

Emergency Management Guidelines

Thomas J. Willis
Gary W. LaVigna



© 2004, Institute for Applied Behavior Analysis
5777 W. Century Blvd., Ste. 675
Los Angeles, CA 90045 USA
All rights reserved. Duplication is prohibited.

Introduction	1
Communicative Function.....	2
Expression Of Frustration.....	2
Managing Anger / Stress.....	3
The Context Of Emergency Management	3
Proactive Strategies.....	5
Reactive Strategies.....	6
Emergency (Crisis) Management Strategies.....	7
Antecedent Control Strategies	8
Remove Seductive Objects.....	8
Fidgety Phil Gets Into Everything.....	8
A Food By Any Other Name	8
The Art Critic.....	9
Re-Deploy / Relocate People.....	10
The Bigger They Are, The Harder They Fall.....	10
The Closer I Get To You.....	10
Remove Unnecessary Demands / Request.....	11
If You Don't Have Something Good To Say, Don't Say Anything	12
Hurry Up And Wait!!	15
Change The Location And Time Of Activities.....	16
Rearrange The Environment	17
Interrupting The Behavioral Chain.....	18
Proximity Control.....	18
Instructional Control.....	20
Active Listening	21
Facilitating Communication In Other Ways.....	22
Facilitating Relaxation	23
Stimulus Change.....	24
Counter Intuitive Strategies.....	27
A Touch In Time.....	27
Diversion	28
The Staples Of Life.....	29
Introducing And/Or Maintaining Non-Contingent Reinforcement Density.....	30
Avoid Natural Consequences.....	34
Don't Ignore.....	36
Don't Punish	38
Capitulate.....	41
Jim's Multi-Element Support Plan	42
Losing The Battle But Winning The War	43
Guidelines For Using Capitulation	44
Geographical Containment Or Interpositioning	45
Emergency Physical Containment.....	48
Individualized Emergency Management Plan.....	51
Social Validity Issues	52
Conslusions	55
Bibliography	56

INTRODUCTION

Many people with Developmental Disabilities also have histories of challenging behaviors. In a small percentage these challenges may represent a very real danger to themselves and / or to others. Some are assaultive and injure others, some are self-injurious and cause great damage to themselves, some cause considerable damage to property, some wander off get lost and are injured, and some do all of these. The severity of these actions call for the development and use of special measures to protect the person from injury, to protect others from injury, and to protect property.

The need for crisis management strategies is well recognized. In the mid-1980s, the State of California issued a "Policy on Treatment and Emergency Behavioral Procedures." These policies grew out of the deaths of several Developmentally Disabled persons in community facilities as a result of "Emergency Restraint" procedures. For similar reasons, other states have followed suit to set standards for the management of Behavioral Emergencies.

Responding to State guidelines, a number of crisis management training programs were spawned across the nation. In the State of California, Management of Assaultive Behavior (MAB), a workshop training program developed by Paul Smith, Ph.D., first appeared in the early 1980s. It was subsequently revised as "Professional Assault Response Training." Other states have similar training programs (e.g., MANDT, CPI, etc.). Our experience has been that most crisis management training programs have large gaps in what they train. Many seem to focus overly on EVASION AND CONTAINMENT. In recent years, we have seen an expansion of these programs to include methods of preventing emergencies as well as less emphasis on physical methods. But still they have not quite fit the needs for us at IABA.

From the very inception of IABA, we have been called on to work with individuals who have very challenging behaviors. Frequently these are individuals for which nothing else seems to work. To fill the GAPS presented by other crisis management training programs, and to be consistent with our philosophy of NON-AVERSIVE behavior management, we formulated a series of strategies that collectively we have come to call the "Emergency Management Guidelines." We have found these strategies to be effective not only for crisis intervention, but also in those situations where the behaviors being presented are not yet at such severe levels.

The suggestions presented below do not represent the total population of things that can be done. As we gain greater experience with many other folks with challenging behaviors, we will come upon new and innovative crisis management strategies. This is exemplified in the many examples contained below. The ideas presented below should be regarded as suggestions on which to build. At the least, they should suggest that there are ways to avoid, minimize and even stop some potential crises. Finally, the suggestions contained in this paper should leave the reader with the impression that "there are ways to survive emergencies without physical confrontation."

Before we begin describing the methods of Emergency Management, it is important to understand just where these procedures fall within a support plan.

WHY DO PEOPLE BEHAVE THE WAYS THEY DO?

People engage in challenging behaviors for many different reasons. A Traditional Model of Behavior would suggest that people engage in behavior to achieve pleasurable events (i.e., Positive Reinforcement) and / or to avoid unpleasant events (i.e., Negative Reinforcement). While this is technically true, when we talk about WHY? we need to be more specific in our answers. This is especially true when we are working with people who may have a developmental disability and who may also have mild to severe cognitive delays. How we conduct ourselves in a crisis will be partially influenced by what we know about WHY the person is engaging in the behavior. Here are some examples of the possible functions served by challenging behaviors.

COMMUNICATIVE FUNCTION

Some people engage in challenging behaviors because they have no other way of communicating their needs. They have never learned to speak, do not use signs, and have not been given the opportunity

to use other methods to communicate their needs. Others may be able to communicate verbally, or by other means, but **NO ONE LISTENS TO THEM**. These individuals may have learned to communicate through their behavior, (e.g., “ If I hit myself, people will leave me alone.”). Our experience has been that almost anything we might want to communicate verbally ourselves, others have used their challenging behaviors to communicate the same message (e.g., come here, leave me alone, I want ____, I’m happy, etc.). Just how we might react to the person’s behavior in an emergency will be partially determined by the message we feel is being sent.

EXPRESSION OF FRUSTRATION

John gets angry and hits when the buttons on his shirt don’t line up correctly. His hitting seems to be a reaction to the frustration of not knowing how to solve the problem. This is quite a common scenario not only for people with disabilities, but also for people we bump into throughout the day at work, at home, and at the health club. Here are some common frustration precipitating events:

- You misplaced your keys to the car.
- You locked the keys to your car in the car.
- You can’t find a matching sock.
- You went through the drive-through at McDonalds. When you got home you found that the one thing you really wanted (chocolate malt) is missing, but there is something there in its place (liverwurst malt).
- Someone keeps interrupting you when you are in the middle of negotiating your taxes.
- You are sitting on the toilet and realize that there is no more toilet paper.
- You ran out of coffee.

- Someone cuts you off in traffic.

Sometimes people simply have never learned effective ways of dealing with the frustration (including us). Sometimes people react to these events with challenging behaviors such as yelling, screaming, tantrumming, hitting, etc. Given that we are working with a person whose challenging behaviors are reactions to frustration, then what we do might involve helping the person to solve the problem at the moment in order to reduce the frustration.

MANAGING ANGER/STRESS

Many people who have histories of challenging behaviors have found that they can reduce their anger or lower the stress they are experiencing by engaging in behaviors such as physical assault, self-injury, screaming, and running aimlessly. For example, one young man that we worked with was taught to relax by laying face down on a blanket in a particular corner of his classroom. Additionally, when he would become assaultive, he would be “prone contained” with his arms behind his back on that same blanket. Unfortunately, this young man learned the wrong thing. When he was feeling uptight, anxious, or under some stress, he had learned to attack others as a way of managing his feelings. He had learned that if he attacked, several people would jump on him, take him to the corner, and hole him face down on the blanket. At the end of it all, he appeared quite relaxed and calm.

Similarly, Wanda experienced intense anger, perhaps pain, when she would hear the sounds of a person screaming, a vacuum vacuuming, or a commercial floor buffer buffing. When she would hear these sounds, she would scream, focus on the source of the sound, run and jump on the source of the sound while biting, scratching, and clawing. People around Wanda reacted by turning off the vacuum and the buffer when Wanda attacked, and removing the person who might be screaming.

What Wanda seemed to learn, however, was a way of managing her anger or pain, i.e., “If I attack the sound, it goes away, and I feel better.”

If a person is engaging in a challenging behavior because it is the most effective way they have found to reduce or manage their anger or stress, then how we react during an episode might be impacted. For example, if we know that John slaps his ears when they are infected, we might assume that he hits his ears because the slaps reduce (or distract from) the pain. While we would take steps to prevent him from hurting himself, part of the crisis intervention would be to get him to the doctor.

Just how we react during a crisis is partially determined by what we know about the person and what we interpret may be the reason for the behavior. Crisis management cannot be mechanical. The same procedures may not be applicable from one person to another, or from one situation to another with the same person. In other words, what we do needs to be individualized and based on what we know about the person we are serving.

THE CONTEXT OF EMERGENCY MANAGEMENT A MULTI-ELEMENT MODEL FOR DEVELOPING SUPPORT PLANS

The key to developing a support plan to meet a person's needs is in a Comprehensive Functional Assessment (See outline in Table 1 below). Most importantly, it is through the assessment process that we learn ways of to help the people we serve survive "Emergencies." It is frequently believed, and erroneously so, that the Behavioral Psychologist "has all the answers." We don't! We talk to the person, we ask people who know the person, we review records, and we observe. It is through these processes that we learn how to and how not to react. For example, a young man who has lived in a Development Center over the past five years is described as one of the most dangerous individuals known to that center. As far as staff of the Development Center can remember, he has never assaulted a woman; he assaults men, and "the bigger they are, the harder they fall." Consequently, as part of his emergency management plan, and in an effort to reduce the likelihood of serious behaviors to begin with, those who made up his support team included "only women."

Table 1
Functional Assessment

Process	Content	Materials
<ul style="list-style-type: none"> • Observation • Data Collection • Interviews • Records Review • Interactions • Test Situations • Analysis • Report Writing 	<ul style="list-style-type: none"> • Referral Information • Background Information • Functional Analysis of Behavior • Mediator Analysis • Motivational Analysis 	<ul style="list-style-type: none"> • Assessment Guide and User's Manual • Reinforcement Inventory • Communication Functions Instrument • Aide To Functional Analysis • Trouble Shooting Guide • Report Writing Format

Table 2
Multi-Element Support Plan

Proactive Strategies			Reactive Strategies
Ecological Manipulations	Positive Programming	Focused Support Strategies	Situational Management
<ul style="list-style-type: none"> • Settings • People • Interactions • Instructional Methods • Instructional Goals • Environmental Pollutants • Philosophy 	<ul style="list-style-type: none"> • Teach General Skills • Teach Functionally Equivalent Skills • Teach Functionally Related Skills • Teach Coping Skills 	<ul style="list-style-type: none"> • Differential Reinforcement Schedules • Stimulus Control Strategies • Antecedent Control Strategies • Instructional Control • Stimulus Satiation 	<ul style="list-style-type: none"> • Ignoring • Redirection • Active Listening • Problem Solving • Contingent Instruction • Contingent Relaxation • Stimulus Change • Geographical Containment • Physical Containment

It is based on the Functional Assessment that a support plan to meet a person's needs can be designed. In Table 2 above, we have distinguished between two major categories of strategies: *Proactive Strategies and Reactive Strategies*.

PROACTIVE STRATEGIES

Proactive Strategies are those designed to decrease the frequency and/or intensity of challenging behaviors over time. Included within this category are ecological manipulations, positive programming, and focused support strategies.

1. Ecological Manipulations. Challenging behaviors frequently occur as a function of a person's living, working and interacting environment. *Ecological Manipulations* involve planned changes in the environment that result in person being less likely to engage in the problem behaviors. Examples of ecological manipulations include changing the setting in which the person lives, changing the number and quality of interactions with others, changing the instructional methods being used, changing the instructional goals, removing or reducing environmental pollutants such as noise and crowding, and changing the philosophical context in which the person lives and works. The success of ecological manipulations rests on the quality of the information derived from the assessment. It is not unusual to find that the people we serve are more likely to engage in serious behaviors when others are disrespectful, make unreasonable demands, and generally interact with them in an un-dignifying manner. Consequently, an ecological strategy would be to give the person the opportunity to interact with others who ask rather than demand, who talk rather than yell, who are respectful and interact with the person with "dignity."
2. Positive Programming. Positive programming may be defined as a "longitudinal, instructional program designed to give the person greater skills and competencies for the purpose of controlling or eliminating problem behavior in order to facilitate and enhance social integration" (LaVigna, Willis and Donnellan, 1989). Positive programming teaches more effective and socially acceptable ways of getting one's needs met and of coping with the realities of the physical and interpersonal environments in which the person must act and interact. Thus, the first emphasis of behavior programs to manage behavioral challenges (e.g., aggression, property destruction) must be to provide a rich schedule of positive programming to develop the person's functional communication, domestic, vocational, recreational, social, community and coping skills. It is within this context that efforts directed toward reducing the individual's behavior problems can occur. To the extent that the person develops and exhibits a rich repertoire of daily living and coping competencies these problems should occur less often, if they occur at all. Thus, positive programming may in itself reduce the frequency, duration, intensity and array of individual and group behavior problems.
3. Focused Support Strategies. This category comprises a range of strategies designed to achieve relatively rapid reduction in the occurrence of the person's behavior. It includes a variety of reinforcement strategies, including reinforcement for the absence of certain behaviors (DRO), reinforcement for engaging in the challenging behaviors fewer times (DRL), reinforcement for engaging in alternative behaviors (Alt-R), reinforcement for following instructions, and reinforcing the person for engaging in the problem behaviors at the right time and in the right place (Stimulus Control). Within this category is a group of strategies that are included within the context of Emergency Management Strategies; namely, Antecedent Control Strategies. These strategies will be discussed below.

REACTIVE STRATEGIES

Reactive Strategies are those actions people take in reaction to the challenging behaviors. The purpose of reactive strategies is to resolve the behavioral episode as quickly and safely as possible. That is, the purpose of a reactive strategy is to provide a response that does not cause an escalation in the frequency and/or seriousness of the person's behavior while preventing injury to the person and to others and preventing damage to the environment. Accordingly, the effectiveness of a reactive strategy can be measured by the change in the behavior's "episodic severity."

Episodic severity is defined as the measure of intensity or gravity of a behavioral incident. Table 3 illustrates the distinction between measuring behavior over time vs. episodic severity as a dependent variable. Episodic severity is an important dependent variable since simply showing a reduction in the rate of a behavior over time or a reduction in the severity of the behavior over time, does not guarantee that the severity of individual episodes (i.e., episodic severity) has also decreased; indeed, the opposite is frequently the case. Thus, when the severity of target behavior is of concern, measures of episodic severity may be more useful as a dependent variable than severity for a particular period of time.

Frequently, consultants design programs for people with serious behavioral challenges without specifying just what to do when the behavior occurs. It is as if they believe that the staff person will "know" what to do. This is a sure formula for failure. If staff are not given a plan for reacting to challenges, they will do "what they have been taught," or will "fly by the seat of their pants." Either solution may result in injury to the staff or to the client.

Table 3***

A comparison of episodic severity vs. measures of severity over time

<u>Target Behavior</u>	<u>Baseline</u>	<u>Intervention</u>
<u>Outbursts</u>		
<u>Over Time</u>		
Frequency	10/week	2/week*
Duration	10 hours/week	4 hours/week*
<u>Episodic Severity</u>		
Average Duration	1 hr/episode	2 hr/episode**
<u>Physical Aggression</u>		
<u>Over Time</u>		
Frequency	10/month	3/month*
Episodes result in trips to the hospital	7/month	3/month*
<u>Episodic Severity</u>		
% of episodes resulting in trips to the hospital	70%	100%**
<u>Property Destruction</u>		
<u>Over Time</u>		
Frequency	10/day	7/week*
Cost of repair or replacement	\$280/week	\$7/week*
<u>Episodic Severity</u>		
Average cost of repair and replacement	\$4/episode	\$1/episode*

* Improvement

** No improvement

*** **From: LaVigna, G. W., and Willis, T. J. (In press). Changes in Behavior and Other Outcomes as Dependent Variables for Evaluating Behavioral Plans. In M. Hersen & J. Rosqvist (Eds.), Encyclopedia of Behavior Modification and Cognitive Behavior Therapy: Volume I: Adult Clinical Applications.**

Knowing how to react is especially important in crisis situations. On the following pages, a number of possible “reactions” in potentially serious situations is presented

EMERGENCY (CRISIS) MANAGEMENT STRATEGIES

In spite of the clear provision of positive, constructive programming, the people with whom we work may continue to manifest severe behavior problems that represent a potential threat to themselves, to others, and to property. In the sections below, a variety of strategies are presented as ways of preventing or lessening the likelihood of a full-scale outburst. These procedures should not be construed as capable of producing lasting change. Rather, they are designed to manage the behavior until positive programming can have the opportunity to affect change.

ANTECEDENT CONTROL STRATEGIES

"The best Emergency Management Method is NOT to have an Emergency in the first place."

Most serious episodes can be avoided, but we continue to make the same mistakes over and over. For example, everyone who knows Paul knows that he is likely to run off when he is in crowded situations. But people keep taking him into large stores and to malls during the busiest hours and are surprised when he "runs off." When asked why they took him to the mall, they describe that "he has been so good at home we thought it was time to take him shopping." It appears they believe that "time will heal." Time does not heal, as a rule. Until the person has been taught to tolerate crowds, to tolerate noise, AWOL can be eliminated by avoiding the conditions (i.e., cues) that cause it to occur. This procedure we call an "Antecedent Control Strategy."

What Would Happen If Someone Held A War And Nobody Came? Antecedent Control Strategies involve the removal or elimination of events, objects, or situations that may "set off", "cue", or "set the stage" for the occurrence of behavior problems.

1. Remove Seductive Objects. Frequently, objects or materials in a setting act as cues for someone to approach to engage the object. It is this approach to or engaging of the object that results in a potentially serious situation. By removing the object, or by eliminating access to the object, a potentially serious episode might be avoided. Here are some examples:
 - Fidgety Phil Gets Into Everything. Parents of "hyperactive" (i.e., ADHD) children are very familiar with this problem. They complain that once this child begins to toddle, he is into everything, is grabbing things off of tables, opens cupboards and drawers, and touches everything that is within his reach. Some parents attempt to manage this child by running behind him saying "no, no, don't touch." They try to occupy and redirect each time the child gets into something. This parent frequently resorts to more severe measures as the less forceful methods fail. Other parents, on the other hand, take a more common sense approach. They childproof the environment. They lock the cupboards and drawers so the child can't get into them; and they put away the valuable "knick-knacks" until which point the child develops greater control (perhaps 35 years old with some). In other words, they remove the "cues" for getting into "trouble."
 - A Food By Any Other Name. Martha has problems associated with Prader Willi Syndrome. She has an uncontrollable need to eat. As a result, anytime food is left out, a cupboard is left open, or food is left unattended, she eats it. She has eaten frozen steaks, has consumed an entire box of granulated sugar, has consumed so much food that she has vomited and then searched for more food. It is clear that she does not have the ability **NOT TO EAT FOOD** if it is available. In the past, Martha has been punished for "food stealing." But it has not worked. She simply has become more subtle and sneaky.

It does not make any sense to punish Martha for taking food. It makes even less sense to continue “teasing” her by leaving cupboards open with food in them, of having enormous amounts of food in the house when everyone knows that Martha can't control herself.

Antecedent Control was used in this situation to eliminate the problem. The cupboards and the refrigerator were locked, and staff were instructed NOT to leave food out. The support plan package included giving Martha the opportunity to eat low calorie foods frequently throughout the day, teaching Martha follow a good nutritional dietary plan, and reinforcing Martha for NOT taking foods not on her plan.

- The Art Critic. Paula is a 35-year-old woman who was referred because of “severe” property destructive behavior. Paula had been living in a board-and-care residential program for about a month. The care-provider complained that Paula would not leave pictures on the wall. She would pull any picture from the wall and toss it on the ground. The care-provider lectured her, repeatedly put the pictures back on the wall, and tried to prevent her from taking down the pictures. The care-provider reported that Paula had broken many pictures and was becoming progressively more destructive and angry. She wondered whether Paula should continue living in her program. The care-provider asked, “What should I do?”

Antecedent Control was used to eliminate the problem. The care-provider was told to take the pictures down, to eliminate the “cue” for the problem. The care-provider’s initial reaction was negative. She felt that she was giving in to Paula’s problem and that Paula was “getting away” with it. It was explained that the recommendation to remove all the pictures was the first step on the way to teaching Paula to leave the pictures on the wall.

The long-term strategy (i.e., Positive Programming) involved teaching Paula to tolerate pictures on the wall, gradually. In step 1, a postage stamp was used. Pieces of a wooden match stick were formed around the stamp to simulate a frame. Using a bit of scotch tape, the “tiny-little picture” was placed on the wall. Several times a day, Paula was given the opportunity to have some of her favorite snacks near the picture. At that time, the care-provider talked about the picture. Paula was encouraged to look at it and to touch it while she snacked. The postage stamp was replaced with small passport-sized pictures framed with pieces of ice-cream sticks. Subsequently, the pictures were systematically increased in size, from Polaroid-sized to 8 by 10s and so on. Over a period of about 3 months, the care-provider was able to help Paula get to the point that she could tolerate the pictures that she previously pulled off the wall.

- Some other examples of removing the seductive objects (i.e., Antecedent Control) include:
 - i. Locking the gates so that Ted won't elope.
 - ii. Locking up valuables because Sandra has a tendency to steal.

- iii. Not sending Paula to the store when she is known to be destructive in that setting.
- iv. Not taking Alan to the store since he is known to grab anything edible and consume it.
- v. Not giving Ralph small coins since he is known to put them in his mouth.
- vi. Not giving Michael small coins because he will refuse to participate in all activities from that time on.

2. Re-deploy/Relocate People. Quite often, we observe that certain people simply do not get along with others. A person may be more likely to escalate into serious behaviors with men than with women; or when people get too close; or with people with a particular size or personality. Instead of assuming that the people we serve must get along with everyone with whom they come in contact, a serious problem may be averted by simply removing or eliminating the things about people that set off serious problems. Here are some examples of this antecedent control strategy in action:

- The Bigger They Are, The Harder They Fall. When young people have a history of assaulting others, the usual policy is to assign the biggest and most powerful of the GUYS to manage this person. This was indeed the case with Gary. Gary has a history of psychiatric illness along with severe assault. Our assessment showed that he had hospitalized several staff as a result of assault and consequently was restrained 24-hours-a-day to prevent injury to others. It was generally believed that he assaulted EVERYONE. However, our assessment suggested that he assaulted MEN and was more likely to assault LARGE DEMANDING MEN. Those interviewed were unable to recall a woman who had been assaulted by Gary. Consequently, the antecedent control strategy involved having ONLY WOMEN work with Gary.
- The Closer I Get To You. A seven-year-old little girl with a severe cognitive disability was referred because of high-rate aggressive behavior. She had recently been placed in a small group home with five other children with disabilities. The care-provider described this little girl as engaging in high-rate slapping of the other children primarily during mealtimes. We observed during mealtime and sure enough, she slapped and swatted at the other children nearly constantly throughout the meal. She would take a bite and swat, and bite and swat at the same time. It seemed that she was attempting to “keep the children away” from something.

In an effort to better understand why she would do this, it is important to understand where she had been living prior to arriving at the home. She had spent the past several years living in a State Hospital. As anyone can tell you who has worked in a large congregate setting like a state hospital, meals are frequently chaotic. And don't let your meal out of sight for an instant, because when you look back it will be

GONE. Perhaps this was the meaning of this child's behavior. Perhaps she was using it to keep others from taking her meal.

To eliminate the problem, an antecedent control strategy was used. Through trial and error it was determined that if the other children were moved just out of the child's reach during meals, at just about 2 feet from the other children, the little girl no longer attempted to strike the other kids.

While this strategy eliminated the problem for the moment, it was not likely to produce lasting change. We can guarantee you that if you did nothing else, moving the other children closer would result in the problem recurring. Our strategies involved changing how the little girl viewed the other children during meals. It seemed that she originally viewed them as "takers of my food." If an effort to change this view, the children were given the role of "food giving." That is, in a family-style eating arrangement, all food was passed to the little girl by the other children. As this was done, the children were brought closer and closer over a period of about 3 months. By the end, the children were all sitting quite close to each other at the table.

3. Remove Unnecessary Demands/Requests. People sometimes react angrily with physical aggression and property destruction when they are presented with demands or are pursued for compliance. In such situations, the removal or lessening of demands/requests is likely to reduce many serious behavioral episodes while structured reinforcement strengthens compliance. Here are some examples:

- Sandy lives in a small group home with other kids who have cognitive disabilities. One of his jobs at the group home has been to set the table each night for the kids. For doing this he receives 20 tokens each night. One evening when he was informed that it was time to set the table, he screamed and turned over the table. The dishes and everything else on the table went flying across the room. This was a surprise to those who knew Sandy. This had never been one of his problems. As a matter of fact, setting the table had always been one activity that he looked forward to. For the next several days, the same thing happened.

When asked what to do, an Antecedent Control strategy was suggested. Group home staff were directed TO NOT ASK Sandy to set the table. Initially, the staff argued that they couldn't do this, for it would be GIVING IN to him; but they eventually agreed. When they did this, the problem ceased. This continued for the next couple of weeks. Remember, Antecedent Control is not going to produce lasting change because no learning occurs. It simply eliminates the antecedents that "set off" the behavior.

The support plan for Sandy involved making the activity (i.e., setting the table) so easy that he couldn't help but participate. When he was asked to simply put a glass on the table and that would represent "setting the table," he looked at staff in a surprised way; but did what had been suggested. He received his 20 tokens for the job. Over the next several weeks, staff simply asked him to do gradually more

until which time he was again setting the complete table. At the end, however, there was one major difference. He was now receiving 30 tokens for the complete act of setting the table.

- Some Other Examples:

Incident	Antecedent Control Strategy
• Fred yells and screams when he is asked to "Take out the trash."	• Don't ask Fred to take out the trash.
• Bill is likely to hit when told to "sit down."	• Don't tell Bill to sit down.
• William will slap himself in the face quite hard when he asked to do a puzzle.	• Don't ask Bill to do a puzzle.
• Mary lunges at female staff who work with her and rips off their blouses when they demand that she spend 15 minutes doing her least preferred puzzle as a consequence for being noncompliant (i.e., Contingent Work).	• Don't ask Mary to do the puzzle.

When faced with the suggestion to NOT make a request in order to eliminate a problem, people frequently argue that they "can't do that;" that it is "giving in;" that the person is "winning," or that they are "reinforcing the behavior." It is important that we understand that it is none of these. The purpose of the strategy is to eliminate potentially dangerous behaviors immediately. The power comes with the implementation of the complete support plan. While Antecedent Control Strategies eliminate the problem, positive programming teaches the person to cope with demands, to do what is asked, and to solve problems in other ways. Remember: **It is OK not to have a CRISIS.**

4. Eliminate Provocative Statements and Actions. Everyone has a "button," something that someone does or says that just irritates us to no end. It could be the way something is said; it could be a word; it could be a person saying it; it could be how someone looks at you. The point is that while we all know we have "buttons," we need to recognize that the people we serve also have their "buttons."

When we are faced with people who constantly irritate us, we sometimes tell them "Don't push my button;" at least we say it to ourselves. What we are recommending to others is an Antecedent Control Strategy. We are saying, "If you don't _____, I won't _____." This is exactly what we should be doing for the people we serve. Recognizing that there are things we say and do that set off serious behavioral challenges, "we should stop saying them and stop doing them." Here are some examples in practice:

- "If you don't have something good to say, don't say anything." Jerry is a 35-year-old man with a mild cognitive disability. He lives in a large residential center and attends a workshop during the day. His problem is that he is about to be booted out of his workshop because of what has been described as "assaultive behavior," which he does several times each day. The staff described that when Jerry gets angry, he bites the knuckle of his right index finger, gives "the finger" with his left hand, and then picks up a chair or other object not tied down and throws it at a person. When asked "what sets this off?" the staff described "nothing, he just flips out." Upon further exploration

it was determined that he “always has a good reason.” Anytime someone criticizes Jerry, or he perceives someone as criticizing him, he engages in “finger, finger, throw” behavior, as this complex of behaviors had come to be called.

It wasn't that Jerry didn't know what to do when he was criticized. In fact, when asked, he presented a litany of things he could do and say when criticized or teased. These were the things he had heard for years and indeed he was able to verbally regurgitate them. However, from what we could determine, he had never really used them. In fact, he would get so angry when he was criticized that it was easy to see how he was unable to verbalize.

The initial recommendation to those who worked with Jerry was “Don't criticize!! But if you do, DUCK.” This was hard for those who worked with Jerry, but they did agree, since it was also explained that strategies designed to reduce the frequency of “finger, finger, throw behavior” would follow.

The support plan included a number of components. Jerry was reinforced for the absence the problem behavior. In addition, he was taught to cope with criticism through “incident-based, social skills training (IST).” IST involved the following steps:

- Staff along with a consultant reviewed incident reports and personal experiences looking for discrete examples of “criticism” that had resulted in “finger-finger-throw” behavior. For example, one staff member described an incident in which she approached Jerry after noticing that he wasn't working, but was doodling on a piece of paper. She simply placed her finger on the paper and said “Is that what you are supposed to be doing.” Jerry immediately became angry and engaged in “finger-finger-throw” behavior. In another instance, another staff member described approaching Jerry to correct him for incorrectly assembling something he was working on. She said to Jerry, “That's not the way to do that.” Jerry engaged in “finger-finger-throw” behavior.

Several dozen examples were identified. Each example of criticism was written on a 3” by 5” index card. For each example a short script of what to do (action) and what to say was also written. For example, one card contained the following:

Staff Script #1

Setup: Jerry is sitting at his workstation. He is supposed to be working but is doodling with a pencil on a piece of paper.

Staff:

- Approach Jerry quietly.
- Stand quietly looking down at him “doodling” on the piece of paper.
- Place your index finger gently on the paper where he is “doodling” and say “Hmmmmmmm.”

For each example of criticism, a script was also written describing what Jerry should say and what he should do.

Jerry's Script #1

- Look up at the person criticizing you.
- Look him right in the eye.
- Ask him “Is there a problem?”
- Don't say anymore.

Once all of the scenarios of criticism and their reactions had been written, they were arranged in order of their severity. That is, with 100 cards, card # 1 represented very minor criticism, while card 100 represented extreme, even outrageous criticism.

Each day when Jerry returned from the workshop, he and a staff member practiced, i.e., role-played, how to react to criticism. Staff modeled how to react, as Jerry would play the role of the person criticizing; then Jerry practiced how he should react. This was done as realistically as possible. They began practicing with items that represented minimal levels of criticism. When Jerry had mastered one level, they moved up to the next. They eventually got to the point where Jerry was rehearsing how to react to outrageous, un-dignifying levels of criticism. For example, one of the last scripts to be practiced involved the following:

Staff Script #97

Setup: Jerry is sitting at his workstation. He has been working, but he has done a sloppy job. He put the wrong screws in the zip-lock bag.

Staff:

- Approach Jerry angrily.
- Slap the table in front of him.
- Point your finger at him and shake it.
- Yell at him saying, "That is absolutely the worst job I have ever seen. I have told you a thousand times how to do it and you can't get it right. You must be stupid. What do I have to do for you to get it right."
- Stand there staring at him.

Jerry's response to this outrageous criticism was contained in another script:

Jerry's Script #97

- Look up at the person criticizing you.
- Look him right in the eye.
- Say to him "You don't have the right to talk to me like that."
- Get up and walk away without saying anything more.

- Hurry up and wait!! You have heard that statement. If you have ever been in any of the military services, you know what we mean. Waiting is unpleasant, especially if we are in a hurry. Most of us have learned coping skills for waiting, but some of us have not. When was the last time you were in a line and heard someone yelling and screaming (yourself perhaps) about the incompetence of the person (usually some civil servant) who is making us wait.

With some individuals with disabilities, the frustration associated with waiting is tantamount to a crisis in their eyes. Not only can they not cope, but also they engage in serious behaviors (e.g., self-injury, physical aggression, property destruction, etc.) to deal with their frustrations.

What is the answer? Initially, to prevent the crisis it may be necessary to arrange so that "there is no waiting," or it is held at a minimum. While this is likely to reduce serious behaviors through Antecedent Control, positive programming will be needed to teach the person how to "tolerate longer periods of waiting." For example, Lee has problems waiting. Typically, he approaches and tugs on your sleeve when he wants something and when he wants you to answer a question. If

you don't respond immediately, he will strike you or look for something to break; both of which will get an immediate reaction. Initially, Lee is asked to wait for only a moment. He approaches, tugs at your elbow and you say "Lee, I'll be right with you." No more than a half a second later, you say "Thank you for waiting Lee, what can I do for you?" This period of waiting is gradually increased to the point that Lee can wait for several minutes and longer. But REMEMBER, it begins with not letting Lee wait at all.

Here are some other examples:

Precipitating Event	Prescribed Reaction
<ul style="list-style-type: none"> Some teenagers frequently become defiant, argue with their teachers and may escalate to profanity and possible assault when they are singled out and criticized in front of their peers. 	<ul style="list-style-type: none"> Don't criticize these individuals publicly. If correction is necessary, do it privately.
<ul style="list-style-type: none"> When you point a finger at Joey, he bites himself. 	<ul style="list-style-type: none"> Don't point your finger at Joey. Later, teach him to cope with people pointing their fingers at him.
<ul style="list-style-type: none"> Pedro runs away terrified and is likely to bite himself, if someone touches him. 	<ul style="list-style-type: none"> Initially, avoid touching Pedro unless it is absolutely necessary. Positive programming will help him learn ways of coping with touch.
<ul style="list-style-type: none"> John will lunge at a person and strike them if they get too close, especially if he doesn't know them. 	<ul style="list-style-type: none"> Keep your distance.
<ul style="list-style-type: none"> Bart becomes physically aggressive when you attempt to remove small objects from his hands. 	<ul style="list-style-type: none"> Don't attempt to remove the small objects unless they represent a danger. A program can be designed to teach Bart to give up the objects and to tolerate longer periods of not having small objects in his hands.

5. Change the Location and Time of Activities. Certain people manifest serious behavior problems reliably in certain situations and at select times. For example, hitting may occur only in the dining room, but not in the kitchen; tantrums might occur during activities presented just before lunch. By changing the location and/or time of the activities, the behavior problems may not present themselves. Here are some examples:

- Sally, who has severe learning difficulties is described as slow to wake. When she is awoken abruptly, she physically assaults those around her to the point of serious injury. Alternatively, when she is allowed to awaken slowly - to start her day in a gradual fashion - morning physical aggression simply does not occur. In this instance, the advisable course is to "let her wake gradually."
- Billy and Lisa are 22-month-old twins who engage in serious tantrums when it is time for them to go to the bathroom for a bath. They scream, bite, scratch and do whatever they can to escape or avoid taking a bath. Our assessment has determined that the kids had some bad experiences with bathing and it was concluded that they were fearful of bathing. Instead of forcing the kids to bathe in the bathroom, the tantrums were eliminated in this situation by NOT using the

bathroom. Baths were initially conducted in the kitchen, in a large pail, with warm water and large sponges. The baths were moved gradually closer to the bathroom over a period several months. Eventually, the kids were taking baths without tantrums in the bathroom and in the bathtub; just like other kids their age.

6. Rearrange the Environment. Have you ever had the experience of moving the furniture in your house, or changing the position of your desk and find that for a period of time your actions or behavior has changed? Sometimes we will arrange our home office; for no apparent reason. For a period of time after we do this, we feel different in the office. We seem to have more motivation, more interest in working? Why is this?

Sometimes our behavior, including emotions, becomes tied to environment we are in, including the arrangement of that environment. This is also true with people who engage in challenging behaviors. The behaviors they engage in may be more likely to occur in the “comfort of familiar surroundings.” Sometimes, the likelihood of these problem behaviors can be reduced, by changing or rearranging the environment. For example, Mary yells, screams and hits at others only when she sits in a specific chair that is pointed in a specific direction. By changing the chair and her position, it was possible to eliminate many outbursts outside the confines of a structured support plan. Here are some other examples:

- Rearrange the pictures on the walls.
- Hang the pictures on the walls upside down.
- Move the furniture.
- Change all the light bulbs so that the lighting in the house is much less or much brighter.
- Replace all the white light bulbs with colored ones (e.g., red in the bedroom, blue in the living room, green in the bathroom).
- Change the sleeping arrangement.

This set of procedures does not just affect the problem behavior. It has the tendency to disrupt all behaviors. As we will discuss later, it is actually a form of “Stimulus Change.” But it involves a change in a broader array of stimuli than will be discussed later. Given it is a form of stimulus change, and its impact depends the “novelty” of the change, the effect will eventually “wear off.” This strategy is used when the person has serious behavioral challenges and we need a brief period of time to assess the problem, to implement other programs and/or to organize our resources. **REMEMBER!** You do not want to use this strategy with a person who does not tolerate changes very well.

INTERRUPTING THE BEHAVIORAL CHAIN

“Don’t interrupt me, you made me lose my train of thought.”

“What was I saying?”

Have you ever heard or said these things? These sayings attest to the fact that what we may be saying or doing can be interrupted and possibly forgotten if something intrudes: e.g., a noise, a question, a flash, another thought, an instruction, or something else remembered. While we know that this happens - and it appears to happen more often as we get older - we seldom formally use this knowledge to help people who have challenging behaviors. Before we get started, you need to understand that the ideas presented below are radical in the sense that they sometimes violate the traditional belief we have that if we react to a behavior, we will reinforce it. Based on this belief, many of us hold that when a behavior occurs we need to ignore it. This fear of reinforcing behaviors by reacting or attending is based on a mistaken assumption that all behaviors are maintained by attention. That is absolutely ridiculous. Common sense tells us that the people we serve engage in challenging behaviors for a wide variety of reasons, one of which may be attention. Given this revised view, then the following ideas may seem less radical or strange.

Severe behavioral challenges are frequently a part of a “behavioral chain,” which progresses from less to more severe. For example, physical aggression (e.g., hitting others) might be preceded by verbal protests, whining and crying; property destruction (e.g., breaking objects) might be preceded by a reddened face and screaming; self-injurious behavior (e.g., striking self in head with a fist) might be preceded by screaming and pulling at ears. It might be possible to prevent physical aggression, property destruction or self-injury by eliminating the early members of the chain (i.e., the precursors); by doing something that prevents the person from escalating to the next higher member of the chain. Indeed, a major episode might stop through a variety of reactions we might have. Here are some ways that this might be done:

1. **Proximity Control.** Teachers and parents of children and adults with challenging behaviors can teach us (professionals) so much about how to survive serious episodes. Unfortunately, many of us have elected not to listen or to discount what they say because they are not professionals. But, we can learn so much. One parent described that she was able to prevent most of her son’s tantrums by getting close to him and touching him on the shoulder in a reassuring manner when she saw his acting nervously. A teacher described that he found that a reassuring touch to be one of the most effective methods of de-escalating his students; he would approach touch the student on the shoulder and make a comment. In other words, what these people have found is that proximity can have an impact on a person’s behavior.

With some people who have challenging behaviors, we might observe, or someone might report, that the person is “less likely”, if at all, to engage in the behavior when an adult is present or in “close proximity”. As described above, a teacher might report that she or he has found by moving closer when the person is “upset,” the person seems to relax or de-escalate. Under such circumstances, simply “moving closer” to the client when he

appears agitated may be sufficient to “prevent” a full-blown episode. Others have found that by placing a firm hand on the person’s shoulder as he is escalating, or by moving closer to the individual at the dinner table when she starts to become disruptive; or by getting closer to a young man in a group setting where he is feeling uncomfortable reduces the likelihood of a severe behavioral episode.

Proximity control also includes moving away at strategic times. Paul seems to enjoy his space. He can tolerate people being close to him “only so long.” When he vocalizes and begins to verbalize repetitively (i.e., show agitation) he seems to be communicating “Leave me alone.” By moving away from him and giving him his space during these times, he does not escalate into a full-blown self-injurious episode. He seems to calm down.

2. Introduce Humor. People have described humor as therapeutic for decades. Indeed, over the past several years we have seen books on the shelves of popular book stores that seem to be touting the value of humor. But isn’t this common sense. Most of us have experienced this scenario: You are angry about something, or perhaps just a little depressed. You are dwelling on it; you are mulling it over in your mind. In fact, you may be so intent on wallowing in your anger or depression that you avoid people who you know who are always happy. But haven’t you experienced this; a friend, your spouse comes in, makes a funny face, cracks a joke, uses a word or makes a noise and you break into laughter as much as you try not to laugh. That is what we are getting at; laughter, a humorous response may “compete” with our anger or depression. Consequently, as a person begins to escalate, or begins to show the precursors leading to more serious behavior, we might do something that causes the person to laugh.

It took a parent of a young man with disability to teach us the importance of humor. We were asked to conduct an assessment for Rob because he was having difficulty getting off to school each morning. Indeed, two people (driver and aide) were required each morning to get him on to the bus. This is what one of us had to report:

"I arrived the first morning to begin the assessment and to observe the problem. As I drove up, I observed a large yellow school bus sitting in front of the home. After stopping, I observed a young man (Rob) weighing approximately 225 pounds and standing about 6 ft. tall pacing on the porch of the house. I got out of the car with my “behavioral clip board,” and proceeded to walk along the side of the bus. As I approached the front side the bus; the door of the bus was closed and the two men had their faces pressed up against the windows. One was pointing to the porch, toward Rob. This seemed a little strange to me. I then began to walk up the walkway to the house. I had no sooner begun up the walkway when Rob began coming at me on a dead run. When he got close, he threw his body at me, striking me at about the waist with the side of his body. He threw a near perfect downfield body block. When we made contact, the clipboard went flying and we fell on the grass and rolled over and over several times. It was about this time that I figured out what was going on. I was able to grasp Rob by his elbows and to escort him to the bus where the three of us got him into his seat.

“Confused, and somewhat dazed, I found the clipboard and proceeded to enter the house to begin the assessment. Rob’s mother and I talked about the problem in some depth. She described that it had only been a problem for about 2 months.

“Prior to that, she escorted her son to the bus each morning. But because of her weight, a very bad case of arthritis, and because she had extreme difficulties negotiating the steps, she had to give the responsibility of getting Rob to the bus to the school. It was at that time that the problem began. As we talked more, she informed me that she had never had a problem like this with her son. He had never pushed or hit her as far as she could remember. At one point she frankly began to laugh at me, saying ‘I’ve told you psychologists before just how to handle him. No one listens to me!’

"I asked her to tell me how to handle him. After my experience I would do about anything. She laughed and told me that he has a ‘ticklish spot;’ a place under his arm that when touched, her son breaks out into laughter. No wonder people hadn’t listened to her.

"I arrived at the home the next day before the school bus arrived. Rob allowed me into the house without any difficulty. He was very interested in me as I talked to his mother. During this time, Rob’s mother proceeded to demonstrate the “ticklish spot “ to me. She lifted her son’s arm and placed her finger amidst his ribs. He withdrew his arm giggling, then put his arm up to her for her to do it again. Then I did it. We began to play a game of tickling. Now it was time that he went onto the bus. I had learned that he likes cokes, so I brought one with me. As we went out, he and I played the ‘ticklish-spot’ game all the way on to the bus. He sat in his seat, I buckled his belt and I gave him his coke. Surprisingly, he did not attack on this day. We continued this for the next several days. Then the bus aide was added into the support plan. Over a period of several weeks, the aide took over escorting the young man to the bus, and got to the point where he no longer had to play the game, but would simply arrive at the door, walk with him to the bus, and give him a coke."

Laughter, humor, joking, making fun might be effective with some people to “break the chain” of escalation to more severe problems. However, considerable caution needs to be exercised, since such a method might be wrongly construed as ridicule or sarcasm.

3. Instructional Control. Instructions include verbal, written and gestural events. Instructional control is said to occur when instructions reliably result in a change in behavior to conform to the content of the instructions. Many individuals with whom you come in contact indeed are able to change their behavior to conform to instructions. For some, the tendency to follow directions may approach being compulsive. In such instances, instructions may be used to divert the person into more appropriate activities, to stop ongoing activities, etc. For many people, an instruction given at the right time to the person or the group might divert the person from continued escalation.

Here are some things that might be done as the person is escalating:

- Ask him to do something that diverts him from the issue at hand (e.g., run an errand, help, do a favor).

- Ask him, quietly, about his program and how he has been doing.
- Give an instruction to the entire class to stand up and take deep breaths and stretch.
- Ask him to check a paper for you.
- Ask him to collect everyone's work.
- Ask the entire class to describe their three favorite things and call on the student who is having the problem first.
- A person who masturbates indiscriminately might be told where it is appropriate to masturbate.
- A person who is about to hit himself or others might be told "hands down".
- A person who is agitated and escalating toward aggression might be asked to "leave the room".
- A person who is running toward the street might be told to "stop".
- A person who is hitting his head might be told to "stop".

Take, for example, John. He is one of those people who hits others and sometimes causes severe injury. Additionally, an assessment showed that he initiates some requested activities whenever he is asked. A staff person who knew John well described that he will drop whatever he is doing when asked to "take out the trash." One day while at his group home, he was running to hit another young person. The man who was responsible for caring for John, was too far away to prevent the contact. He remembered John's propensity to follow instructions and immediately yelled to John, "John, take out the trash." Reportedly, John slowed his run, and walked to the kitchen to take out the trash. The instructional cues were powerful enough to interrupt the chain of aggressive behavior.

4. Active Listening. It makes no sense to argue with Fred. His father said "You can argue until you are blue in the face, but he still won't understand." Additionally, he is likely to get angrier and perhaps become physically aggressive the more he argues. This is not atypical of young people who get caught up in the emotion of the moment. In this situation, it was suggested that people don't argue with Fred. Rather, when he is angry about something, people might be able to help by communicating with him in a special way. The method suggested is called Active Listening.

Active Listening was first described by Dr. Thomas Gordon in 1970 as part of Parent Effectiveness Training. It is a method of communication. Its special value is when people have strong emotions in which there are embedded messages. One major value is that since it is non-directive and non judgmental, it does not serve to further escalate already difficult situations. It involves reflecting back to the person the "message they are sending." For example:

Scenario 1

Setting: George is upset because he can't wear the baggy clothes he wants to wear. The rules specify that certain clothes can't be worn.

George: "You don't understand. They are cool."

Response: "I can see you are real upset because you want to wear those pants, but the rules won't let you...and you feel I don't understand you and how cool the clothes are."

Scenario 2

Setting: Someone is screaming close to Mary. She appears to be upset. She is looking at the person screaming.

Mary: Grimacing, holding her ears and staring at the person screaming

Response: "Tom's screaming seems to be bothering you. It looks like it is hurting your ears!"

This strategy of communicating to kids seems to go against the usual belief that "Kids should do what they have been told. They shouldn't argue and they should listen." It is frequently this belief that stimulates the confrontation that escalates into a crisis. We have found that in a great number of instances, reflecting back the emotion and message, while presenting a non-judgmental, understanding reaction to an upset teenager, frequently results in the teenager re-gaining control and de-escalating.

5. Facilitating Communication in Other Ways. Many of the people with whom we work either lack communication skills entirely to communicate desires, anger, frustration, and wants, or their skills are not firmly developed. Consequently, efforts to assist them to express themselves may effectively reduce the likelihood that severe problems will appear. More importantly, attempts at the time the person is upset may head off more severe problems.

When people begin to show signs of agitation and frustration, when they show the early signs of escalating to more severe behaviors, every effort might be taken to DETERMINE the nature of the problems, and to ENCOURAGE them to express themselves. Some specific questions that might be used include:

- What do you want?
- Do you have a problem?
- Do you need help?
- What is wrong?
- Can you show me where it hurts?

- How are you feeling?

Some other phrases that might assist in encouraging the person to communicate include “Tell me what is wrong,” “Tell me about it.” Simply showing interest and vocalizing “hmmmm,” or “uh huh,” may be sufficient to help the person communicate. At least it conveys the person an air of understanding which in and of itself may have a calming effect.

Many people with disabilities are simply unable to talk and have limited non-verbal expression skills. For these individuals, a “best guess” approach may be helpful during crisis times. For example, an 18-year old young woman yells and screams for no apparent reason. We know, however that this problem is more likely to occur when she is about to or is having her period. One reaction might be: “_____, you don’t feel good. Your stomach is hurting. I’m sorry. Would you like to lie down? Here is some medication that might help”.

In a second case, a 25-year-old woman who is not able to communicate had just had an altercation (fight) with another woman. During the fight, she received a scratch on her cheek. After the fight, she grabbed and pulled at anyone and anything around her. One approach might include: “_____, you have a scratch on your face. I’ll bet that hurts. Let me help you. Let’s go to the bathroom and fix it.”

6. Facilitating Relaxation. This is another special form of “Instructional Control Procedure”. If the person continues to be upset, agitated, self-abusive, or destructive, instructions to relax should be used. The following guidelines are presented to assist the client in the process of learning and engaging in relaxation.

- i. Acknowledge that the person is upset: “I know you are upset.” “You seem to be upset.” “You are angry about _____.”
- ii. Instruct the person to calm down: “You need to calm down.” “Relax.”
- iii. Instruct the person in activities that promote relaxation: “Take a deep breath.” “Raise your arms over your head (demonstrating).” “Now take a deep breath.”

If instructions are not effective in de-escalating the situation, the person may be encouraged to go to a place that is conducive to “gaining control”.

- iv. The “quiet place” should be away from others and should offer the person an opportunity to be undisturbed while he “gains control”. Some possible locations include:

- a sofa or chair in an unoccupied room.
- at the kitchen table when there is little or no activity.
- in the his/her bedroom.

- v. Once the individual has arrived in the designated area, he should be instructed to sit or to lie down; in other words, to get comfortable.
- vi. The person should be assisted in getting comfortable. He should be instructed to loosen any tight clothing. The person should be prompted to place his hands in a resting position by his sides, resting on the arms of a chair, or in his lap. These positions should be identified as “relaxing positions.” The entire situation should be one of “encouragement,” not forced compliance.
- vii. The voice tone during these instructional periods should be given in a calm and even “monotonous” manner. The voice should always convey an air of support.
- viii. Instructions should be given to “relax” select parts of the body. For example, as body parts are identified and as relaxation is instructed, the statement should be accompanied by tactile “stroking” of the targeted area (e.g., arm, neck, forehead). Another approach is to have the person shake his hands and fingers, since continued shaking may lead to fatigue and a feeling of relaxation. Statements that might assist in the process of relaxing might include: “limp as a rag doll,” “melt into the floor,” “float like a feather.”
- ix. The individual should be instructed to take a deep breath, hold it, and let it out slowly while the instructor says the words “relax,” “calm down.” This breathing should be repeated up to five times in a given session.
- x. One technique developed by Schneider and Robin (1975) is the “Turtle Program.” This technique involves the following: (1) teaching the individual to withdraw into an imaginary shell by pulling his arms and head in close to his body, and closing his eyes when he is threatened, upset or frustrated. “You can hide in your shell whenever you get that feeling inside you that tells you that you are angry. When you are inside your shell, you can have a moment to rest and figure out what to do:” and (2) telling the person to rest his muscles while “doing turtle.”
- xi. Once the individual has achieved a “calm,” relaxed state for from one to five minutes, he should be asked “Are you calm?” If the answer is yes and his appearance is one of calm, he should be instructed to take a few deep breaths (three to five), to stretch his arms overhead, and to get up. If he is not calm, an additional one to five minutes should be allowed.

It should be remembered that the relaxation procedure is not designed as a punishment (i.e., a time-out). Rather it is designed (1) to prevent escalation to more severe behaviors, (2) to reduce the intensity and duration, i.e., the episodic severity of an ongoing incident, and (3) to provide the person with an alternative coping strategy.

- 7. Stimulus Change. At the time of an incident, or when the person is beginning to escalate, the introduction of a novel stimulus or UNEXPECTED EVENT may interrupt the course of the escalation or even terminate the episode. Take for example the beginning of an attack. The untrained individual is likely

to take up a defensive posture as the person approaches (e.g., hands raised, knees bent). If this occurs repeatedly in the face of an assault, the person who is doing the assault may come to expect it. So, when the aggressor approaches and the defender takes up the “ready position,” the message that is being sent is “OK, I’m ready! C’mon down.”

In contrast, Stimulus Change involves **doing the unexpected**. It involves doing something that’s **not the rule**. Stimulus Change involves a “non-contingent” (i.e., not a contingent) delivery of a stimulus (e.g., a saying, a movement, an interaction), or a sudden alteration of incidental stimulus conditions that already exist in the situation (e.g., turn lights off or on, rearrange the furniture). We have found that by using these unexpected reactions, challenging behaviors frequently lessen in intensity or even stop. But the effect is only temporary. The more often the same “novel” event is used, the less novel it becomes and the less effective it is. People just get used to things when they occur over and over. For this reason, people need to have a wide repertoire of “novel” things to do and to say. And they need to remember that one method might work two or three times, but be wary of the fourth time it is used.

Stimulus Change may be useful in a variety of situations; for example, when a person is beginning to escalate, when aggressive, destructive acts, etc., are imminent **or are already occurring**, and when serious behavior is occurring in a seemingly unending chain. Remember, however, it may take considerable exploration to identify events and actions that have the desired disruptive properties you might be looking for.

To better understand Stimulus Change, picture in your mind a person who has begun to argue with you, a person who has begun to escalate and you fully expect that this person will hit you, others or themselves. What would be this person’s response if you,

- began simulating a tantrum in front of the class and ended with “I needed that;”
- began to stare into air and swat imaginary flies;
- fell and writhed around in apparent pain;
- pretended to faint;
- began to sing and dance while skipping through the house;
- began talking to an unseen someone;
- all of a sudden said in a surprised way, “I forgot my _____;”
- asked him to “hold this for me;”
- did a somersault in front of the class;
- got down on the floor and began searching for something that was dropped (e.g., contact lenses);

- began to flap your arms and to act like a chicken;
- pulled your shirt over our head and just stood there;
- put on a Disney character mask;
- dropped all of your change on the floor;
- bumped into something and it fell on the floor;
- turned and began to recite the Pledge of Allegiance while saluting an unseen flag;
- began to spin like a top;
- began to skip through the class singing;
- had a coughing attack;
- asked another person close to you to dance.

Here are some examples of Stimulus Change in action. One of us had a recent experience with a potentially dangerous behavior where stimulus change saved the moment:

"While I was consulting at a group home, one of the young residents (about 10 years old) was exploring how he could part a cat's head from the rest of his body. (He was holding the cat tightly under his arm while twisting the cat's head with his other hand.) The cat was showing signs of being noticeably upset (i.e., screeching bloody murder). A staff member was attempting to disengage the child from the cat, but gently because a forceful action could be dangerous to the cat's ninth life or would surely result in a serious physical altercation between the staff member and the child. At that instant, I jumped up and went running through the house and outside screaming that someone was taking my surfboard. Not 10 seconds later, the boy who was hurting the cat came to the door and said "Tom, what happened?" Importantly, he did not have the cat in his hands - but I saw it heading for open fields in the back yard. I'm wonder if that the cat ever returned.

"In another situation, a 14-year-old had just returned to the group home where he lives. He was angry at something that had happened on the bus. He was SPOILING FOR A FIGHT. He was standing in front of the 6'3" house manager, bristling with clenched fists. The manager was using active listening, along with the other procedures described above.

"I was sitting about 20 feet away thinking how well he was handling the situation. But after about 10 minutes or so of this I could see that the manager was running out of ideas. He turned and looked at me with that 'What do I do now boss?' expression. Luckily, I heard a siren. Loudly I said 'Hey, that sounds like a fire engine. Boy its close. I wonder if it is in the neighborhood?' I proceeded to walk outside while talking about the closeness of the siren. When I got outside I said, 'Look, there it goes. Do you see any smoke?' By that time, the all of the kids and staff were out on the lawn looking, listening,

and talking about the possibility of a fire. Interestingly, the bristling had stopped. The young man was also out on the lawn looking, listening and talking.”

Perhaps one of the most novel examples of Stimulus Change was described to us during a break at a conference where we were presenting. We had just finished talking about Stimulus Change. During the break a woman approached excitedly to share an experience that she had. She finally felt validated that what she had done was NOT CRAZY; strange, but not crazy. This woman was a principal of a high school. She described that one day as she was walking across the school grounds she observed two guys, two big bruisers, having a knock-down fight. As principals would do, she said, “Stop!” But, that did not work. She then tried to physically separate them; but that was not successful. Finally, she used the SANFORD TECHNIQUE. This technique may not be familiar to you? Do you remember the situation comedy “Sanford and Son?” When Fred Sanford was under stress, he would feign a heart attack and call to his dead wife “Elizabeth...I’ll be with you in a minute.” Well, the principal, using the Sanford Technique, grasped at her chest, began choking and gasping for air. Almost immediately, the two young men who were fighting, stopped, assisted the principal to the drinking fountain and then back to her office. According to the principal, when the students left her, they were not fighting.

As strange as stimulus change methods may sound, they can be quite effective. But no one strategy can be effective over any length of time. People get used to them. Just imagine if the principal used the Sanford Method regularly. After a short period of time she would walk out on the playground and the students would probably say “here comes old heart attack.” Thus, a wide range of strategies needs to be learned.

COUNTER INTUITIVE STRATEGIES

There are a number of strategies that we have employed that we have found to be among the most powerful in their ability to avoid, or to get rapid control over an escalating and/or potentially dangerous situation. However, they run counter to common sense and what many of us believe is appropriate in a support plan for somebody who has severe and challenging behavior. Here is an example to illustrate this counter intuitive approach.

“A Touch In Time. A number of years ago we were asked to help a young man whose self-injurious behavior was so severe that he risked permanent mutilation. Specifically, when he was upset, he would tug at his lip so severely that it had had to be surgically reattached a number of times. The physician made it clear that this would not always be possible and he was at risk for losing his lip permanently. His instruction to us was “Don’t let it happen again.”

Based on our assessment, the only reactive strategy that we could identify that was sufficiently effective in getting him to stop tugging on his lip when he was upset was to put our arms around him and to hold him. This was a possible problem, not because this “restraint” procedure was aversive; on the contrary, he liked being held in this way. *(In fact, many of the people we work with, like being physically held, i.e., “restrained.” It is often an event they seek to experience rather than one they seek*

to avoid.) The potential problem was that holding him when he became upset could potentially positively reinforce his self-injurious behavior, making it more likely to happen under similar circumstances in the future, rather than less likely. That is, it had the potential of producing a counter-therapeutic effect.

However, this reactive strategy was only one of 18 different strategies that made up his entire support plan. The other 17 strategies were all proactive and designed to produce the desired changes in future behavior, including ecological manipulations, positive programming and focused support strategies. In contrast to what had been feared, the introduction of the entire support plan resulted in a rapid reduction of his self-injury. More importantly, his face remained unmarred and he did not lose his lips (this outcome can be directly attributed to the reactive strategy we employed, with the resulting reduction in episodic severity). Further, on last report, it has been years since he has had any episodes of self-injurious behavior and is living successfully in the community (this outcome can be attributed to the proactive strategies that were employed).

What we learned was that when a reactive strategy, with the potential to produce a counter-therapeutic effect, is employed within the context of a fully developed proactive plan, the proactive plan can compensate for the potential counter-therapeutic effects of the reactive strategy. It should be pointed out that in this case the proactive plan, among other things, provided for him to receive frequent and regularly scheduled deep muscle massages on a non-contingent basis to assure that his need and desire for intense physical contact with other people could be met without requiring him to engage in self-injurious behavior.

The use of counter-intuitive strategies is a unique and very powerful feature of the multi-element approach for developing support plans. It opens up options for reactive strategies, which previously were not possible because of their potential counter-therapeutic effects. We call this approach to Emergency Management “counter-intuitive” because it goes against what we would ordinarily think makes sense. For instance, in the example above, an episode of self-injurious behavior was controlled by physically holding the person. Because this was an event that was known to be a preferred event for him, common wisdom would have been to find some other, *non “reinforcing”* way of controlling his behavior. Counter-intuitively, but with a lot of consideration of the internal dynamics we were establishing with the entire multi-element support plan, we included this as the primary reactive strategy.

There are a number of such counter-intuitive strategies that we describe in the following paragraphs. Some of them are variations of antecedent control, designed to avoid emergency situations, and some are variations of interrupting the response, designed to get rapid control over escalating and/or dangerous situations, i.e., designed to reduce episodic severity.

1. Diversion. Diversion, or redirection as it is frequently described, is a much-maligned strategy. When parents and teachers describe that they re-direct, it is frequently looked upon by professionals as akin to “doing nothing.” On the contrary, it is a powerful way of interrupting an escalating problem or one that has already reached an emergency level.

Our experience has been that one way of interrupting an escalating or full blown episode of a problem behavior is to redirect the person or divert the person to an activity or event that has such a strong attraction, the person “can’t help but be diverted.” For example, we might re-direct the person to

activities that have a ritualistic, almost compulsive quality to them. Indeed, these highly preferred activities might be reinforcing for and to the individual, under certain conditions. (If you haven't yet figured out why we call these strategies "counter-intuitive", we think you should be getting the idea about now.) On the surface, the idea of redirecting the person to a pleasurable activity probably sounds like we have gone off the deep end. You are probably asking "Wouldn't such a strategy reinforce the problem behavior and shouldn't we avoid doing so at any cost?" Perhaps an example will help illustrate the logic and rationale behind this *counter-intuitive* suggestion.

The Staples of Life. A number of years ago we were contracted with another agency to train their professional staff in IABA methods for conducting behavioral assessments and functional analyses and for designing strictly non aversive support plans for people who have severe and challenging behavior. When we provide this kind of training, each trainee selects a person from their agency who needs such behavioral services. One of the trainees selected Gail as her "focus person," an adolescent girl whose problem was frequent and long tantrums involving loud and lengthy screaming and severe self-scratching of her face. At the time that training was being provided, Gail had been receiving behavioral services from the agency, at home and in school, for 18 months. The primary strategy that had been employed was a "corner time-out" procedure in which, upon exhibiting tantrum behavior, she was placed and required to sit in a chair facing a corner until she quieted down and stopped tantrumming. Under these conditions, Gail's behavior had reached a steady state in which she was screaming and scratching herself an average of 40 minutes a day, and on some days for as long as 80 minutes.

The teacher carried out an excellent functional assessment and analysis and on that basis designed an excellent proactive support plan. For example, some of the ecological manipulations included changes in the curriculum and a rearrangement of the classroom layout so that the student would not be subject to as many distracting stimuli. Among the skills identified for instruction under the heading of positive programming were the use of a picture communication board and a relaxation response. The picture communication board included, among other things, a picture of the water fountain for Gail to point to when she wanted something to drink, a picture of a magazine for her to point to if she wanted to look at a magazine, and a picture of the restroom for her to point to if she needed to go to the bathroom, etc. The relaxation response involved deep, measured breathing as a way of successfully dealing with stressful situations. The focused support strategy included a schedule of reinforcement in which Gail received positive reinforcement for lower and lower rates of screaming and scratching.

The proactive plan included these and other strategies, but then the question arose, "What should people do in the face of a tantrum?" While the teacher acknowledged that the corner time-out procedure had not produced a sufficient reduction in screaming and scratching, she recommended that it be used as a reactive strategy strictly for the purpose of getting rapid control over a potentially dangerous situation. "We have to do something when she starts hurting herself. Don't we?" she said. She was right; this is an example of exactly the kind of situation that calls for "emergency management." We pointed out, however, that corner time-out did not seem to have the potential, in this case, as a sufficiently effective emergency management procedure,

since Gail was engaging in the behavior an average of 40 minutes a day and for as long as 80 minutes a day.

We then suggested to the teacher that she review the information she gathered during the assessment process to see if she could identify any activity which would be highly likely to divert Gail from her tantrum *without regard for its possible reinforcing effects*. Upon that review, the teacher reported that she was very confident that if you handed Gail a magazine, she “compulsively” needed to open it up and remove the staples holding it together. Since the teacher felt that this activity had such seductive qualities for Gail, we recommended that as soon as the teacher became aware that a tantrum was pending, and the sooner the better, she should hand her a magazine and once the “ritual” of pulling the staples out was over, redirect Gail back to her instructional activities. The theory was that this reactive strategy would be very effective in getting immediate control over an escalating tantrum and that the proactive strategies would prevent any counter-therapeutic effects. What actually happened was that, immediately, tantrums occurred for no more than five minutes a day and she was spending more time each day in instructional activities. Further, the frequency of tantrums began to come down, requiring the less frequent use of the reactive strategy. On last report it had been more than two years since any tantrums had occurred.

In this case, counter-intuitive as it may have been, diverting Gail to an activity that was known to capture her attention under most, if not all circumstances, proved to be a very effective emergency management procedure. Although, traditionally, such a procedure would not even be considered out of fears that it would reinforce tantrums, the proactive strategies proved capable of compensating for that potential counter-therapeutic effect. It is out of experiences such as this that we believe the multi-element model opens up options for very effective emergency management procedures that would not be viable in more traditional approaches. In the multi-element model the total burden for producing changes over time rests with the proactive strategies. The reactive strategies, being liberated from this responsibility, can be selected strictly for their ability to get rapid control over a dangerous and/or escalating situation. Diverting the person to a highly “compulsive” or even highly preferred activity is just one example of such a counter-intuitive strategy. Presenting such an activity sets the occasion for responses other than, and as alternatives to the problem behavior.

2. Introducing and/or Maintaining A High Density of Preferred Events. A second counter-intuitive emergency management strategy is to introduce and/or maintain a high density of preferred events. For example, when we carried out our assessment to learn about Jeff and his challenging behavior, we discovered, among other things, that he was more likely to become aggressive when his general level of reinforcement was low and that one of the very clear antecedents for this behavior was when he was denied reinforcement for some other behavior, such as non-performance of a requested activity or refusal to go to school. Therefore, counter-intuitively, when he chose not to go to school, rather than making sure that his day at home was not so enjoyable out of fear that we would reinforce his “truancy”, we made sure that he did enjoy himself, as an “emergency management” procedure. This procedure really upset his parents. They felt he should not

get away with this. "If a child without a developmental disability stayed home from school, he certainly would not be allowed to go out to play or perhaps even to watch TV. Why should Jeff?" We tried to explain our rationale as follows:

"1. It is true that when Jeff does not go to school we may spend the day with him letting him draw, interacting pleasantly with him, going out into the community, possibly stopping off somewhere for an ice cream cone or other snack, and engaging in other enjoyable activities. We believe, however, that these preferred events will only reinforce, i.e., increase, his non-attendance at school if these activities are *more* preferred than the activities he engages in when he goes to school. That is, to increase his attendance in school, it is not necessary to remove his access to enjoyable activities when he doesn't go to school but rather to simply insure that the density of preferred events that is available to him when he goes to school is sufficiently greater than the density of preferred events that is available to him when he does not go to school. If this differential in the respective densities of reinforcement is established and maintained, he will spend more and more time in school. Fortunately, everybody agrees that Jeff really enjoys school. This makes it easier to maintain the necessary differential in preferences in support of the objective of increasing Jeff's time in school."

"2. Another reason we believe that the enjoyable activities that Jeff participates in when he does not go to school will not result in increasingly poor attendance is that the things that he does, drawing, going out, eating snacks, etc. are non-contingent, i.e., he has access to these opportunities whether or not he goes to school. For example, he goes into the community and has snacks when he stays home and he also has these opportunities when he goes to school."

"3. He is in fact spending more time in school and less time at home. In the first progress report dated April 3, 1993, he attended school 25% more days in April than he had in March (15 days vs. 12 days), and, for those days that he attended, he was arriving earlier. We will of course continue to monitor this and if he does not continue to improve, we will modify one or more aspects of the procedures we are using. Typically, such changes would occur in conjunction with our quarterly review, but could occur as a function of our ongoing clinical evaluation."

"4. The initial functional assessment report and recommended support plan dated Jan. 11, 1993 described a number of ways that preferred events would be used. As indicated, the most important was to provide them non-contingently. '...there should be a high density of preferred events available on an essentially non-contingent basis, to assure that the quality of Jeff's life is generally a happy and rich one, that is full of enjoyment.' A trap to be avoided when trying to help someone who has significant behavior challenges, is to be so reactive to the presence of behavior problems, through the contingent withdrawal of reinforcers (Type II

Punishment), that the person's quality of life deteriorates. This, itself, may produce more behavior problems, which lead to more reinforcers being withdrawn, and so on. This can create a downward spiral, from which it may be very difficult to get out."

"5. To eliminate or significantly reduce the amount of enjoyment that Jeff has when he doesn't go to school would also be inconsistent with our recommended antecedent control strategy to consistently use 'Non Aversive Procedures' to reduce aggression and the associated challenging behavior. Our plan is not to reduce his other behavior problems through the contingent loss of reinforcement, since such an approach is likely to increase his aggression, etc., and one of our important objectives is to reduce these behaviors."

"6. In fact, our full plan to increase Jeff's desirable and appropriate behavior and to help him meet life's challenges without aggression and similar behavior is extensive and involves many interrelated features that may only make sense when they are considered in total. For this reason, it may be helpful for you to reread the full Jan. 11th report and recommended plan, since this context may be necessary to fully understand the rationale behind our use of enjoyable activities when Jeff is home and our other uses of preferred events that may be of concern to you."

This response to Jeff's parents was an acknowledgment of the "counter-intuitive" nature of our recommendation and the need for some justification in order to increase its social validity. The fact that Jeff was a child and not an adult contributed to the counter-intuitiveness. The issue is a little more complex when working with adults. When we look at ourselves, we see that most of our day-to-day enjoyment, i.e., participation in preferred events and activities, is non-contingent. For example, we plan to go out to a dinner and show this Saturday. It is not likely that we will cancel that activity because of something we do or not do that week or even that day. The TV shows we watch, the food we eat, the books we read, the people we see, the things we buy, etc. are events that occur, by and large, independent of our day-to-day behavior, i.e., they occur non-contingently.

This is even true when our behavior is "horrendous." Have you ever had this experience? You were getting ready to go out to that dinner and show on a Saturday night and one of your children did something that just struck you the wrong way. Did you find yourself overreacting, having an adult tantrum with all of the child-like yelling and screaming? If you did, do you remember your experience, your thoughts after you calmed down? Do you remember the guilt when you realized that your reaction was totally out of line with your child's behavior; that your child simply did not deserve your "harsh" treatment. Reflecting upon **your** "misbehavior" toward your child, did you cancel your night out for fear that you might reinforce your own "misbehavior." Of course not! Hopefully, you apologized and then went out and had a good time. Notice...you did not become an increasingly worse parent, i.e., your behavior was not reinforced.

How about this? Have you ever overreacted to some innocent mistake made by your spouse or close friend? Have you yelled or said something

you regretted? Did you do something that was just plain stupid? After realizing your misdeed, your stupidity, did you say to yourself “if I go out and enjoy myself tonight, I’m likely to reinforce my inappropriate behavior. Hmmm, I guess I’d better cancel my plans?” Of course you didn’t. In all likelihood, as bad as you may have felt you behaved, you probably apologized and went on with the evening’s plans.

Given that we frequently do enjoyable, fun, exciting, preferred things right after we misbehave, why is it that our misbehaviors don’t worsen. Why isn’t our behavior reinforced under these circumstances? Why is it that we do not exhibit more and more “inappropriate” behavior? Why is it we don’t become tyrannical monsters? To answer this question, we must look back at a basic rule of reinforcement. “In order for an event to strengthen a behavior (i.e., reinforce it) it must be contingent upon that behavior. In other words, there must be an if-then relationship between the behavior and the consequence, with the consequence not being otherwise available. In other words, we don’t become monsters because our enjoyment of the recreational and other events is *not contingent* upon our undesirable behavior, even though it may *immediately follow* those responses.

As adults, we maintain a high density of non-contingent, preferred events in our lives. That is, we do many things for the fun of it and do not place rules on ourselves governing our leisure time activities. For example, when was the last time you said “If I’m good at work, I can watch TV tonight.” Can you imagine your reaction if, all of a sudden, people started placing rules governing your leisure time? How would you feel? How would you react? You would be first in line at the office of the ACLU claiming that your constitutional rights had been violated. But isn’t it interesting that when working with our adult clients, when they engage in a problem behavior, our attitudes change. We are very careful to cancel any existing plans for that person that might be enjoyable. Our justification is that we don’t want to reinforce problem behavior.

Ideas such as continuing with a preferred activity following problem behavior run against common practice; in other words, they are counter-intuitive. In contrast to our common beliefs, in keeping with the principles of applied behavior analysis, as long as the preferred event is non-contingent, it is not likely to reinforce and strengthen the undesired behavior. Thus, maintaining high densities of non-contingent preferred activities and events can help avoid crises and avert emergencies in at least two other ways:

- We can avoid those behavioral crises that could develop as a direct effect of canceling a preferred activity or event. Reducing reinforcement density as a consequence for behavior is a punishing event and by avoiding punishing events we can avoid *punishment induced aggression*. In fact, avoiding punishment is a strategy for avoiding behavioral crises in its own right and is discussed below.
- We can avoid behavioral crises that are more likely to develop when the person is experiencing a low density of preferred events and that are less likely to develop when the person is experiencing a high density of preferred events.

There is another powerful argument for introducing and maintaining high densities of non-contingent, preferred events and for not removing preferred events as a consequence for “misbehavior.” Many of the people we serve have very little in their lives that is truly exciting. Indeed, a common complaint of staff is that they can find very little that is “reinforcing” for the people they serve. Instead of removing pleasure from people’s lives, one of our goals should be to give people a better quality of life. And one of the most direct ways that we can accomplish this goal is by increasing the amount of non-contingent preferred events they experience. Taken a step further we might also suggest that reducing a person’s access to preferred events for misbehavior, when their general level of preferred events is already below the norm, may be ethically questionable.

Reducing a person’s overall density of preferred events may also be clinically questionable, especially when it comes to behavioral crises. A person’s overall density of preferred events and the rate and severity of behavioral outbursts might also be related. Evidence indicates that a low general level of preferred events is likely to be setting event that increases the probability of behavior problems, while a high general level of preferred events is likely to decrease the probability.

3. Avoid Natural Consequences. Natural consequences are defined as consequences for a behavior that would be likely to occur if the person exhibiting the behavior did not have a disability. They are those that society in general imposes, in contrast to those that are imposed by staff as a part of a formal plan of intervention to change behavior. Examples of natural consequences would range all the way from being evicted for not paying rent or for causing repeated disturbances, losing a job because of one’s dress, grooming, language, or other behavior on the job, having people in your life choose not to talk to you because of the way you have treated them, etc. It has been argued that it is important for people with disabilities to experience the natural consequences of their “misbehaviors.” It has been argued further that if people with disabilities experience the same natural consequences as others, they may not be as devalued as they have been in the past. Further, it is thought that natural consequences would provide the least stigmatizing way for people to learn what behaviors will be tolerated by society and those that will not.

The use of natural consequences has grown in popularity as more and more services have been provided in the community. However, our observations tell us that many, if not most, of the people we serve whose behavior escalates to the point of requiring emergency management strategies, have not learned and are not likely to learn from natural consequences. If natural consequences had been so effective, this monograph would not have been necessary. Almost by definition, the people we serve who have the most challenging reputations, have not and are not going to learn from natural consequences. In fact, that is precisely what makes their plight so challenging. Business as usual, has not resolved the problems, hence, special measures are necessary.

In broad terms, the histories of most of the individuals with challenging behaviors we have served have followed the course shown below:

- Their parents and teachers used natural consequences to reduce early identified misbehaviors.
- Their parents, teachers and other support staff, finding that natural consequences failed, used routine behavior modification procedures, including the use of punishment, e.g., time-out, loss of privileges, etc.
- As problems continued and became more serious, staff increased the precision of what they were doing, sought more sophisticated professional guidance and consultation, and probably increased the use of aversive consequences.

This scenario has been played out for many of the people we serve. It has led to increased artificiality of treatment and greater isolation and segregation from the community. It is understandable, therefore, that there is an impulse and desire to normalize the lives of the people we serve and the ways they are being treated by others and by society at large, thus the push for natural consequences. However, we believe that natural consequences should be avoided for the following reasons:

- Natural consequences are not likely to lead to learning, based on past history and as evidenced by the continued need for crisis management.
- Natural consequences may lead to further devaluation of the individual and further exclusion from community presence and participation.
- Natural consequences may increase the need for further crisis management strategies through the phenomenon of punishment-elicited aggression and through a reduction in the person's overall general level of preferred events.

On the other hand, it is true that one of the long-range goals of a support plan would be that the person's socialized behavior patterns would be maintained by the natural consequences provided by society. For this reason, it would be appropriate to allow a natural consequence to occur if it did not lead to further devaluation or exclusion of the individual and *if it did not cause an escalation of the situation*. For example, if a person knocks over a piece of furniture, there would be nothing wrong in asking him to put it back, as long as asking him to put it back did not cause a escalation in which he knocked over other furniture, threw furniture or became aggressive.

Even when natural consequences are allowed to occur because they do not lead to devaluation or exclusion (and may even lend a little dignity to the person) and they do not lead to escalation and/or the increased need for crisis management, it should be remembered that the natural consequence is not likely to teach the person a more socialized pattern of behavior. This teaching role is assigned to Positive Programming in the multi-element model. In fact, all changes in future behavior are assigned to the proactive strategies of Environmental Change and Focused Intervention, as well as Positive Programming. In the Multi-element Model, Reactive Strategies have the narrow, although important role of situation management, i.e., the reduction of episodic severity. The liberation of Reactive Strategies from the traditional role of providing consequences for instructional purposes is necessary in our

quest to seek a model for supporting people with challenging behavior that is truly non-aversive. This narrowing of the Reactive Strategy role also allows for crisis management within a non-aversive framework, such as the recommendation to avoid natural consequences, as counter intuitive as that may seem.

4. Don't Ignore. Perhaps you have heard of the University established by Brother Guido Sarducci. After just 20-minutes of class work he grants students a four-year bachelor's degree. How does he do it? Simple! All he teaches is what the typical college graduate remembers five years after they have graduated. For example, in Economics 101, all he teaches is **Supply and _____**. You should have been able to recall that the correct word to fill in the blank is "Demand". "Supply and Demand" is what most college graduates remember from Economics 101 five years after they have graduated, so that is all Brother Guido Sarducci teaches to begin with. What he teaches in his behavioral psychology course is that when somebody is behaving inappropriately you should '**Ignore.**' What most people remember long after they have forgotten everything else from their introductory course in behavioral psychology, applied behavior analysis or behavior modification is that if somebody is acting in an inappropriate manner, you should ignore them. For example, Johnny is described to you as making strange noises in the group for attention. What are you going to advise the teacher? Isn't it likely you will tell him, "Ignore it!" Well, this may be the wrong thing to advise.

We believe that behavior, even "misbehavior", communicates legitimate messages, i.e., serves a functional role. If this is so, what can be worse than ignoring somebody's attempts to communicate. If somebody is attempting to communicate, and they are being ignored, they simply begin to escalate, e.g., yell and scream until somebody pays attention. At the very least, to be ignored when attempting to communicate can be emotionally devastating. Have you ever said hello to somebody in a public setting and have that person snub and ignore you? Do you remember how you felt? That is how the people serve may feel if we ignore them when they are attempting to communicate to us. Why is it that behavior sometimes worsens when it is ignored? Escalation occurs because ignoring a person or their behavior can under some circumstances represent an extinction condition, and extinction, while it may eliminate behavior in the long run, often, and in fact, typically will escalate the immediate situation. This is a well-known observation that has been termed the "extinction spike."

People sometimes think that ignoring and extinction are the same thing. Extinction, however, is a technical term defined as the "withholding of a previously available reinforcer for a response". Given that definition, sometimes ignoring is extinction and sometimes it is not. Take, for example, the situation of a teacher whose ten-year-old student has the challenges associated with autism. This student may have the frequent stereotypic behavior of moving his hand, with fingers spread, between his eyes and the overhead light on the ceiling. If this behavior is ignored, this is not likely to be an extinction condition, since it is not likely that the teacher's attention, which would be withheld through ignoring, is the reinforcer that is maintaining this behavior. More likely, the maintaining reinforcer is the visual stimulation produced by such stereotypic behavior. Since, in this case, ignoring is not extinction, it may be included as part of a multi-element support plan without

fear, all things being equal, that it will escalate the behavior and create an emergency situation.

In contrast, however, consider a teacher whose adolescent student uses profanity in the classroom, in reaction to which it has been her practice to verbally reprimand him and send him to the vice-principal's office to be "disciplined." Suppose, further, that after two months of this the teacher realizes that rather than getting better, the problem is getting worse, i.e., he is cursing in class more and more rather than less and less. She concludes that rather than punishing this behavior, as she intended, she has actually been reinforcing it, i.e., the student really likes to see her get upset, which she visibly is when she verbally reprimands him, and he likes to get out of class, which he does when he is sent to the vice principal's office. Accordingly, she decides to start ignoring this behavior. What is the first thing that is going to happen? The behavior is going to get worse. In this case, ignoring is extinction, and this is likely to cause an escalation of the behavior in each instance in which it is ignored. This escalation can increase to emergency levels and that is why we say that when ignoring is extinction-**don't ignore**.

We are convinced that the typical advice we receive, to ignore inappropriate behavior, frequently creates many of the severe behavior problems we have and contributes to the behavioral emergencies with which must deal. Rarely do behaviors reach emergency levels instantaneously. Almost always, there are precursor behaviors, i.e., less severe behaviors that occur in an escalating pattern of behavior leading to emergency levels. If we ignore these "whispers of behavior," i.e., the precursor behavior, we are very likely to have to deal with the shouts and screams of behavior, i.e., the behavioral crises.

To respond or attend to problem behavior rather than ignore it is counter-intuitive because it has been hammered into us that we should not reinforce such behavior, at almost any cost. This makes intuitive sense because we know that behavior that is reinforced is more likely to occur in similar circumstances in the future. But what we don't take into account is equally known, and that is when reinforcement is withheld for behavior that has been previously reinforced, that behavior is likely to escalate. Unfortunately, we have been taught to focus almost exclusively on what is likely to influence the future occurrence of behavior, almost to the exclusion of consideration for what is likely to influence the present occurrence of behavior. As a result, we often create the behavioral emergencies that are of such concern, and which can result in injury to the person or those around him or her.

We propose that we should apply what we know about behavior as much to the elimination and rapid control of behavioral emergencies, i.e., to the reduction of episodic severity, even as we apply what we know in an effort to improve future behavior. We know that paying attention to behavior, even reinforcing it, typically will cause the behavior to stop at that time. Why not - the behavior has then served its purpose. If we ask someone for a glass of water, we stop asking if we are given the water, but if we are not given the water, we may continue to ask, more and more vociferously.

In fact, if we pay attention to the behavior rather than ignore it, we may even be able to affect its future occurrence, *if we pay attention as early in the behavioral chain as possible*. This may actually reverse the process that

created the severe behavior problem in the first place. That is, in following the advice to ignore inappropriate behavior, we may have ignored low level problems and under this extinction condition, the behavior may have escalated to the point of such severity that we finally had to respond, thereby reinforcing the more extreme form of behavior. In this way, we may have actually shaped the behavior problem to occur at its more extreme levels. This is very likely to happen in those situations in which we have tried to ignore the behavior as much as possible but where it finally reaches such extreme levels that ignoring is no longer possible without exposing the person or others to extreme risk. This is the level at which we say we need emergency management procedures. However, if we reverse this process and pay attention as soon as possible to the behavior, rather than as late as possible, we may not only prevent escalation to a behavioral crisis, we may also shape the behavior down to its less extreme forms in the future.

In fact, early response can also be used, through shaping, to transform the behavior to a more socially acceptable form altogether. To address the concerns that people may have about responding to a behavior rather than ignoring it, however, we would not rely on this shaping strategy as our only proactive strategy for addressing the future status of the behavior. In the multi-element approach, we would have a fully developed plan of ecological strategies, positive programming strategies (of which the shaping strategy may be only one), focused support strategies (including rapid attention to precursor behavior as a way of preventing escalation to a behavioral crisis), and reactive strategies, including listening to the message being communicated by the behavior in order to get the most rapid control over the situation possible.

To avoid and sometimes to get rapid control in a behavioral emergency, we advise “don't ignore.”

5. Don't Punish. We can define punishment as a “consequence applied to a behavior that reduces the likelihood of that behavior in the future.” But, one unfortunate side effect of punishment is that it sometimes causes the person being punished to behave aggressively. This has come to be known as “elicited” or “evoked” aggression.” Certainly, many of you have experienced this phenomenon personally. Have you had any of these experiences?
 - When taking a child to “time out,” the child begins hitting, scratching and biting.
 - A child in a time out room begins hitting the walls, breaking the furniture, and hurting himself.
 - You inform a child that he has lost all of his privileges for being noncompliant. The child now escalates into a tantrum, property damage and physical assault.
 - You inform an adult resident that he has lost his community privileges for failing to carry out his household responsibilities. The resident consequently becomes destructive and aggressive; to the point that emergency physical containment is required.

Punishment by definition suppresses **future** behavior. How is it, then, that punishment can actually produce severe behavior problems. There are a number of explanations for this.

- a. First of all, we must understand that punishment is not designed to have an impact in the “here and now.” By definition, it is supposed to work in the FUTURE. We must also understand that punishment was never designed to be a crisis management strategy; it was never designed to deal with emergencies. Indeed, by punishing a person when they are in crisis, they may be likely to escalate.
- b. While punishment may, by definition suppress future responding, it may not and in fact often does not eliminate the behavior, it may be necessary to continue to punish the residual behavior to avoid the well-known phenomenon of recovery after punishment. Each time the residual target behavior is punished, it may produce another episode of aggression.
- c. The behavior being punished may not be as severe as aggression and yet still be punished in order to suppress its occurrence in the future. For example, “non performance of a requested activity” or “shouting” may be punished by placing the person in a “time-out” area or through the levy of a 50-token fine in a token economy. Such punishment consequences, however, regardless of their effect on the person’s cooperation or lack of shouting in the future, may very well lead to aggression now.
- d. Aggression, as a behavior that might be different and often more severe than the primary behavior being punished, may itself be punished, leading to more aggression, the continued application of punishment, more aggression, and so on. Such escalating and continuing cycles of aggression and/or associated behavior is what we often refer to as an emergency situation.

Our experience is that many of the behavioral emergencies we have to deal with become worse when punishment is used. For example, we were asked to work with a woman with problems associated with autism who had resided in a State Development Center for more than 10 years. She had a long history of refusing and aggression, as well as many other behavior problems. At the time we met her, she was living in a transitional residential program that used “high tech” behavioral methods. The primary complaint was that she was highly aggressive. Staff described that she was aggressive 5 to 10 times a day for “no apparent reason.” Each time she was aggressive, it required physical containment and subsequent seclusion time out. Our assessment also showed that one of her primary target behaviors was “noncompliance.” This was a long-standing problem. The program for this behavior included reinforcement (i.e., tokens) for following simple directions and contingent work for the occurrence of noncompliance. That is, each time she was noncompliant, she was required to go to a table in the kitchen and work on a puzzle she absolutely hated for 15 minutes.

While staff generally described aggression as being for no apparent reason, some staff suggested that she was aggressive to “get out of doing something she didn’t want to do.” Our review of well over a hundred Special

Incident Reports and ABC Recordings indicated, on the contrary, that over 70% of the aggressive acts were preceded by noncompliance on her part and presentation of the “puzzle” consequence. Indeed, all someone had to say was “You are being noncompliant.” and this was highly likely to result in aggression.

Our experience has also been that many of the behavioral emergencies we have to deal with simply wouldn't occur at all if we just stopped using punishment. Indeed, in the example given above, a majority of the aggressive acts were eliminated by removing the “contingent work” punishment, and by telling staff not to use the term “noncompliant” with her. Punishment is so culturally embedded, however, that the mere suggestion we stop using it stirs panic in some of us. At the very least, the idea of **NOT USING PUNISHMENT** raises a number of issues and questions:

- **If we do not punish problem behavior, how can we help the person to STOP the behavior? How can help the person GAIN RAPID CONTROL over the behavior, especially when it is a very serious problem such as self-injury or property destruction?** The multi-element model presented earlier describes *focused support strategies*. The purpose of these focused support strategies is to establish rapid reduction in the occurrence of the target behavior.

Focused Support Strategies include, among others, schedules of reinforcement, e.g., the Differential Reinforcement of Other Behavior (DRO) and the Differential Reinforcement of Low Rates of Responding (DRL), antecedent control strategies, and stimulus satiation strategies. The latter two are particularly note worthy since, unlike punishment, they have the potential of precluding the occurrence of behavior problems. Antecedent Control Strategies eliminate the likelihood of behavior by avoiding those antecedents that trigger or set off the problem behaviors. Stimulus satiation is a motivational strategy. It reduces the likelihood of behavior by giving the reinforcer that maintains the behavior non-contingently and in large amounts. For example, imagine that you have a problem behavior called “going to work everyday for a paycheck at the end of the week.” Also, imagine that you have just won the \$52,000,000 lottery. What is the likelihood that you are going to go to work on Monday after having won the lottery? This is an example of Stimulus Satiation.

In contrast to antecedent control and stimulus satiation, punishment is an after the fact procedure, a procedure that is employed only after the behavior occurs.

- **If we do not provide consequences for problem behavior, how is the person supposed to learn that the behavior is inappropriate and that it is not socially acceptable to engage in it?** In the multi-element model, teaching new behavior patterns is critical and occurs under the heading of positive programming. Specifically, four categories of skills should be considered for possible instruction: general constructive skills, functionally equivalent skills, functionally related skills, and coping skills.

6. Capitulate. Perhaps the most counter intuitive strategy of all is to capitulate to the person as a way of getting rapid, safe control over the emergency situation in order to reduce episodic severity. This idea goes to the heart of our gut resistance to these counter intuitive strategies because of our concerns about reinforcing problem behavior. *What can be more reinforcing than giving in to the person, i.e., capitulating to them and giving them what they are essentially demanding through their behavior?* Another example will illustrate the effectiveness of strategic capitulation as a crisis management procedure. Interestingly, this procedure did not produce the feared counter therapeutic reinforcement so often talked about.

Jim was a 26-year-old man diagnosed with autism and severe mental retardation. He is almost 6 feet tall and weighed over 200 pounds. He is nonverbal. Treatment was being provided in a home in which he was the sole resident. A number of behaviors were targeted for intervention. The most critical of these was severe self-injurious behavior defined as striking his head on or against any surface. This behavior was so serious that there was fear that he was at risk for death or at the very least, blindness and/or permanent neurological damage. His aggression toward staff was also considered to be quite serious, since it had resulted in injuries severe enough to place the person on disability leave during recuperation.

During 1987, Jim received a non-aversive treatment program. Concern still existed. A prominent, internationally recognized behavioral psychologist was brought in as an outside consultant. The consultation report concluded that:

- a. Despite "state-of-the-art" non-aversive procedures, "little or no progress had been made".
- b. "Self-injury presents a significant risk...in the form of irreversible brain damage and visual impairment."
- c. Punishment "...must be limited to...cases in which: a) less restrictive alternatives have failed, b) the behavior is one of significant risk; and c) great care is taken in design, implementation, and evaluation. All three factors are present..." in this case.
- d. "A priori objections to the use of punishment are philosophically based and are not supported by either law or the scientific or clinical literature."
- e. Contingent shock is recommended.

Before contingent shock was initiated, however, a second outside consultation was sought from IABA. It found that despite legitimate concern, Jim's first year of treatment had been marked by three milestones of notable success, i.e., psychotropic medications, which had no proven beneficial effects, had been eliminated; a variety of functional skills were established; and his behavior problems were continuing to improve. Rather than suggesting a radical new approach, this second outside assessment concluded that the success that had been shown to date suggested that even more rapid improvement could be accomplished by expanding certain features of the non-aversive plan. Such an alternative plan was proposed in

December, 1987. The four-part support plan, based on a comprehensive functional assessment is illustrated in Table 4. These strategies were gradually introduced.

Table 4
Jim's Multi-element Support Plan

Ecological Manipulations

1. Activity Sequence Board
2. Backward Chaining for Community Integration
3. Increased Choice Making
4. Simple Token Economy

Positive Programming

1. General Skill Development (Chronological Age-Appropriate/Functional)
 - a. Domestic Domain
 - b. Vocational Domain
 - c. Community Domain
 - d. Recreational Domain
2. Escape Communication Training
3. Tolerance training for reinforcement delay, stress and frustration
4. Relaxation Training

Focused Support Strategies

1. Antecedent Control
2. Discrete trial, differential reinforcement for cooperation

Reactive Strategies

1. Active Listening
2. Staff Withdrawal
3. Redirection

From the beginning, a major concern was how to manage Jim's behavior when it occurred. To keep him and staff safe from harm, the most effective crisis management strategy was necessary. The clues for such a strategy came from the functional assessment and analysis that had been carried out. Specifically, simply put, Jim's aggression and self-injurious behavior served a task avoidance function. In fact, when asked if there was anything they had learned that would stop the behavior once it began, staff reported that if they turned and walked away from him, he would stop hurting himself and would not come after staff to harm them. So on the one hand, turning away from him and walking away would avert the crisis and keep people safe. However, it seemed almost certain that this practice would negatively reinforce self-injury and aggression, making them more likely to happen under similar circumstances in the future. Nevertheless, within the context of the full support

plan outlined in Table 4, this was the emergency management procedure that was employed. The results of this plan was as follows:

- a. Injuries to Jim and to staff no longer occurred.
- b. The rate of head banging immediately and sharply decreased.
- c. The rate of other related but less serious behavior problems also eventually decreased.
- d. Jim became increasingly willing to participate in a variety of activities at home and in the community.
- e. He has a real job for real pay.
- f. Jim's parents and staff report that he appears to be happier and more relaxed throughout the day.
- g. Jim now lives with two roommates, increasing his relationships and interactions with other people.

In short, the support plan, in its entirety, proved capable of providing effective emergency management and long term gains in the reduction of Jim's challenging behavior and in his quality of life. *How are these outcomes explainable? Can they be understood in terms of applied behavior analysis?* We believe they can. First, capitulation, involves surrendering to the person's demands. It is not difficult to understand that if we give the person what they want, they have no reason to continue with the behavior. In Jim's case, aggression and self-injury served a task avoidance function. When staff turned and walked away from him, they were as much as saying "...O. K., you win, you don't have to do what I'm asking." Given this capitulation, it is perfectly understandable that the crisis can thus be contained.

LOSING THE BATTLE BUT WINNING THE WAR

However, this is strategic capitulation. It may mean that the "battle" is lost, that is, in this particular case, the person gets his way and avoids performing some task or activity. However, losing the "battle" takes place within the context of a plan for winning the "war", that is, in this particular case: keeping everybody safe, reducing the future occurrence of behavior problems, increasing the Jim's level of participation in a variety of tasks and activities, and improving his community presence and participation and his overall quality of life. The (support) plan for winning the war includes environmental strategies, positive programming strategies, and focused support strategies, which provide the context for capitulation as a reactive strategy. Our experience is that within the context of such a fully developed plan, the counter-therapeutic effects feared should capitulation occur do not develop.

To use capitulation as a strategy for resolving a behavioral crisis requires that you have some idea as to what has reinforced the behavior in the past and what outcome for the behavioral episode is likely to resolve the crisis as quickly and safely as possible. In the example described above, the pattern of past consequences was one of negative reinforcement, i.e., task and activity avoidance, staff departure, withdrawn demands, etc. Therefore, crises

were safely brought under rapid control by staff terminating their request/demand that Jim perform some task or activity and leave the situation to make it clear that they were withdrawing the previous pressure to perform. In another case, the pattern of past consequences may have been one of positive reinforcement, i.e., acquiring someone's attention, getting something to eat or drink, getting access to some activity, item, or place, etc. In such a case, crises may safely be brought under rapid control by giving the person access to the desired item, activity, etc.

To prevent capitulation from reinforcing the problem behavior and producing a counter-therapeutic effect, the following guidelines are important.

Guidelines for Using Capitulation as an Emergency Management Strategy

- a. If capitulation is being used as a planned crisis management procedure, it should be used as early, rather than as late, as possible in the escalating hierarchy. This is to minimize the risks of requiring the person to escalate in order to get his or her way and to take advantage of the possible beneficial effects of shaping the behavior down. If the person learns she or he can get their way with a precursor behavior, it will become less necessary for them to engage in more serious behavior.**
- b. Whether it is positive or negative reinforcement, the reinforcers that have been identified as the relevant ones should be freely available to the person, as non-contingently as possible. For example, it should be understood that the person can choose not to participate in a planned activity or scheduled task.**
- c. There should be a fully developed proactive support plan which, among other things, is aimed at:**
 - Improving the person's overall quality of life, based on a Positive Futures Plan to assure that there is a focus on the person which sometimes does not follow the typical Individualized Plan. (Environmental Change.)**
 - Giving the person more control over her or his life, in terms of where he or she will live, with whom they will live, what they will do, where they will go, etc. (Environmental Change.)**
 - Teaching the person how to communicate their desires and needs in more socially acceptable ways, precluding the need for the person to exhibit "problem behavior". (Positive Programming - Functionally Equivalent Skills.)**

- **Teaching the person how to cope with and tolerate naturally occurring aversive events, such as having to wait for or being denied something, discomfort, rejection, criticism, the performance of non-preferred tasks, etc. (Positive Programming - Coping and Tolerance Skills.)**
 - **The use of focused support strategies to minimize the occurrence of the target behavior and hence to minimize the use of capitulation, including antecedent control strategies, stimulus satiation and well designed schedules of reinforcement. (Focused Support.)**
- d. **An adequate and accurate data system should be designed and employed to evaluate the effects of the support plan and to assure that all of the desired outcomes are being achieved, i.e., that behavioral crises are being safely resolved, that behavior problems are being reduced in terms of rate and episodic severity, that skills are being learned, that the person is increasing in his or her participation in tasks and activities that are chronologically age-appropriate, that the person has increasingly informed control over his life, and that the person is living a increasingly good quality of life.**

GEOGRAPHICAL CONTAINMENT OR INTER-POSITIONING

Alan is 7 years old. When he has a tantrum, he approaches an adult screaming, scratching and striking. Staff fend off the blows but after awhile their emotions begin to wear thin, they become angry and then restrain Alan using a “basket hold.” This is not an unusual scenario. In the face of repeated trauma, people become angry and try to protect themselves.

There are other ways of protecting yourself without resorting to restraint. For example, in the case of Alan, as he approaches angrily the adult could pick up a pillow or a cushion from the couch and place it between the child and their bodies. The angry child’s actions would be taken by the cushion. During the episode, the cushion would be moved back and forth to keep it between the Alan and the person’s body. At the same time, the person who is being attacked, would be using Active Listening and/or the other problem resolution strategies described above.

Geographical Containment, or Inter-positioning, involves the use of the immediate environment to minimize or to eliminate the consequences of physically aggressive/destructive behavior; in other words, to eliminate the need for physical contact with the person who may be angry and intent on damage to another or to property. Generally, something is done to place a fixed object between the person and the object of their behavior. For example, here are some of the things a person might do when under imminent assault:

- get behind a table;
- stand behind tree;
- clutter the environment with bulky furniture;
- place a mattress between the person and the target of the behavior;
- using a football blocking dummy to protect self from blows;
- wear protective clothing when working with a person who bites.

Here are some other examples of this strategy:

Situation	Geographical Containment
<p>A 12-year-old girl has very intense tantrums. Not only does she scream, she attempts to strike and will bite if she gets close. Sometimes talking to her, and using Active Listening will work, but when it doesn't work, the tendency has been to use two people to restrain her (i.e., physical containment).</p>	<p>Cot mattresses have been brought into the home. They are kept out of sight, but easily accessible. A cot mattress can be rolled and stored. They typically have handles on their sides. As this young lady begins to escalate and it becomes obvious that "talking isn't working," while one person talks, another gets the mattresses. Like the cushions above, the mattresses are used to prevent contact between the girl and the staff with whom she may be angry. If she redirects her actions toward property or other people, those with the mattresses INTERPOSE between the girl and the target.</p>

Situation	Geographical Containment
<p>(From one of our assessments) I was recently conducting an assessment for a young man in a State Development Center. Staff on the unit failed to inform me that the young man, who was described as being one of the most dangerous, did not like people being too close and that he would indicate his dislike with a scowling look, which he was surely doing. As I talked to staff, took notes and attempted to talk to this young man, he all of a sudden jumped up, yelled “no,” struck me and pushed me on the right shoulder. It was very clear that he was upset at me sitting too close - The message was now clear.</p>	<p>The young man was intent on continuing the assault. He lunged at me again, but could not make contact, because I was on the other side of the table at which we both had been sitting. For the next 10 minutes, he continued to pursue, intent on me and no one else. As I kept the table between us I was saying things such “It seems you are upset that I was sitting too close.” “I understand. I’ll leave.” At the end of it all, the young man left the area, went into the bathroom and did not reappear for the next hour. “There must be some message in his last actions for me.”</p>
<p>A young man with problems of Autism breaks windows in a unique way. These are not little windows, but the large double, sliding-glass doors. When he is angry, he charges full blast through the glass. Luckily, he hasn’t hurt himself severely. Possible solutions have been to board-up the windows, or to put Plexiglas in the windows (the cost would be enormous).</p>	<p>The assessment showed that he typically did not hurdle objects. Indeed, it was the impression that he required a “clear field” to fulfill the actions. As an interim procedure, a large couch was placed in front of the double doors, just enough so that the door could be still be used. It seemed that the small space of the door left uncovered was sufficiently different that it no longer acted as a cue to charge.</p>
<p>A 20-year-old man with Schizophrenia resides in a psychiatric hospital. He was placed in the hospital because of severe assault that had resulted in the hospitalization of several people. At the time of an evaluation, he was attended by three staff. The evaluation showed that prior to every assault, he would spend several minutes pacing which increased in speed and vigor with time. The pacing was always unobstructed and in a straight line. Staff had reported that if something was in his way, this would interrupt his ability to continue escalating.</p>	<p>The recommendation was to clutter his home with ottomans, chairs etc. Based on the assessment it was expected that he would need to focus on the furniture, which would interrupt the chain of escalatory pacing.</p>
<p>A young man who weight about 180 pounds rushes toward a staff member with his hands in the air. He seems intent on hitting.</p>	<p>As the staff member talks to him using “Active Listening,” the staff person positions himself behind a table or chair. He continues to talk while insuring that the object remains between them.</p>
<p>A 15-year-old boy with a severe learning difficulty frequently rushes toward the door in an attempt to get outside. He has no understanding of the danger of running into the street. Assessment shows that he is not physically aggressive.</p>	<p>This young man does not have a history of physical aggression. So that staff decide that the appropriate action is to position themselves between the boy and the door when they observe the running.</p>
<p>Fred abruptly jumps up and rushes to hit Martin.</p>	<p>Staff position a table in front of Fred where he now sits to do his work. The table makes it just a little more difficult for Fred to get to others. It also gives staff a little more time to intervene, since Fred needs to move the table to access others.</p>
<p>Theodore hits and kicks the windows in the van when he is riding in it.</p>	<p>Assessment showed that Ted does not hit and kick the windows when he has a tray on his lap, or he has the responsibility for holding something on his lap for the duration of the ride. So, whenever a ride in the van is necessary, the staff have something available for Ted to hold.</p>
<p>Robert gets angry, frustrated and thrashes himself around. He frequently attempts to hit others in this process.</p>	<p>Robert is instructed to go to a hallway or other part of the house to prevent access to the other residents in the home. At some times, he may be instructed to go to his room where he can relax, and staff have the opportunity to help him gain some control.</p>

Situation	Geographical Containment
AI spends his days in a development center with many other young adults who have severe to profound learning difficulties. Several times throughout the day, he gets up and runs from person to person, pulling out large clumps of their hair.	Staff rearrange the setting so that other workers sit across a table from AI, and arrange the tables such that if AI gets up to run to another worker, he must first pass another staff person, and must run around an array of other tables.

When using Geographical Containment, there are some rules that should be observed:

1. Remember that Geographical Containment is an “evasive” strategy. It is designed to prevent or minimize contact. So, “Get Out Of The Way!” Don’t be hit; don’t be pushed; don’t be bitten! Physical contact should be viewed as THE LAST RESORT.
2. Geographical control procedures should be accompanied by instructional methods as described above (e.g., active listening, facilitated relaxation). As you are avoiding, use Active Listening, help the person solve the problem, prompt relaxation, change the subject, etc. In other words, JUST KEEP TALKING, and if need be, KEEP TALKING UNTIL YOU ARE BLUE IN THE FACE, or UNTIL THE CHICKENS COME HOME TO ROOST, which ever one comes first.
3. If you can’t get out of the way, PROTECT YOUR SELF, COVER UP, AND CALL FOR ASSISTANCE.

EMERGENCY PHYSICAL CONTAINMENT

1. In the event that a person’s behavior becomes so uncontrollable that it presents a clear danger to the person and/or to others, and in the event that preventative methods, reactive strategies and geographical containment methods have not been effective, “Emergency Physical Restraint” may be used as an “EMERGENCY PROCEDURE ONLY”. **When physical restraint is necessary, the system (i.e., procedures) employed should only be one(s) that have been approved by the responsible State agency or department.**
2. “Emergency Physical Containment” involves the use of “hands on” contact through the placement of staff body weight in such a manner as to briefly prevent the person’s movement. It does not involve the use of restraining devices such as “soft ties”, “poesy restraints”, seat belts, etc.
3. Examples of Physical Containment include the following:
 - Holding a person’s hands to his or her sides to prevent self-injurious head banging or head slapping.
 - Holding a person’s hand to prevent the hitting of staff or other clients.
 - Holding a person in a corner to prevent him from turning around and pursuing physical aggression.

- Placing a person's legs so that he/she cannot kick.
 - Holding a person in a sitting position from behind with your legs over the person's legs.
 - Sitting on the person's lap while he/she is sitting.
 - Escorting the person to a place while holding his hands or arms.
 - Preventing a person from leaving an area by presenting your body (contact made) in front of the him/her.
4. Physical containment should be avoided unless there is a clear and present danger of physical injury to the person or to others. Physical altercations are dangerous for all involved whenever they are used.
5. **“Physical containment should be a last resort.”** But a time may arrive when you have no choice but to physically contain a person. Before considering using physical intervention, as the person is escalating to an impending crisis, you should ask yourself a number of questions:
- Am I physically capable of managing this person?
 - If not, is help available?
 - How will I get help if I need it?
 - Am I wearing anything that will possibly injure the person or myself, including rings, watches, glasses, long hair, ties, etc.? A corollary to this question is whether you are wearing something of great value, that if damaged would cause you to lose your temper.
 - How can I get away if I need to?
 - Are there objects or pieces of furniture in the immediate environment that may cause damage to the person or myself?

The answers to these questions may help prevent injury to the person or to the staff.

5. If there is a choice, physical containment should not be attempted by a single staff member. It is during these 1:1 altercations that someone is likely to be injured. Therefore, when there is opportunity, the assistance of another staff member should be enlisted. Depending on the person, it may require up to three staff members to safely contain the person. Team-work among staff members will be important. Every staff member that works on a regular basis with the individual should know immediately what his/her role in the containment process should be.
6. Remembering that physical containment is a “last resort” technique; when it must be used a number of guidelines should be observed, ***beyond doing a self-check to determine that the reactive strategies planned to***

prevent the need for physical containment have been, in fact, implemented:

- a. When approaching the person, assume a non-threatening but prepared posture. Do not yell, scream or reprimand. This may only heighten the behavior for which containment is deemed necessary.
 - b. Maintain eye contact with the person at all times. Speak and instruct in a calm, reassuring voice. And as described above, continue to talk to the person in an effort to de-escalate the situation.
 - c. If it is necessary to grasp the person and there is a choice, always grasp by the clothing rather than by the flesh. In addition to affording a better grip, there is less likelihood that the person will be hurt and that the incident will escalate further.
 - d. If it is necessary to grasp body parts, grasp limbs at points just above the joints. In addition to offering a better grip, it is likely to minimize joint damage.
 - e. When constraining an individual from hitting, do not force his/her arms down. Apply only the level of strength that may be sure to “stop” the blow.
 - f. When containing a person against a wall (upright containment), allow some room for movement. Since the object of the procedure is to assist in calming down or regaining composure, rigid containment is likely to simply extend the length and intensity of the incident.
 - g. Throughout the containment procedure, the person should be reassured and encouraged to calm down.
7. Physical containment should be gradually decreased as the individual shows signs of calming, relaxing and gaining control. This may be accomplished in the following ways:
- a. Gradually lessen muscle tension.
 - b. Gradually move from restraining to shadowing (i.e., simply having a hand on the person).
 - c. Gradually reduce the intensity and nature of the containment contact.
 - d. Increase the space available by moving away.
 - e. Gradually decrease the number of staff involved.
8. As the person appears to have a greater calm, he should be asked, “Are you calm?” “Are you under control?” “Do you feel better?”
9. Each incident in which any form of “physical containment” is used should be documented. The particular events that need to be documented include the following:

- a. The date of the incident.
 - b. The time of day of the incident.
 - c. The total amount of time spent in containment.
 - d. The events that lead up to the need for containment.
 - e. The strategies used by staff to avoid the need for physical containment.
 - f. An exact description of the actions taken by staff during containment (e.g., position, number of staff, location).
 - g. The outcome of containment, including injuries.
 - h. How the incident was eventually resolved.
 - i. A retrospective analysis on how the need for physical containment could have been prevented.
 - j. Recommended changes, if any, to the formal support plan to minimize the need for physical containment in the future.
10. In addition to the documentation described above, each occurrence of physical containment should be reported immediately to the person's case manager. This should be followed by the delivery of written documentation to the case manager and to the Regional Center Psychologist.

INDIVIDUALIZED EMERGENCY MANAGEMENT PLAN

For each person where a review of records or experience shows that the potential exists for the emission of behavior that could be harmful to the individual or others, an individual plan of emergency management strategies should be prepared and the techniques provided. This individualized plan should, at minimum, include the following:

1. Operational Definition. Each behavior should be clearly defined, giving (i) the topography of the behavior, (ii) the measurement criteria that are to be used to quantify the frequency of occurrence of the behavior, e.g., its "cycle, (i.e., when an episode will be considered to have started and stopped), and to quantify the severity of the episode, e.g., its duration or the degree of harm or injury that results, and (iii) the "delimiters" (i.e., actions that may resemble the behavior, but do not fall into the definition, as when "hitting" during a boxing match) (iv) in the current setting, and (v) a description of the person's behavior as it escalates to a serious level, to enable intervention to stop the escalation.
2. Antecedent Conditions. The conditions that "set off", "cue" or initiate the behaviors should be described. This should include persons, times of day, demands, demand styles, times of the month, etc. This information is necessary for staff so that they can avoid inadvertently triggering the

behavior. In addition, the conditions that set the occasion for alternative behaviors should also be described, in order for staff to have the opportunity to further reduce the likelihood of target behavior.

3. Emergency Management Strategies. A list of the suggested preventative procedures and reactive strategies should be presented. Basically, this should include procedures like those described above—a list of “do’s” and “don’ts”. Additionally, the persons who should be informed of the incident and the phone numbers of “back-up” staff and supervisors should be included.

SOCIAL VALIDITY ISSUES

There are at least three separate agenda’s when we are trying to support a person with severe and challenging behavior. The first is to make changes over time, the second is to keep people safe from harm, i.e., reducing episodic severity, both in the short run and in the long run, and the third is to meet our own emotional needs. It is usually only the first agenda that gets addressed explicitly by our interdisciplinary teams. We sit around the table and discuss what it is we should do *to improve the behavior over time*. If we do this job thoroughly, we not only discuss how to reduce the targeted behavior significantly and rapidly, we remain equally concerned with the durability and generalization of our results, avoiding negative side effect, and social and clinical validity, always keeping our focus on the person having the opportunity to achieve a better quality of life. In the multi-element model, these goals are addressed through the proactive strategies of environmental change, positive programming and focused support strategies.

The second agenda we have, keeping people safe, is largely reserved, in the multi-element model, for reactive strategies. This is accomplished through the use of procedures that bring about the most rapid and safest resolution possible of a behavioral episode, including the use of the counter-intuitive strategies described above. The explicit provision for reactive strategies within the multi-element model occurs because punishment is not utilized as a proactive strategy. In traditional approaches, with punishment used explicitly to reduce the future occurrence of problem behavior, punishment provides a reactive strategy that often implicitly gives staff a way to manage an episode of problem behavior. For example, placing an aggressive student into a time-out room may have the explicit intent of reducing future occurrences of aggression. However, whether or not this strategy produces this stated outcome, it may provide staff with a procedure (i.e., script) for dealing with aggression when it occurs, i.e., placing the student in the time-out room when he or she is aggressive, and in so doing, preventing the student from hurting others. This implicit, secondary role of punishment may explain why punishment procedures are often continued over a long period of time. They may not adequately produce the desired changes over time, but may be fill the need for situation management.

With punishment not used as a proactive strategy, we create an explicit need for reactive strategies for situation management and to assure the health and safety of the individual and others who might be at risk, i.e., to reduce and minimize episodic severity. Further, as previously discussed, with changes over time being addressed by proactive strategies, reactive strategies need not fill this role, providing the opportunity to use reactive strategies that are not only non-aversive

but which, outside of the context of a proactive plan, might even produce a counter-therapeutic effect, because of their potential to be reinforcing events.

As described, the non-aversive, multi-element approach addresses both the need to produce a broad range of outcomes over time and to manage situations when they occur to keep people safe. Even so, there is often significant resistance to the use of the emergency management procedures we have described, especially, the counter-intuitive strategies. The initial lack of acceptability, i.e., **social validity** of these strategies has to do with the third role that punishment serves in more traditional approaches:

...the use of punishment and other aversive procedures, often meet the emotional needs of parents and staff and explains why such strategies may be reverted to, even if they are not needed to produce the desired long-term outcomes nor needed to provide sufficient strategies for situation management.

We have many and different emotions when faced with a problem behavior. These may include, but are not necessarily limited to anger, fear, revulsion, guilt, responsibility, outrage, etc. For example, imagine we are working with someone whose problem behavior is spitting. We may have a very effective proactive plan in place, which has rapidly reduced spitting behavior from 50 episodes a day to five episodes a day, with a downward trend still very apparent when we examine the summary graph. Further, we may know through a recent medical evaluation that the person does not have any communicable disease. Given this, when an episode of spitting occurs, we do not require a situation management strategy for the purpose of protection and health and safety. Nevertheless, if we don't advise staff on what they should do when spitting occurs, they will naturally want to revert to a traditional aversive strategy, such as squirting the person briefly in the face with a spray bottle, washing their face with a course wash cloth, or requiring them to brush their teeth with a stiff bristled tooth brush. *Why would well meaning staff want to employ such a procedure, if it is apparently not needed to meet the long-term or short-term goals of the support plan?* They would argue for the use of such strategies in treatment terms, that is they might say that the support plan is not sufficiently effective (in spite of the evidence). However, the real need that is not being met here, whether they are aware of it or not, is their own emotional need. When the person spits at them, they have a strong emotional reaction, which in the past has been met, implicitly, through the use of punishment or some other aversive procedure.

The proactive and reactive strategies we have discussed, since they do not include punishment or other aversive procedures, do not tend to meet these emotional needs. It is our opinion that it is these emotional needs, if left unrecognized and unmet, which contribute most to the social validity problems that may exist for the recommendations we have made in here. While this area of social validity can benefit from further study, there are a number of suggestion we can make in a effort to help meet the emotional needs of staff and parents. To the extent that their emotional needs are being met, there will be less of a tendency for them to rely on the traditional punitive strategies and a greater acceptance of, i.e., more social validity for the non-aversive crisis management strategies described here. These suggestions are as follows:

1. Provide a forum and a format for staff and parents to express their feelings and to have them listened to and respected. All to often, we

establish barriers to the expression of these feelings. We are likely to express to staff, for example, that "...you shouldn't feel that way." or "...if that's the way you feel, maybe you should be in a different field." The fact is that the feelings staff and parents have are honest. To the extent that we put up barriers to their expression, they will come out in other ways, such as through the use of the traditional reactive strategies.

2. Our friend and colleague, Dr. Albert Kushlick, suggests that the Rational Emotive techniques developed by Ellis be used to help staff and parents think differently about the different behaviors they have to confront on a regular basis. He finds that if people begin to think about these behaviors differently, they begin to feel about them differently. He suggests doing group exercises with staff having them brainstorm different positive things they can say about the different behaviors they have to deal with. It seems that when staff have a good laugh because they describe someone who spits at them as having "good oral-motor control" and "good aim", they tend not to get as upset when the behavior actually occurs, and they are more open to different ways of dealing with the behavior.

Perhaps the penultimate example of thinking about behavior differently follows from performing a good comprehensive functional assessment and analysis. Such an assessment and analysis helps us see that what we call a behavior problem virtually always serves legitimate roles and meets understandable needs. This is so to such an extent that once we understand why a person does what she or he does, we would not be likely to even consider the use of a traditional procedure.

Most of us would agree that the typical strategies that are employed in the field when dealing with adolescent and adult aggression are aversive, including such procedures as time-out, overcorrection, loss of privileges, restraint, etc. However, in one situation, we were dealing with a woman who was very aggressive toward staff whenever they were with her in the bathroom. Unfortunately, they needed to be with her, since her lack of self-care skills required them to assist her with her toileting and bathing tasks and to provide training in these areas. Her aggression, in fact, was quite severe and, as a result of the injuries they had incurred, a number of staff had been placed on disability leave. Upon referral, we carried out a thorough behavioral assessment and functional analysis of her aggression. In addition to confirming that this behavior in fact occurred almost exclusively in the bathroom, we discovered as part of our records review, that when she had been in a previous group home placement, when she acted "inappropriately," staff brought her into the bathroom, stuck her head in the toilet bowl, and then flushed it.

One way to understand the function of a behavior is to infer some message value for it. Although this woman could not speak, with the information provided, most of us would have no problem figuring out that her aggression was her way of expressing her fear that she was going to be mistreated again, her anger at the way she has been treated, or both. Given this understanding of her behavior, staff were

naturally reluctant to consider the use of the traditional aversive strategies. Rather, they were very open to the non-aversive, multi-element approach, involving, for example, using a “port-a-potty” and a freestanding wash tub in a room other than the bathroom (antecedent control to avoid a behavioral crises), while shaping and desensitization were employed to get her gradually comfortable with the regular bathroom environment (teaching her how to cope with and tolerate the normal environment to assure the best quality of life outcomes possible).

3. A third suggestion for helping staff and parents get their emotional needs met is to help each develop their own individual plan. Here, the individual plan organizes around the parent or staff, rather than around the client. For example, one staff person may have the plan that whenever an episode of the target behavior occurs, they are going to leave and go for a ten minute walk, another may need one-to-one counseling session with their supervisor once a week to discuss their feelings, another may need to write a long entry in a specially maintained journal, to express themselves and get things off of their chest.

Through these and other strategies, we let staff and parents know that their feeling are legitimate and that we care and want to know about them. If we do not acknowledge and address these feelings, they may be the reason that the traditional aversive strategy is used. If, however, we address and account for these feelings, if these legitimate emotional needs can be met, people may be more open to crisis management within a non-aversive framework, and the social validity of the suggestions we have made here will be enhanced.

To summarize, there are a number of suggestions to increase the social validity, i.e., the acceptability of the suggestions we have made here for dealing with emergency management situations:

- Make sure a multi-element support plan, based on a full behavioral assessment and functional analysis is in place to assure the full range of desired outcomes.
- Make sure the reactive strategies that have been recommended are the surest possible strategies for keeping the person and everybody else safe.
- Make sure that staff and parent feelings have been acknowledged and addressed.

CONCLUSIONS

We sincerely hope that this document has been helpful in providing guidelines for you in avoiding or dealing with the crisis situations that can be caused by challenging behavior. Our plan is to revise this from time to time as we learn more about this fascinating field. We would appreciate any questions you may have and suggestions you may want us to consider.

BIBLIOGRAPHY

- Albin, R. W., O'Brien, M., & Horner, R. H. (1995). Analysis of an escalating sequence of problematic behaviors: A case study. *Research in Developmental Disabilities, 16*(2), 133-147.
- Ayllon, T. (1963). Intensive treatment of psychotic behavior by stimulus satiation and food reinforcement. *Behaviour Research and Therapy, 1*, 53-61.
- Azrin, N. (1958). Some effects of noise on human behavior. *Journal of the Experimental Analysis of Behavior, 1*, 183-200.
- Azrin, N., & Holtz, W. C. (1966). Punishment. In W. K. Honig (Ed.), *Operant behavior: Areas of research and application* (pp. 380-447). New York: Appleton-Century-Crofts.
- Azrin, N., Hutchinson, R. R., & Hake, D. F. (1967). Attack, avoidance, and escape reactions to aversive shock. *Journal of the Experimental Analysis of Behavior, 10*, 131-148.
- Baer, D. M., Wolf, M. M., and Risley, T. (1968). Current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis, 1*, 91-97.
- Cameron, M., Luiselli, J., McGrath, M., & Carlton, R. (1992). Stimulus control analysis and treatment of noncompliant behavior. *Journal of Developmental and Physical Disabilities, 4*, 141-150.
- Campbell, R. V., & Lutzker, J. R. (1993). Using functional equivalence training to reduce severe challenging behavior: A case study. *Journal of Developmental and Physical Disabilities, 5*(3), 203-216.
- Carr, E. G., & Durand, V. M. (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis, 18*, 111-126.
- Carr, E. G., Doolabh, A., Horner, R. H., Marquis, J. G., McAtee, M. L., McLaughlin, D. M., Ruef, M. B., Ryan, K. A., Smith, C. E., & Turnbull, A. P. (1999). *Positive behavioral support for people with developmental disabilities*. Wash., D. C: American Association on Mental Retardation.
- Carr, E., & Durand, M. (1985). The social-communicative basis of severe behavior problems in children. In S. Reiss, & R. R. Bootzin (Eds.). *Theoretical issues in behavior therapy* (pp. 219-254). Orlando: Academic Press.
- Carr, E., & Durand, M. (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis, 18*, 111-126.
- Carr, E., Newsom, C., & Binkoff, J. (1980). Escape as a factor in the aggressive behavior of two retarded children. *Journal of Applied Behavior Analysis, 13*, 101-117.
- Catania, A. C. (1992). *Learning (3rd ed.)*. Englewood Cliffs, NJ: : Prentice Hall.
- Cautela, J. R. (1984). General level of reinforcement. *Journal of Behavior Therapy & Experimental Psychiatry, 15*(2), 109-114.
- Cautela, J., & Groden, J. (1978). *Relaxation: A comprehensive manual for adults, children, and children with special needs*. Champaign, IL: Research Press.
- Cipani, E., & Spooner, F. (1997). Treating problem behaviors maintained by negative reinforcement. *Research in Developmental Disabilities, 18*, 329-342.

- Deitz, S. M., & Repp, A. C. (1974). Differentially reinforcing low rates of misbehavior with normal elementary school children. *Journal of Applied Behavior Analysis, 7*, 622.
- Deitz, S.M., & Repp, A.C. (1973) Decreasing classroom behavior through the use of DRL schedules of reinforcement. *Journal of Applied Behavior Analysis, 6*, 457-463.
- Deitz, S.M., Slack, D.J., Schwarzmuller, E.B., Wilander, A.P., Weatherly, T.J., & Hilliard, G. (1978) Reducing inappropriate behavior in special classrooms by reinforcing average inter-response times: Interval DRL. *Behavior Therapy, 9*, 37-46.
- Diorio, M.S., & Konarski, E.A. (1989). Effects of a freely available response on the schedule performance of mentally retarded persons. *American Journal on Mental Retardation, 93*(4), 373-379.
- Donnellan, A., & LaVigna, G. (1986). Nonaversive control of socially stigmatizing behaviors. *The Pointer, 30*(4), 25-31.
- Donnellan, A., LaVigna, G., Negri-Schoultz, N., & Fassbender, L. (1988). *Progress without punishment: Effective approaches for learners with behavior problems*. New York: Teachers College Press.
- Donnellan, A., Mirenda, P., Mesaros, R., & Fassbender, L. (1984). Analyzing the communicative functions of aberrant behavior. *Journal for the Association of Persons with Severe Handicaps, 9*, 201-212.
- Durand, V. M. (1990). *Severe behavior problems: A functional communicative approach*. New York: Guilford Press.
- Epstein, L. H., Doke, L. A., Sajwaj, T. E., Sorrell, S., & Rimmer, B. (1974). Generality and side effects of overcorrection. *Journal of Applied Behavior Analysis, 7*, 385-390.
- Favell, J. E., McGimsey, J. F., & Jones, J. L. (1978). The use of physical restraint in the treatment of self-injury and as a positive reinforcement. *Journal of Applied Behavior Analysis, 11*, 225-241.
- Ferster, C. B., & Skinner, B. F. (1957). *Schedules of reinforcement*. New York: Appleton-Century-Croft.
- Goldiamond, I. (1974). Toward a Constructional Approach to Social Problems: Ethical and Constitutional Issues Raised by Applied Behavior Analysis. *Behaviorism, 2*, 1-85.
- Goldiamond, I. (1975). Alternative Sets as a Framework for Behavioral Formulations and Research. *Behaviorism, 3*(1), 49-86.
- Gordon, T. (1970). *Parent effectiveness training*. New York: Wyden.
- Groden, J., Cautela, J., Prince, S., & Berryman, J. (1994). The impact of stress and anxiety on individuals with autism and developmental disabilities. In E. Schopler & G. Mesibov (Eds.), *Behavioral issues in autism* (pp. 177-194). New York: Plenum.
- Hall, R., Lund, D., & Jackson, D. (1968). Effects of teacher attention on study misbehavior. *Journal of Applied Behavior Analysis, 1*, 1-12.
- Hanley, G., Piazza, C., & Fisher, W. (1997). Noncontingent presentation of attention and alternative stimuli in the treatment of attention-maintained destructive behavior. *Journal of Applied Behavior Analysis, 30*, 229-237.

- Hawkins, R.P., & Dobes, R.W. (1977). Behavioral definitions in applied behavior analysis: Explicit or implicit? In B.C. Etzel, J. M. LeBlanc, & D.M. Baer (Eds.), *New developments in behavioral research: Theory, method, and application* (pp. 167-188). Hillsdale, NJ: Lawrence Erlbaum.
- Holtz, W., & Azrin, N. (1963). A comparison of several procedures for eliminating behavior. *Journal of the Experimental Analysis of Behavior*, 6, 399-406.
- Horner, R. H. (1994). Functional assessment: Contributions and future directions. *Journal of Applied Behavior Analysis*, 27, 401-404.
- Hutchinson, R. R. (1977). By-products of aversive control. In W. K. Honig & J. E. R. Staddon (Eds.), *Handbook of operant behavior* (pp. 415-431). Englewood Cliffs, NJ: Prentice Hall.
- Iwata, B. A., Bailey, J. S., Neef, N. A., Wacker, D. P., Repp, A. C., & Shook, G. L. (Eds.) (1996). Behavior analysis in developmental disabilities (3rd Edition). *Journal of applied behavior analysis reprint series*, 1.
- Iwata, B. A., Pace, G. M., Kissel, R. C., Nau, P. A., & Farber, J. M. (1990). The self-injury trauma (SIT) scale: A method for quantifying surface tissue damage caused by self-injurious behavior. *Journal of Applied Behavior Analysis*, 1(23), 99-110.
- Iwata, B., Dorsey, M., Slifer, K., Bauman, K., & Richman, G. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197-209. (Reprinted from *Analysis and Intervention in Developmental Disabilities*, 2, 3-20, 1982).
- Iwata, B., Pace, G., Dorsey, M., Zarcone, J., Vollmer, T., Smith, R., Rodgers, T., Lerman, D., Shore, B., Mazakeski, J., Goh, H., Cowdery, G., Kalsher, M., McCosh, K., & Willis, K. (1994). The functions of self-injurious behavior: An experimental epidemiological analysis. *Journal of Applied Behavior Analysis*, 27, 215-240.
- Jacobson, E. (1938). *Progressive relaxation*. Chicago: University of Chicago Press.
- Jason, L.A., & Liotta, R.F. (1982). Reduction of cigarette smoking in a university cafeteria. *Journal of Applied Behavior Analysis*, 15, 573-577.
- Johnston, J. M. (1972). Punishment of human behavior. *American Psychologist*, 27, 1033-1054.
- Johnston, J. M., & Pennypacker, H. S. (1993). *Strategies and tactics of behavioral research* (2nd Ed). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Kahng, S. W., Iwata, B.A., Thompson, R.H., & Hanley, G.P. (2000). A method for identifying satiation versus extinction effects under non-contingent reinforcement schedules. *Journal of Applied Behavior Analysis*, 33, 419-432.
- Kazdin, A. E. (1977). Assessing the clinical or applied importance of behavior change through social validation. *Behavior Modification*, 1, 427-451.
- Kushlick, A., Trower, P., & Dagnan, D. (1997). Applying cognitive-behavioral approaches to the carers of people with learning disabilities who display challenging behavior. *Positive Practices: The IABA® Newsletter*, 2(4), 1,7-19.
- LaVigna, G. W., & Donnellan, A. M. (1986). *Alternative to punishment: Solving behavior problems with non-aversive strategies*. New York: Irvington Publishers.

- LaVigna, G. W., & Willis, T. J. (1992). A model for multielement support plan planning and outcome measurement. In D. Berkell (Ed.), *Autism: Identification, education, and support plan* (pp. 135-149). Hillsdale, NJ: Erlbaum.
- LaVigna, G. W., & Willis, T. J. (1995). Challenging behavior: A model for breaking the barriers to social and community integration. *Positive Practices, 1(1)*, 1, 8-15.
- LaVigna, G. W., & Willis, T. J. (1996). Behavioral technology in support of values. *Positive Practices, 1(4)*, 1, 7-16.
- LaVigna, G. W., & Willis, T. J. (1997). Severe and challenging behavior: Counter-intuitive strategies for crisis management within a nonaversive framework. *Positive Practices, 2(2)*, 1, 10-17.
- LaVigna, G. W., & Willis, T. W. (1997). Antecedent analysis. *Positive Practices, 3(1)*, 1, 4-18.
- LaVigna, G. W., and Willis, T. J. (2003). Counter-Intuitive strategies for crisis management within a non-aversive framework. In D. Allen (Ed.), *Behaviour Management in Intellectual Disabilities: Ethical Responses to Challenging Behavior*. Kidderminster, UK, British Institute of Learning Disabilities.
- LaVigna, G.W., Willis, T.J., and Donnellan, A.M. (1989). The role of positive programming in behavioral treatment. In E. Cipani (Ed.), *The Treatment of Severe Behavior Disorders*, Monographs of the American Association on Mental Retardation, 12, 59-83.
- Leitenberg, H., Agras, S.W., Thompson, L.E., & Wright, D.E., (1968). Feedback in behavior modification: An experimental analysis in two phobic cases. *Journal of Applied Behavior Analysis, 1*, 131-137.
- Lerman, D. C., Iwata, B. A. (1995). Prevalence of the extinction burst and its attenuation during treatment. *Journal of Applied Behavior Analysis, 28*, 93-94.
- Lerman, D. C., Iwata, B. A., & Wallace, M. D. (1999). Side effects of extinction: Prevalence of bursting and aggression during the treatment of self-injurious behavior. *Journal of Applied Behavior Analysis, 32*, 1-8.
- Lovaas, O.I. (1981). *Teaching developmentally disabled children: The me book*. Pro-Ed, Inc.
- Luce, S. C., Delquadri, J., and Hall, R. V. (1980) Contingent exercise: a mild but powerful procedure for suppressing inappropriate verbal and aggressive behavior. *Journal of Applied Behavior Analysis, 13*, 583-594.
- Luiselli, J., & Cameron, M. (1999). *Antecedent control: Innovative approaches to behavioral support*. Baltimore: Paul H. Brookes.
- Maguire, K. B., Lange, B., Scherling, M., & Grow, R. (1996). The use of rehearsal and positive reinforcement in the dental treatment of uncooperative patients with mental retardation. *Journal of Developmental and Physical Disabilities, 8(2)*, 167-177
- Malott, R. W., Whaley, D. L., & Malott, M. E. (1997). *Elementary Principles of Behavior (3rd ed.)*. Upper Saddle River, NJ: Prentice Hall.
- Matson, J. L., & DiLorenzo, T. M. (1984). *Punishment and its alternatives*. New York: Springer.
- Meyer, L. H., & Evans, I. M. (1989). *Non-aversive intervention for behavior problems: A manual for home and community*. Baltimore: Paul H. Brookes.

- Michael, J. (1982). Distinguishing between discriminative and motivational functions of stimuli. *Journal of the Experimental Analysis of Behavior*, 37, 149-155.
- N.A.P.P.I. (1985). Non-abusive physical and psychological intervention. Auburn, ME: Author, 250 Minot Ave., Auburn, ME.
- Neufeld, A., & Fantuzzo, J. W. (1987). Treatment of severe self-injurious behavior by the mentally retarded using the bubble helmet and differential reinforcement. *Journal of Behavior Therapy and Experimental Psychiatry*, 18, 127-136.
- Nijman, H. L., Muris, P., Merckelbach, H. L. G. J., Palmstierna, T., Wistedt, B., Vos, A. M., Van Rixtel, A. & Allertz, W. (1999). The staff observation aggression scale revised (SOAR_R). *Aggressive Behavior*, 25, 197-209.
- O'Brien, J. (1989). The punishment of people with developmental disabilities. In E. Cipani (Ed.), *The treatment of severe behavior disorders: Behavior analysis approaches* (pp. 37-58). Washington, DC: American Association on Mental Retardation.
- O'Leary, K.D., Kaufman, K.F., Kass, R.E., & Drabman, R.S. (1970) The effects of loud and soft reprimands on the behavior of disruptive students. *Journal of Applied Behavior Analysis*, 37 145-155
- O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook (2nd ed.)*. Pacific Grove, CA: Brooks/Cole.
- Palotai, A., Mance, A., & Negri, N. A. (1982). Averting and handling aggressive behavior. Columbia, SC: South Carolina Department of Mental Health.
- Patterson, J., Mount, B., & Tham, M. (1988). Personal Futures Planning. A mini-handbook of developed for the Connecticut "Positive Futures" Project. Connecticut Department of Mental Retardation, 90 Pitkin Street, East Hartford, CT.
- Pierce, W. D., & Epling, W. F. (1995). *Behavior Analysis and Learning*. Upper Saddle River, NJ: Prentice Hall.
- Poling, A., & Normand, M. (1999). Noncontingent reinforcement: An inappropriate description of time-based schedules that reduce behavior. *Journal of Applied Behavior Analysis*, 32, 237-238.
- Reynolds, G. S. (1961). Behavioral contrast. *Journal of the Experimental Analysis of Behavior*, 4, 57-71.
- Sajwaj, T., Twardosz, S., & Burke, M. (1972). Side effects of extinction procedures in a remedial placement. *Journal of Applied Behavior Analysis*, 5, 163-175.
- Schilling, D., & Poppen, R. (1983). Behavioral relaxation training and assessment. *Journal of Behavior Therapy and Experimental Psychiatry*, 14, 99-107.
- Schuler, A., & Goetz, C. (1981). The assessment of severe language disabilities: Communicative and cognitive considerations. *Analysis and Intervention in Developmental Disabilities*, 1, 333-346.
- Sidman, M. (1960). *Tactics of scientific research*. New York: Basic Books.
- Sidman, M. (1989). Coercion and its fallout. Boston: Authors Cooperative.
- Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.
- Sulzer-Azaroff, B. & Mayer, G. R. (1991). Behavior analysis for lasting change. Chicago, IL: Holt, Rinehart and Winston, Inc.

- Sulzer-Azaroff, B., & Mayer, G. R. (1977). Behavior modification procedures for school personnel. Hinsdale, IL: Dryden Press.
- To, M., & Chan, S. (2000). Evaluating the effectiveness of progressive muscle relaxation in reducing the aggressive behaviors of mentally handicapped patients. *Archives of Psychiatric Nursing*, 14, 39-46.
- Touchette, P., MacDonald, R., & Langer, S. (1985). A scatter plot for identifying stimulus control of problem behavior. *Journal of Applied Behavior Analysis*, 18, 343-351.
- Tucker, M., Sigafoos, J., & Bushell, H. (1998). Use of noncontingent reinforcement in the treatment of challenging behavior. *Behavior Modification*, 22, 529-547.
- Van Houten, R. & Rolider, A. (1989) An analysis of several variables influencing the efficacy of flash card instruction. *Journal of Applied Behavior Analysis*, 22, 111-118
- Van Houten, R., Nau, P. A., MacKenzie-Keating, S. E., Sameoto, D., & Colavecchia, B. (1982). An analysis of some variables influencing the effectiveness of reprimands. *Journal of Applied Behavior Analysis*, 15, 65-83.
- VanHouten, R., Axelrod, S., Bailey, J., Favell, J., Foxx, R., Iwata, B., & Lovaas, I. (1988). The right to effective behavioral treatment. *Behavior Analyst*, 11, 111-114.
- Vargas, J. S. (1977). *Behavioral Psychology for Teachers*. New York, NY: Harper & Row.
- Vollmer, T. R., Iwata, B. A., Cuvo, A. J., Heward, W. L., Miltenberger, R. G., & Neef, N. A. (Eds.) and Bourret, J., & Rapp, J. T. (Asst. Eds.) (2000). Behavior analysis: applications and extensions (1968-1999). *Journal of Applied Behavior Analysis Reprint Series*, 5.
- Vollmer, T.R. (1993) The role of attention in the treatment of attention-maintained self injurious behavior: Non-contingent reinforcement and differential reinforcement of other behavior. *Journal of Applied Behavior Analysis*, 26, 9-21.
- Watson, D., & Tharp, R. (1993). Self-directed behavior: Self-modification for personal adjustment. (6th edition). Pacific Grove, CA: Brooks/Cole.
- Williams, C.D. (1959) The elimination of tantrum behavior by extinction procedures. *Journal of Abnormal and Social Psychology*, 59, 269.
- Willis, T. J., & LaVigna, G. W. (1994). Emergency management guidelines. Los Angeles: Institute for Applied Behavior Analysis.
- Willis, T. J., & LaVigna, G. W. (1996). Behavioral assessment: An overview. *Positive Practices*, 1(2), 1, 8-15.
- Willis, T. J., & LaVigna, G. W. (1996). Behavioral assessment: An overview: Part 2. *Positive Practices*, 1(3), 1, 11-19.
- Willis, T.J., LaVigna, G.W., & Donnellan, A.M. (1993). Behavior assessment guide. Los Angeles: The Institute for Applied Behavior Analysis.
- Wolf, M. M., (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11(2), 203-214.

Wolfensberger, W. (1983). Social role valorization: A proposed new term for the principle of normalization. *Mental Retardation*, 21, 234-239.

Wolfensberger, W. (2000). A brief overview of social role valorization. *Mental Retardation*, 38, 105-123.

Zivolich, S., & Thvedt, J. (1983). Assault crisis training: Prevention and intervention. Huntington Beach, CA: Special Education Counseling Service.