing ABA program.

I became very excited about incorporating the analysis of verbal behavior into my son's program, only to become quickly frustrated. Consultants that were well versed in this type of teaching were not available without a very long waiting period. If I was going to provide my son with this learning experience, I needed to educate myself. Very early after we first received Zachary's diagnosis of autism, I learned parents could be the best resource for information. Therefore, I felt a need to start a list group that would provide parents and professionals with the opportunity to ask questions and share information about this type of teaching.

"DTT-NET" is not a methodology. "DTT-NET" is an acronym used to describe an Internet list group dedicated to helping parents and professionals working with children with autism. I feel those six letters together, DTT-NET, are loaded with information that is beneficial to anyone interested in finding a way to help children with autism become successful learners.

As a parent, I was able to understand more of what Dr. Carbone was teaching in his workshops after reading Chapter 13 of Dr. Mark Sundberg and Dr. James Partington's book

(1998) "Teaching Language to Children with Autism or Other Developmental Disabilities." According to Drs. Sundberg and Partington, "One of the most complex tasks both parents and professionals face is developing and implementing an effective language intervention for children with autism. Parents and professionals are finding that BOTH Discrete Trial Training (DTT) and Natural Environment Training (NET), together with the help of Skinner's (1957) Functional Analysis of Verbal Behavior to be very effective for children with autism."

DTT-NET list group was designed to discuss the many components of ABA (VB, DTT, NET, etc.) and how they work together to meet the educational needs of children with autism. It is a place where "both" parents and professionals running home (and school) programs can discuss concerns and share their knowledge in a non-adversarial atmosphere. Participants are encouraged to keep their questions and posts positive. Participants are encouraged to ask themselves, "How will this question or answer be beneficial to the educational needs of our children?" If it can't, it does not belong on the DTT-NET list group.

Autism is a very complex diagnosis. To help meet the needs of everyone whose life is touched by autism, it is important for internet list groups to address the specific needs of its audience. If topics are broad, the number of posts a person receives in a given day can be overwhelming. Quality information gets lost and difficult to understand. DTT-NET is aware that both parents and professionals can have challenging days when working with children with autism. Instead of giving parents and professionals a place to "get things off their chest", DTT-NET would like to provide the knowledge and skills needed to make tomorrow a better day for everyone involved, including the child. Participants are encouraged to ask themselves, "How can we improve the child's ability to learn, so we do not see the same

tantrum tomorrow?” “How can we improve our teaching skills, so the child can learn at a quicker pace?” “What can I do to improve my child’s understanding of the world he lives in?” “How can I make learning easier for this child with autism?”

As of Jan 2001, DTT-NET is owned and moderated by Jennifer Godwin an ABA

therapist and consultant (ABAqueen1@cs.com). Jenn works closely with Dr. Vince Carbone; her knowledge and understanding of using the analysis of verbal behavior to help children with autism learn makes her a strong candidate to run a list group of this nature. Currently DTT-NET has over 1000 members and continues to grow daily. For more information or to join, go to www.yahogroups.com .

OVER THE COUNTER SERVICE VERSUS TRAINING AND TREATMENT EFFICACY: WHAT WILL BEHAVIORAL HEALTH REHABILITATION (WRAP-AROUND) PROGRAMS STRIVE TO BE?

Tracey Adkins-Ruff, Joseph D. Cautilli, Karen Clarke and C. A. Thomas

This article is a part of the on-going series of operational, management and consulting issues that appear in developing and running a behavioral health rehabilitation (wrap-around) program. It is recommended that readers begin this series with reading the first article in the first issue of the behavior analyst today (e.g., Cautilli & Clarke, 2000) and work through all of the articles. These articles draw on an organizational behavior management perspective to structure what many have come to see as unstructured at best. Services rendered in the child's home, school and community. Since the first article, we have set out to cover three major objectives: keeping costs low, scheduling in an efficient manner (Cautilli, Rosenwasser, & Clarke, 2000), and enhancing performance of the key players (Cautilli & Santilli-Connor, 2000; Hancock, Cautilli, Clarke, & Rosenwasser, 2000; Thomas & Cautilli, 2000). These objectives often lead to trade-offs between components. For example, the cost of a new supervisor is often a trade-off against the increased performance to the teams under the supervisor's care. It becomes important to recognize that trade-offs in training, education of key personnel, and a process of developing a continuum of care through expertise and specialization instead of simply developing new programs to provide a continuum of care will ultimately prove more efficacious. Additionally "forms" compliance should never replace sound clinical decision-making. Also, the way that BHRP programs build partnerships is important to the smooth functioning of such programs. This paper discusses these issues while examining the direction that BHRP's should not but unfortunately seem to have taken.

THE COSTS VERSES BENEFIT OF COMPETENCY IN PROVIDING A TRUE CONTINUUM OF CARE

The goal of Behavioral Health Rehabilitation Programs (BHRPs) that wish to survive in the current health care environment is to create an agency that fosters a continuous learning environment. Such an environment will increase employee dedication and loyalty, through the use of training to build skills of employees and take an active role in professional development. Thomas & Cautilli, (2000) suggest that such agencies will foster development and promote Behavior Specialist Consultants (BSC), Mobile Therapists (MT) and Therapeutic Staff Support (TSS) who become expert in the treatment of specific issues facing children in their care. This allows the agency to expand their continuum, while increasing the efficacy of their treatment. Pre-service training that focuses on clinical issues likely to be encountered in the field will greatly improve the quality and effectiveness of the services the clinician will provide (Thomas & Cautilli, 2000). These practices will be especially important during the predicted future worker shortages in the mental health field, where potential workers can be particularly "choosy" about their employment opportunities.

While studies have shown that organizations routinely invest as much as 85% of their income in salaries to compensate adequately trained professionals they invest only as much as 1% of income to maintain or improve the skills of their current professionals. Current data suggests that a 30:1 ratio of increase in job performance can be obtained for each investment in training and education of employees. Yet much of the training offered by BHRPs focuses on "paperwork" and "policy" over performance, management, and increasing clinical effectiveness. We suggest that BHRPs should reinvest 3-5% of their gross salaries into professional development for their employees. This money should be targeted for education programs and training in performance enhancement, time management, managerial enhancement, and specific clinical training.

In order to ensure that BHRPs are attracting and retaining the "best" clinicians, training should be linked to employee compensation packages through the use of skill based pay systems. In a skill based pay system employee pay is based on the knowledge and skills that the employee can demonstrate. The skills reflected in this type of plan go beyond the immediate skills required for the current job. This type of reinforcement often motivates

attendance at trainings and in conjunction with adequate supervision can increase the overall efficacy of the clinician. Side effects of such pay systems are dramatic increases in the volume of training demanded by the professional staff. Additionally skill-based pay systems require audits to continually evaluate employee skills to ensure that competencies exist. Regular outcome studies can enhance the program's ability to meet the staff's needs. The costs for these are far outweighed by the benefits to organizations that strive to provide the highest quality of care and efficacy of treatment. Quality programs should continually evaluate training programs.

CONSIDERATIONS IN BUILDING SUCCESSFUL CONSULTATION SYSTEMS

Consultation has been shown to decrease special education referrals (Ponti, Zins, & Granden, 1988). This establishes the BHRPs can be of particular use to the school systems. BHRPs that demonstrate ability to successfully reach shared goals with the school system will have an advantage over BHRPs which do not, especially in the wake of the Kellner decision. In this case the court acknowledged that the ultimate responsibility for children's right to a free and appropriate education rests with the school system. Ponti et al. (1988) found that consultation programs that are most successful in reducing the need to move the child into higher level of care meet the DURABLE framework. The DURABLE model includes the following institutional supports to ensure success: discussing, understanding, reinforcing, adapting, building, learning and evaluating. These are also applicable to the current state of behavioral health rehabilitation services and suggest why such services have had difficulty with cost control. We discuss these concepts applying them to BHRPs and suggesting that many of these steps have still not occurred between many community elements such as schools, community groups and the mental health providers who perform BHRP in that community.

Discussing is where the program staff meets the community. Meeting before services begin, the mission, goals, and objectives for the

BHRP are discussed and reviewed. Community input is sought. The eventual goal of a BHRP is to function in a symbiotic partnership with these systems to enhance their functions. Thus input into how these services are best rendered is reviewed. Discussion also occurs with the new program staff in setting up schedules of supervision, training, program timelines, and rights and responsibilities of those who will enroll in the program.

Understanding is the community's response to the suggestions. Communities should determine the level of expected need and how much reliance they will have on the program. The community in the form of the school or neighborhood needs to decide if they want this service and what the benefits are of having this service. For example, the school may profit from decreased need for special education classes.

Reinforcing is critical to program staff such as BSC and external personnel to the program. What are the reinforcers to the school, neighborhood, or family for participating in this program? When should they expect to see benefit and what types of benefits should they expect to see? For example, recognition of the greater and expanding role of the teacher could be highlighted by explaining how this form of professional development should provide immediate and long-term benefits to the teacher.

Acquiring is a critical but often missed feature. Acquiring is training those who desire to receive the service, descriptions and specification as to what the service is about. For example, a school might have an in-service on the role and function of a BSC or any other staff that they may potentially use in their school. Staff community agencies should also receive this training.

Building refers to establishing close relationships between supervisory staff in the BHRP and the administrators in the community program, such as teachers or principals. Both sides should understand and have realistic expectations of what each brings into the relationship and what each can do. The roles and

functions of staff from both agencies would be clearly delineated.

Learning is a supervisory component on both sides. Both sides need to learn their role and function in the set up and maintenance of the new program. For example, BSCs or TSSs may receive pre-service training on the legal and ethical issues of the school system in general with specific focus on the history and cultural practices of the schools in the area. Staff should be trained to be sensitive to using before and after school hours for consultation and that consultation should only occur during a time convenient for the teacher. School personnel may receive training on what consultation is and the teaming process. Expectations would be clearly communicated.

Evaluation is a critical and often omitted function. Have BHRPs had a positive impact not just on the children that they serve but also on the community? Do teachers feel that they are better equipped to handle children with emotional and behavioral disorders? These are questions that evaluation in BHRP has failed to answer.

TRAINING BEHAVIOR SPECIALISTS IN CONSULTATION AND DEVELOPING EXPERTISE

Probably the most critical training that behavior analyst can receive is training on how to be a consultant. Unfortunately, most training programs in applied behavior analysis do not have a strong training component in consultation but in therapy. Consultation differs from therapy in that in consultation the consultant works with the consultee to change the behavior of the client (Bergan & Kratochwill, 1990). In therapy the therapist uses himself or herself as the direct source of client change.

Since consultation is an indirect service delivery model, it has several advantages over therapy. The first and primary advantage is that it helps to develop the community so that more people have the skills to help children with emotional and behavioral disorders. Second, it

allows professionals to provide needed services to many clients at once.

From a behavioral perspective, what the consultant says during the consultation interview is critical to the implementation of the plan (Kratochwill, Van Someren, & Sheridan, 1989). Some research has shown this to be true. Bergan and Tombari (1975, 1976) found that the more complete a problem identification interview is the better the overall chances for treatment outcome success. Thus Bergan's (1977) model stresses that the consultant should structure the interview to guide the consultee through the problem solving process. This system codes consultant and consultee verbal interactions along dimensions of content, process and control.

It is our belief that coursework in behavioral consultation, in which behavior theory is applied to help specify and code consultant and consultee interactions, will improve consultants' ability to intervene effectively. Bergan and Kratochwill (1990) suggest that training helps give the consultant the tools to monitor and receive feedback on his/her own verbal behavior. Thus this behavior can be subject to intervention. While this is not a paper on Bergan's (1977) system of consultation, one example might be helpful in understanding. A consultant who fails to summarize points then elicit validation may believe that the consulting relationship is going well only to find that the consultee does not implement the plan that the consultant develops because s/he does not agree with the environmental sources of the problem. Kratochwill et al. (1989) have a very interesting model for training behavioral consultants that can be readily developed into a training/workshop format.

If behavior specialists have not had this type of training, then we suggest at least twelve hours of pre-service training specifically in behavioral consultation with focus on interviewing from a behavioral perspective. In such training the participants should be scored on their verbal skills with video taped role-plays. Interviews are scored by the systems that Bergan

(1977) developed and given frequent feedback on performance. This training is in addition to specific training in treatment models for the target population (e.g., individuals with autism, ADHD, depression, schizophrenia). Training in administrative matters such as documentation (treatment plans) and timelines is also essential.

Cautilli and Thomas have developed the following training programs as a means to address these critical functions of Behavior Specialist Consultant in the field:

Problem Identification, Analysis and Plan Implementation and Evaluation

This workshop presents the basics of Bergan's model of behavioral consultation. It outlines the problem-solving model and helps participants to skillfully draw on their knowledge of Behavior Analysis and functional Behavioral Assessment to guide solutions. Through stronger understand of the consultation process, consultants will improve their ability to interview consultee, develop collaborative relationships and use the principles of Applied Behavior Analysis in an effective service delivery model. In addition, participants will learn what teachers value in the consultation process. They learn ways to conduct brief interviews that help teachers establish goals and strong behavioral objectives as well as develop specific interventions to achieve those objectives.

Behavioral Parent Training

Behavioral parent training is currently the treatment of choice for parents of children with conduct and oppositional defiant disorders. In addition, behavioral parent training has demonstrated efficacy in the management of children with attention deficit disorder. Training parents in basic techniques of behavior modification will be explored as well as the research supporting the efficacy of these treatments. This workshop trains parent trainers.

Introduction to Behavioral Assessment

This workshop is a general overview of behavioral assessment. It offers participants exposure to several standardized instruments commonly used in behavioral assessment such as the Behavior Assessment Systems for Children, the Walker-McConnel Scale, Connors ADHD/DSM IV Scale, and the School Social Behavior Scales. In addition, this workshop offers an introduction to adaptive behavior assessments such as the ABS: RC-2, ABS: S2, Gilliam Autism Rating Scale and language and learning assessments like the ABLLS and Verbal Behavior Observational Assessment. Use of standardized behavioral assessment scales, is the beginning of an outcome based program and programs can be evaluated by changes in standard scores for children in the program.

Introduction to Functional Assessment and Functional Analysis

This workshop is designed to give participants a firm working knowledge of differences between functional assessment and functional analysis. Participants will also demonstrate selection of key elements of functional assessment and design a functional assessment strategy when given an example of problem behaviors and environment. Participants will demonstrate knowledge of all areas of functional assessment/analysis

Introduction to Behavioral Development in an Ecological Context

Participants will be exposed to Bijou's model of behavioral development. This model comes from within the behavior analytic tradition and offers much to the study of developmental psychopathology and developmental deficits. Finally this model will be reintegrated into Brofenbrenner's model of ecology.

Best Practices in Writing Treatment Plans

This workshop explores the treatment planning process. It links treatment planning to the consultation process. Participants learn to review establishing goals and objectives and write goals and objectives to facilitate the learning of appropriate social behavior. Training is also given in designing interventions in collaboration with teachers and families, allocation of time from treatment team members, and energizing members around activities and interventions that need to be performed. Participants will bring a recent copy of a treatment plan and relevant information pertaining to the individual and write a treatment plan with instructor guidance using best practices.

Resistance and Treatment Integrity

Resistance functions to lessen therapeutic suggestions and interventions. This workshop will look at the common reasons that resistance occurs and interventions that might help in lessening resistance for consultees. The use of these techniques to build and strengthen program integrity as well as techniques from organizational behavior management literature will also be explored.

De-Escalating Children with Serious Emotional and Behavioral Problems

The escalation cycle can be seen as a series of behavioral chains. Interruption of the chain can restore students with emotional and behavioral disorders back to a calm state. In addition, effective interventions during the escalation cycle can teach children self-control. This workshop is designed to help participants to recognize the steps in the escalation cycle and to create interventions with the goal of decreasing escalation at each step.

Teaching Language to Children with Developmental Disabilities

This workshop investigates the most relevant procedures for teaching language to children with developmental disabilities. This workshop includes the functional analysis of verbal behavior and particularly emphasizes the importance of both speaker and listener behavior in the development of language from a functional analytical framework

Developing Effective Discrete Trial Training Curricula

This workshop teaches participants to design and properly implement discrete trial training programs that meet the needs of children with developmental disabilities, offering structure and easily understood training procedures for 1:1 trainers, without ignoring the functional development of verbal behavior, response induction or stimulus generalization. Procedures are also reviewed to develop socialization and play skills.

WHAT DO GOOD MANAGERS REALLY DO?

Luthans and Lockwood (1984) studied what good versus effective managers really do. They found that often good managers (defined as those who receive the quickest promotions) spend a considerable amount of time, networking, politicking, and reinforcing their employees' performances. In stark contrast, those managers rated effective by employees

were those who monitored work, had good communication between themselves and their supervisees, and applied motivational systems that were performance based. Thus managers who are effective engage in specific behaviors that lead to changes in the staff who work for them.

These practices have been formulated into programs often referred to as behavioral supervision practices. A growing body of research supports the use of behavioral supervision in increasing quality, integrity, and staff performance (see Babcock, Fleming, & Oliver, 1998). Both large scale and long-term studies exist to demonstrate that behavioral supervision in the community can achieve the goal of greater quality and staff performance (Parsons, Schepis, Reid, McCarn, & Green, 1987).

SERVICE AND TREATMENT PLANNING

Servicing begins with an adequate evaluation. An old Italian expression is that a fish rots from the head down. This means that if the head (the evaluation is rotten) then the entire fish will soon rot (the team's performance). We suggest that evaluations for BHRPs follow the standards of IDEA 97. The Office of Mental Health should develop language and standards for evaluation of children similar to that mandated in The Individuals with Disabilities Education Act (IDEA) reauthorization of 1997. IDEA states in section 614 b, 2, under evaluation procedures:

(2) Conduct of Evaluation-
In conducting the evaluation the local educational agency shall (A) Use a variety of assessment tools and strategies to gather relevant functional and developmental information, including information provided by the parent, that may assist in determining whether the child is

a child with a disability....(B) not use any single procedure as the sole criterion for determining whether a child is a child with a disability...(C) use technically sound instruments that may assess the relative contribution of cognitive and behavioral factors, in addition to physical or developmental factors.
(IDEA Amendments, 20 U.S. C., 614(b)(2))

In addition to formal behavioral and standardized assessment, a thorough functional behavioral assessment of the child and the family should be conducted. This assessment should create a competing behaviors model for intervention and should be accompanied by a skills assessment.

Also, the following factors are important to ensuring that the project is comprehensive from a planning perspective:

- Functional assessment of the child and the family
- Identifying the project customer (family, teacher, child)
- Establish the end service
- Set objectives
- Estimate the total resources and time required
- Decide on the form of service organization (Activity schedule of the needed interventions for the child)
- Make key staffing arrangements (culturally sound, matching staff skill with the family and child's needs)
- Define the major tasks required (i.e., who does what interventions)

- Establish a cost projection

Each of these should be considered when planning service interventions. Omitting this type of comprehensive planning may result in ineffective service delivery.

Since interdisciplinary teams are loosely coupled systems (Hantula, 1995), it becomes important for management at the supervisory level to control conflicts and confusion. Conflicts and confusion between team members with competing goals can lead to under servicing of clients having multiple service needs (Roberts, 1989). It is important that under servicing have a zero tolerance level. These areas of under servicing must be tracked and addressed in supervisory sessions for they may show that a team member is not sure of the treatment, including his/her role and responsibility. Under servicing outliers in evaluation of hours for client's needs to be tracked and statistical process control methods should be used to identify outliers.

Supervisors need to then engage in clinical review of the case to determine how to bring the services back in line with other services or if the client is in the wrong level of care. It eventually becomes the focus of the supervisor, through the supervision process, to attempt to control competing goals, criteria for success, and areas of possible divergence.

SCHEDULING

A matter of importance in any project is the accurate identification, acquisition, assignment, and implementation of needed resources. In order for BHRPs to be effective in meeting its clinical goals it is necessary to practice effective scheduling.

There are several goals that need to be accomplished through effective scheduling. First and foremost, the evaluation needs to be completed in a timely and efficient manner to allow adequate time for the team to develop a plan. This process may include developing a detailed work breakdown structure, estimating the time required for each task, prioritizing or sequencing the tasks in order (chaining),

developing a start time and target time for each task, determining a budget for each task, and assigning team members to each task. The tasks need to specify who will do what, where, when and how.

Once all these question are answered the result will be a clear specific plan individualized to meet the child's needs with goals and objectives that are measurable, with the ultimate goal being a positive outcome. Agency managers and team leaders must have effective skills in project management (PERT and GANNT) and task assessment (VTA) as well as effective delegation in order to efficiently meet the needs of their clientele and ensure the success of the BHRP.

CONTROL

For the program to be effective for children in BHRP, the agency and the team leader should exert some control over the process. This means that they should: monitor actual time, costs, outcomes, and performance, compare planned with actual figures, determine what corrective action is needed (for example if a BSC's monthly summary indicates that a child has failed to progress two months in a row, then an action plan would state what should be done to ensure that progress occurs), evaluate alternative corrective actions and finally the team should take appropriate corrective action.

We suggest that as a part of ongoing training and development for supervisors and managers in BHRPs training occur in the areas of management by objective, management by exception, performance enhancement, time management and effective task delegation. Training is necessary in behavioral supervision practices, statistical process control and in the area of appropriate and accurate clinical review. We suggest that this type of ongoing training and development may not only have benefit to the organization but more importantly to the consumer of services.

FROM THE CLASSROOM TO THE FIELD

Tracy, Tannenbaum, & Kavanagh (1995) have suggested the following practices to

facilitate generalization of learned skills from the training workshop to the job setting: (1) Supervisors need to encourage and set goals for trainees to use new skills and behavior acquired during training. (2) Task cues should be readily used. These cues are characteristics of a trainee's job that prompts the trainee to use new skills or behavior learned in the training. (3) Feedback from supervisors can be an excellent consequence. If supervisors support the application of the new skill and behavior acquired in the training it is much more likely to generalize. (4) Lack of punishment is important. Trainees should not be openly discouraged from using the new skill and behaviors acquired during the training. (5) Reinforcement is critical. Natural reinforcement is preferred but might not exist to the extent needed to maintain the behavior in the initial use. Trainees should receive external rewards for using the new skill and behaviors learned in the training. (6) Use of natural reinforcers- for training material to adequately generalize, the new behavior should fit into the person's learning history and be practiced to fluency, where it becomes automatic. Trainees should have the intrinsic sense that the behavior "feels right." (7) Trainees should create their own system for monitoring their performance of a new skill and learn to recognize that lapses into old patterns of behavior are natural and should not indicate that the trainee should give up trying.

Lapses to old patterns of behavior are common but careful supervision can be helpful in decreasing these lapses (Marx, 1982). Trainees should be taught that it is acceptable to ask supervisors and other staff for help with the execution of a particular skill. For training to be effective it must be incorporated into an entire performance management program. Such programs should identify key behaviors for the staff to perform (e.g., continuous interaction with the child or giving a specified number of effective descriptive praises in a 1 hour period). Second, the program should use a measurement system to assess whether these behaviors are exhibited. Third, the program should tell the employee of the behaviors to be expected, even making a formal goal with the employee on how often the behavior should be performed. Finally,

feedback and reinforcement are provided to the employee (Anderson, Crowell, Sucec, Gilligan, & Winkoff, 1983).

One way to ensure that ineffective training (i.e., the failure to generalize the learned skills) does not occur is to use the mobile behavioral auditor as a field coach. Mobile behavioral auditors would be trained to identify target skills that TSS workers should perform. This may include rules about effective communication with the child, how to present frequent descriptive praise, or other techniques. Mobile behavioral auditors would also be trained to be an effective model (Latham & Saari, 1979). They observe the TSS worker engage in the behavior and provide feedback and reinforcement for the TSS worker's performance. The skill should be practiced until the TSS worker is fluent. Finally, the TSS worker and the mobile behavioral auditor should review the treatment plan, in particular the activity schedule for the TSS worker included in the plan, and use it as the basis for an action plan for when and where to use the skill.

All trainings should be evaluated to determine: (1) if the training program is meeting the set behavioral objectives for the program (2) if the objectives are being transferred to the day to day performance of the staff (3) if the trainees believe that the content was adequate and relevant to the job that they need to perform (4) the financial benefit and cost to the agency (5) specific trainings should be compared with respect to cost benefit analysis and the most effective trainings selected.

THE PROBLEMS WITH BUREAUCRACY AND CONTINUUM OF CARE

Ft. Bragg was a large-scale and well-funded study comparing continuum of care service delivery models to the mental health services delivered as usual. It was disappointing to many supporting continuum of care models that Ft. Bragg was better liked by consumers but overall was not found to provide improved outcomes. Furthermore, it was more expensive. While some are arguing that the Fort Bragg study (Bickman, 1996) clearly launched a fatal

bullet into the continuum of care model of service delivery (see Sechrest & Walsh, 1997), others are attempting to analyze what factors led to the apparent failure. Several apparent myths have developed with regard to the Fort Bragg study. Some have argued within CASSP that Fort Bragg did not represent a continuum of care since it was a developing system, instead of a mature system. While this argument may hold some merit, the program was preplanned for a number of years, and then ran for almost a full year before even beginning data collection. Data was collected in three waves with some of the data being almost 3 years later than this (Bickman, Guthrie, Foster, Lambert, Summerfelt, Breda, & Heflinger, 1995). The second myth is that the Fort Bragg study was methodologically unsound. While no study is an island, Fort Bragg was measured against the Cook and Campbell (1979) standards and found to be of excellent quality (Sechrest & Walsh).

Weisz, Han, and Valeri offered a common sense approach (1996) when they investigated if empirically validated treatments such as those outlined by the American Psychological Association's Clinical Psychology Division 25 (Task Force on Promotion and Dissemination of Psychological Procedures of Clinical Psychology, 1995) were used in the treatment carried out in the agencies. The answer appears to suggest no. Bickman (1996) suggested that "a very impressive structure was built on very a weak foundation." (p. 695). As has been known for some time empirically validated treatments are rarely used in the clinical setting (Kazdin, Bass, Ayers, & Rodgers, 1990). If this is the case, then Fort Bragg may simply represent the equivalent of going to a drug store to buy a product for losing hair. The drug store may offer many conveniences (i.e., access to many types of products and quick check out lines). In addition, it may offer excellent services (i.e., very friendly store personnel). But unless it sells a product with minoxidil, the customer will not stop losing hair. It appears that the drug store known as Fort Bragg did offer more services (of particular but non therapeutic note was case management) and was higher in customer satisfaction (Bickman, 1996) but the fact remains the minoxidil was not

there. Now other hair products did exist (i.e., health products and vitamins) but these products lack empirical support.

In terms of efficacy, it is doubtful that a continuum of care program that provides services to children with autism based on other models will be as successful as an ABA program in habilitation. It is also doubtful that an art therapy program for children with ADHD or ODD will be as effective as a multi-systemic program (Henggler, Schoenwald, Borduin, Rowland & Cunningham, 1998) or a two stage operant parent training program (i.e., Hapf, 1969; Eyeberg & Robinson, 1982; Hambree-Kegin & McNeil, 1995; Forehand & McMahon, 1981; Barkley, 1987) or even a contingency management program in the classroom (i.e., McNeil, 1995). Even techniques that are well supported for other types of problems may fail in children with attention deficit disorder. For example, cognitive therapy techniques have often been shown to be ineffective with children with ADHD, thus one would expect that a continuum of care program built on such principles would be ineffective.

Too often nonprofit institutions obsessed with the idea and the push to become a continuum of care service agency attempt to achieve this goal by providing larger service offerings. Inadequately trained and ill-prepared staff members are quickly pushed to the limit to provide more and more services in an already loosely organized and poorly managed service system. More often than not, services become justified not based on outcome data but on conformity to the completion of a model of having every level of care available. Agencies become a central source of self-justification. Outcomes become pushed aside and people spend more time writing reports about reports instead of attempting to streamline paperwork and enhance treatment services. These factors drive up cost and time requirements, while adding little in value to the overall quality of the program. In short, everything that we have come to hate about bureaucratic institutions (e.g., the movement of such institutions toward mediocrity instead of excellence) becomes true.

Fort Bragg can be summed up as this: Effective, even stellar, service delivery cannot make a poor product effective. The practice of adding more services without any focus on outcomes do little more than drive up costs, without improving outcomes and quality. An enhanced focus on training, education, management, performance, and critical review of organization process and efficacy of treatment will allow us to avoid the “Fort Bragg Syndrome”.

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WHAT BEHAVIORAL CONSULTANTS AND PARENTS NEED TO KNOW: TRAINING PARAPROFESSIONALS TO WORK IN HOME-BASED PROGRAMS

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Often we receive calls or e-mails from parents or professionals asking for help because their child appears to be making less progress in their home program. Often they mention problems such as the child is mastering few tasks or is having less success with verbal skill learning. It is important to recognize that this may occur for many reasons. Sometimes the behavioral consultant is inexperienced in coordinating a home programs and does not have the necessary skills to adjust protocols when progress is not occurring. Other times the child has mastered the programs and is ready for a new level of programming. A host of these factors exist and little data is available to determine what to do at these points. However, in some cases parents believe that it is the result of paraprofessionals losing interest in the program. In these situations, parents often report that less work is being done or the staff is not working as hard as they did previously. This paper has been written to address this last issue.

When faced with the dilemma of decreasing staff performance many parents begin to feel hopeless. They feel torn between the child's need for improvement and the family's and child's attachment to the worker in question. They may have experienced a high rate of staff turnover and realize that it is often difficult to find, and keep, good workers. Staffing in home programs is often a frustrating issue for parents. We recognize that there is no easy solution to this problem but we would like to offer some suggestions based on a functional assessment of worker performance. It is important to recognize that all, some, or none of these suggestions may apply to the team and in the end specific interventions may require outside help to implement.

When parents or behavioral consultants suspect a performance discrepancy, the first task that needs to be done is to pinpoint the specific behavior or behaviors that are critical to goal attainment. One of the staff behaviors that can be monitored is the number of learned units (opportunities for active responding and feedback) that are provided during the therapy sessions. The second stage of this process is to conduct a behavioral audit. In a behavioral audit past performance is compared to present performance to determine if a discrepancy exists. In the above example, comparing the number of learned units in the past four weeks with the average number of learned units over the last six months could do this. It is important to recognize that this may show a discrepancy

but that the discrepancy may not be important. Several ways exist to begin to determine the significance of the discrepancy. One way would be to graph the performance and this might give a better representation of the data. A second method is called statistical process control. When using statistical process control, the family would get a calculator that calculates means (averages) and standard deviations (the average deviation from the mean) for the previous weeks and compare to recent weeks. The reason for this is that dynamic processes such as human interaction often vary from week to week for a host of reasons. It is only when the variation is outside the normal range consistently that an intervention is necessary.

If a performance discrepancy exists, it becomes important to analyze the job first. Several factors should be considered. The first factor to be evaluated is do the workers receive natural/automatic reinforcement for the job they do (i.e., do they receive feedback about their effectiveness?) If the answer to this question is "no", then an intervention can be to train the paraprofessionals to recognize improvement. The second author recently at the Penn ABA conference asked Kimberly Schreck about staff performance. She stated that celebrating the child's success is a critical motivator to keep staff working. Some families post the child's progress weekly. They use this as a reason to celebrate.

The second is are there sufficient reinforcers for their job? By this, we are not just referring to pay but things like do the parents value the job? Do the parents and consultants communicate how important the paraprofessional's work is to the child's success? Do they monitor and provide feedback about the worker's performance? For example, sometimes it is good for the team to hear "Thanks for giving your all to my son. It is really important to me that you have taken the time to ensure that he has mastered imitation skills." Everyone needs to have an occasional pat on the back or smile or acknowledgment that they are doing well.

The third factor to be considered is social interaction. Often paraprofessionals feel alone working with the child. Sometimes this results in boredom and decreased performance. Having the family around at times to talk and give immediate feedback about performance and just to have an occasional conversation can be highly motivating.

Another area to be considered is task and goal clarity and significance. Is the team informed about how what they are doing is supposed to help the child? Are the goals, job duties, and requirements clear and specific? If not, then maybe an information session for the staff would be helpful. Allow them to become active members in the decision-making process by allowing them to interpret the data and make suggestions on way to achieve the goals. Providing them with opportunities to have input into the program helps workers to become invested in the process and increases motivation to achieve these goals. Another suggestion is to create performance evaluations and base bonuses or raises on scores. Leaf and McEachin (1999) offer such an evaluation form for use in home programs.

You can also look at task variety. Does the job allow for a range of tasks? Is the staff given the opportunity to have input in how the tasks are scheduled? Do they have the right to change procedures or sequences within reasonable limits (for example, while one would

never want them to give the reward before the performance of the behavior but

The sixth factor is task identity. Does your staff feel that they have seen the process from beginning to end? Have they at least been informed about how the child is progressing? This is one of the bonus effects from regular meetings where the entire team reviews the child's performance and discusses operations issues. While weekly meetings are ideal, this may not be feasible for each team. However, team meetings should be scheduled regularly – no longer than every 3 weeks. Notes should be taken at all meetings, distributed to each team member and reviewed with any staff who did not attend the meeting.

Does your staff possess the knowledge, skills and abilities to execute the programs? Most of the time the answer is "yes", since they were performing the skills prior to the slowdown. However, it is important to recognize that if the procedures change staff may need training on the new procedures. For example, in a verbal behavior program if the program changes from a simple tacting program to one where the child is being taught to identify the function, feature or class of items (RFFC programs) the paraprofessional may not be fluent in the new protocol. This could result in ineffective instruction that would affect the child's learning. If this is the case, your staff could benefit from training.

The eighth factor to evaluate is skill variety. Does the staff have the opportunity to display a variety of skills that they possess? Is the job too mechanically designed, where they are only performing one or two activities with no variation? Adding some variation to the protocols and procedures may be helpful in these cases in increasing performance.

The ninth factor is professional growth and learning opportunities for the staff. Does the team feel that they are stagnating or do they feel that they are constantly learning new things and developing as professionals? If they believe that they are stagnating, providing opportunities for attendance at workshops may be helpful. If

that is not possible, having the behavior consultant spend time with them developing their skills may also alleviate their feelings of stagnation. One way this could be done is by videotaping therapy sessions. The consultant and the paraprofessional could review the tapes together.

This would not be done with the intention of criticizing errors. Consultants could highlight skills that the worker is performing well (e.g., using a variety of reinforcers, keeping a rapid pace during therapy sessions, performing effective error correction). Together the consultant and the paraprofessional could select target skills for improvement and develop an action plan to achieve these goals. Regularly videotaping sessions would provide

documentation on the development of these skills.

All of these factors represent areas that are critical to enhancing job performance on a slumping team. Working with children with autism creates many frustrations for families and teams. It is our sincere hope that this article will help to lessen some of the frustrations of those currently in the field.

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ISSUES FOR THE CONSULTING BEHAVIOR ANALYST: DON'T JUST IMPLEMENT A TREATMENT PLAN, USE THE ECOLOGY TO PRACTICE A TREATMENT PLAN

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Currently distance consulting takes place in mental health rehabilitation centers, mental retardation rehabilitation centers, educational, preschool and even home locations. In each of these locations, but especially in home programs, the distance consultant can encounter very different education, training and experience backgrounds within Applied Behavior Analysis this articles talks about the importance of taking into account this part of the ecology in designing a treatment plan.

Gillat & Sulzer-Azaroff (1994), Page, Iwata, & Reid (1982), speak of the importance of teaching those involved in a program how to provide effective training, consultation, and supervision to those who will implement a program. In this example they are speaking of training the trainers which differs slightly from the relationship that we are speaking of currently. In distance relationships involving the education and rehabilitation system, there is no guarantee, but generally individuals are available with an acceptable working knowledge about behavioral technology and its application. In addition there are usually senior staff members available, psychologists, social workers, or other specialists who can assist with training and supervision and add considerable assurance to the treatment effort. In an in home program the relationship that we are speaking of is much more direct, the distance consultant is the trainer, consultant and supervisor to those who will implement the program. This relationship is spread across a number of visits each year and may vary in length, but is generally a short six to eight hours every six to eight weeks and in some cases even longer. The amount of supervision that the distance consultant may provide in between visits varies but is generally limited to videotapes, telephones and advice via data analysis and email. In this type of environment the importance of face-to-face time and instruction of the trainers is at a premium.

Additionally, in an in home program, where implementers are often implementing the treatment plan while there are considerable competing events, the distance consultant must

take into account the ecology of treatment when training the implementer to deal with the complexities of the treatment plan. As Malouf & Schiller (1995) have pointed out there are events in the ecology that are not conducive or may impeded or compete with standards of the treatment plan, like the other children in the family, the phone, preparation of dinner and other events in the ecology that are rarely considered in a behavioral change plan. While it remains clear that practicing the application of treatment is perhaps the most important use of the distance consultant's time, it becomes more a question of how to practice the application of the treatment plan. As Willems (1974) points out there are interdependencies among ecology, organism and behavior that leave the door open to widespread unintended effects. The possibility exists that the most highly advanced and technically perfect treatment plan may have contradictory effects without the consideration of the ecology. In fact it seems rare that a treatment plan developed for a school setting will be successful "as is" in the home or other settings. The plan simply must be developed considering the ecology, which includes the implementers themselves, their willingness to be implement the treatment plan, their knowledge and experience and the likelihood of "resistance" (see Cautilli & Santilli Connor, 2000 for more information) to follow the treatment plan.

The distance consultant working with an in home program must maximize the amount of time that is spent with a team working in the child's milieu and instructing those who will implement the treatment plan while they are

implementing the treatment plan. A simple day of explanation and training about the treatment plan may have little effect once the instructors are left to implement treatment “in the real world” alone. This is especially true for parents who have been the recipients of varying professional advice about their child’s treatment and oftentimes this advice runs counter to the instructions that behavior analyst has provided. Additionally, implementers of in-home programs often fail to implement the protocols at all simply because they do not “feel” they have adequate knowledge to implement them correctly. Fluency is an important aspect of establishing the likelihood the treatment plan will be carried out as intended on a daily basis and the training for this fluency will only come in a didactic relationship between implementer and consultant. The better trained the implementer the more likely they are to implement the treatment plan and when the treatment plan is implemented in a training condition not unlike those of the normal day to day environment the more likely the trainers are to generalize the skills the consultant has passed on to them

In our practice we have found that cases that fair better than others are usually staffed with 1:1 trainers who have had experience in the past and the focus of training is not on the basic principles, but instead on practicing the protocols contained in the treatment plan. This led us to develop a simple plan to assist in training inexperienced (new) teams:

1. New teams get a thorough knowledge of the basics, with specific criterion for mastery (team members who do not meet the mastery requirements are replaced).
2. The consultant first models all protocols in-vivo contained in the treatment plan while the implementers watch and ask questions.
3. The new team spends at least nine hours of 1:1 instruction in-

vivo with the consultant implementing protocols, as they will during treatment.

4. Using the see one; do one; teach one; system to practice for several hours in-vivo under the guidance of the consultant with implementers critiquing one another in performance.
5. Most importantly we start with a relatively small amount of simple goals and build the amount of targets and the complexity of the treatment plan as the team grows in experience.
6. Finally we use the see one; do one; teach one; system as well to conduct the introduction of new protocols in the treatment plan at follow-up consultations.

Treatment planning in distance consulting relationships must be intensive in the training aspects of those who will ultimately implement the treatment plan. An overabundance of time spent reviewing the goals; objectives and technical aspects as opposed to practicing the practical application in the ecology may have adverse effects on the successful implementation of the plan. Finally it appears that the distance consultant can hardly overlook the total ecology where the treatment plan is implemented, which necessarily includes the implementers themselves.

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