



*A quarterly publication dedicated to the advancement of positive practices in the field of challenging behavior*  
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## ***Challenging Behavior: A Model for Breaking the Barriers to Social and Community Integration***

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A major value associated with the recent movement toward community integration for people with a developmental disability has been the opportunity for social integration and interaction with the general population. Major barriers remain, however, for those disabled individuals who exhibit significant challenging behavior. These barriers may include both the behavior challenges the person presents as well as the support strategies that have traditionally been employed to remediate the challenges. They are barriers because neither may be accepted by society—thus limiting the person’s opportunity to benefit from the community integration movement. Present models for providing support have not proven fully adequate to the task of breaking these barriers to social and community integration for individuals who have severe and challenging behavior. In the following paragraphs, we present a model of support that we feel may go a long way toward “Breaking the Barriers.”

## **Outcomes**

The foundation of the model is an expanded view of the outcome criteria by which support strategies can be evaluated (see Figure 1 on page 10). Traditionally, the success of a support plan has been measured by how quick and how much the plan has reduced problem behavior (i.e., the speed and degree of effects). We suggest that you must go beyond simple speed and degree of effects to conclude that a support plan has been effective. Support strategies should be evaluated in terms of the durability and generalization of their effects, the side effects they produce, and their social and clinical/educational validity (Favell et al., 1982; Evans & Meyers, 1985). This last outcome requirement is perhaps the most important, for it keeps us focused on the major point of a support plan. That is, not to eliminate the target behavior, per se, but to contribute to the overall quality of the person’s life. This most critical mea-

*Continued on page 8*

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### **Contents**

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|   |    |
|---|----|
| Challenging Behavior: A Model for Breaking the Barriers to Social and Community Integration ..... | 1  |
| Editors’ Note .....   | 2  |
| Positive Programming: An Organizational Response to Challenging Behavior .....                    | 3  |
| A Person Centered Approach to Supporting People with Severe Reputations .....                     | 16 |
| Behavioral Definition of a Problem Behavior .....   | 18 |
| Procedural Protocol - Interpersonal Style .....   | 21 |
| IABA Resources .....  | 23 |

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## Editors' Note...

The publication of this newsletter is a response to the many requests we have received to establish a mechanism for continued contact between and among us and the many people over the years who have participated in our Summer Institute and our various longitudinal training programs. Many people who have attended our many training seminars have also expressed an interest in receiving more information about our positive approach for supporting people with the reputation of having severe and challenging behavior. To our knowledge this is the first publication dedicated solely to the advancement of positive practices in the field of challenging behavior. We hope you will take advantage of this newsletter by using it as interactively as possible. We hope you will write to us to ask questions, to make comments, to let us know how you are applying positive practices in your own work, to make suggestions and even to challenge us. We will endeavor to make this publication as useful as possible to you in our mutual goal of advancing positive practices in the field. Write and let us know what you think of this first issue.



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# Positive Programming - An Organizational Response To Challenging Behavior

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*Editors' Note: Over the years, we have provided longitudinal training in or have had participants in our two week training institutes from many countries. These have included the countries of Great Britain, Ireland, The Isle of Man, Canada, Spain, Norway, Australia and New Zealand. In this column we plan to publish reports from around the world that describe how people have used the IABA model and the results they have achieved. This first report is from St. John of God, a 500 year old religious order in Ireland that provides services to people with psychiatric problems and/or a developmental disability. As a result of the longitudinal training we provided, they established the Callan Institute For Positive Programming to disseminate positive practices within their service system.*

## Introduction

Efforts by service providers the world over to enable people with disabilities to live and work as integrated members of the community have led to the need to develop more effective ways of dealing with challenging behavior. Large organizations have a particularly difficult task in striving to improve the quality of life of their service users while intervening in positive ways to bring about a reduction in aggressive or self-injurious behaviors. This article presents the attempts of one such organization to equip its staff with the structures, supports, training and expertise to deal positively with challenging behavior and thereby to enhance its work of community and social integration.

## The Services of the St. John of God Order

The St. John of God Order is an international organization which has been providing services to people with psychiatric and developmental disabilities for five hundred years. The Order provides a variety of services in Ireland. These include two large residential services, a significant number of group homes, day centers, special schools and

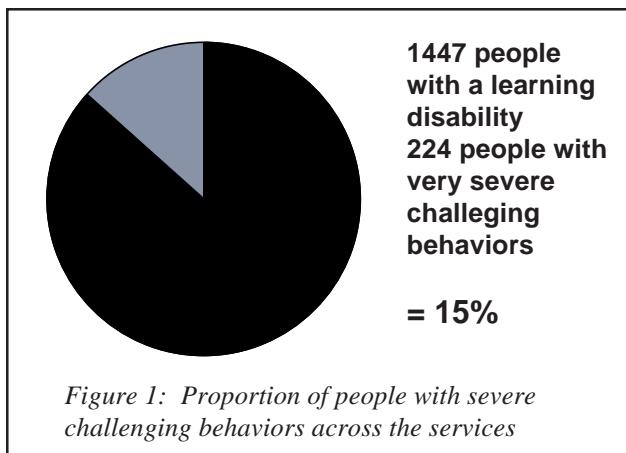
adult training and work enterprises. In all, approximately 1500 children, adolescents and adults receive a service. The Order is committed to the principles of normalization, community integration and the provision of meaningful education and work for its service users. However, as a survey conducted recently (McClean and Walsh, 1995) showed, there have been significant concerns about the way in which challenging behavior has been perceived to impede developments leading to im-

proved quality of life. A total of 1,447 people was surveyed. Using Emerson and Emerson's 1987 definition of challenging behavior as "behavior that is likely to seriously limit or deny access to, and use of, community facilities," 406 (28%) of our sample showed challenging behaviors. Significantly, a majority of this group (83%) was male, living in large residential centers (49%) and aged between 30 and 50 years of age (56%). One can conclude from these figures that many of those people within the Order's services have shown challenging behaviors in large residential centers for many years. The fact that so many of them are male is due to the historical fact that the Order traditionally provided services to Irish men who had learning disabilities and has only provided services to women in recent times.

In a similar survey of the intensity of self-injurious behavior, Oliver, Murphy & Corbett (1987) used a criterion of tissue damage as a more restrictive definition of severe challenging behaviors. In our survey, 224 (15%) showed aggressive or self-injurious behavior so severe as to cause tissue damage during a one month period (see Fig. 1, page 4).

## Traditional Responses to Challenging Behaviors

Research has not fully addressed the strategies that staff use to manage challenging behaviors in the absence of a comprehensive program of staff training. Recent research conducted at the Callan Institute (McClean and Ryan, 1995) examined the factors that predict staff's use of aversive behavior management techniques. The study examined incidence analysis sheets (Willis and LaVigna, 1992) and found that, in the absence of staff training, aversive strategies are as likely to be used in community settings as in large residential centers. They are also as likely to be implemented by experienced staff as by inexperienced staff. In fact, the factor that best predicts the staff's use of aversive techniques in the absence of staff



training is the staff's perception of whether the client can be held responsible for his or her actions. Thus, clients who are in receipt of psychotropic medication, or clients who are perceived as having a lower level of intellectual functioning are more likely to receive nonaversive staff responses. Aversive techniques, therefore, are usually used after blame has been attributed to the person.

This finding is consistent with attribution theory, and is an example of the *fundamental attribution error* (Dunne, 1994), where the observer of the challenging behavior has the proclivity to underestimate the importance of ecological factors and situational contingencies and to overestimate the contribution of dispositional factors, whether willful or not. One of the reasons for the impact of training in Positive Programming may well be that it reattributes the explanations for challenging behaviors in terms of the fit between the needs and characteristics of the person and the needs and characteristics of the environment. Thus the proclivity towards the fundamental attribution error is reduced, and therefore aversive methods are less frequently applied.

In this context, and prior to the introduction of staff training in Positive Programming, a small scale survey was conducted to establish the repertoire of methods available to staff who work with people who show challenging behaviors. Sixteen staff were selected for initial training in Positive Programming. Each staff member selected one indi-

vidual with whom a nonaversive behavior support plan would be established, and reported on the plans and interventions currently existing for that person. The results of this survey are presented in Figure 2.

Figure 2 shows that, prior to the introduction of staff training in nonaversive behavior management techniques,

8 of the 16 clients with severe challenging behaviors were actively receiving a skills teaching program that was written. These included general skills teaching programs (n = 5), relaxation training programs (n = 2) and one functionally equivalent skills program which taught prosocial forms of physical contact. Two clients were receiving nonaversive focused support programs (in both cases, these were Differential Reinforcement of Other behavior (DRO) programs). Eight of the sixteen clients had a current Individual Program Plan, in which staff had written annual goals for or with the service user during the previous year.

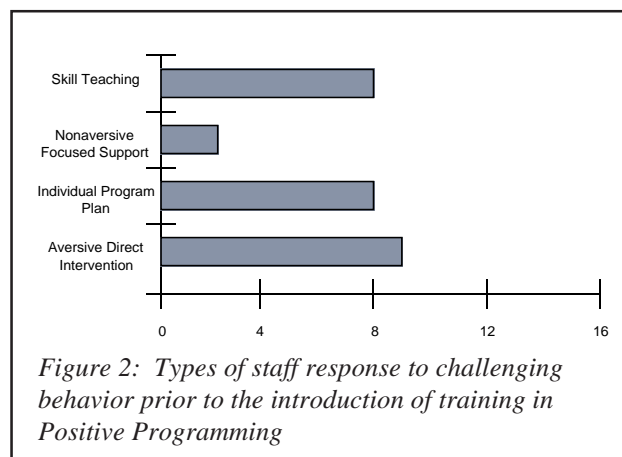
An alternative way of constructing these results is that 8 out of 16 clients with learning disabilities were receiving no formal skills teaching, 14 were receiving no nonaversive behavioral support services, and 8 did not have the benefit of a staff group meeting to plan or coordinate the client's goals for the year. The study, therefore, supports the pervasive finding of descriptive or ethnographic studies of service settings for people with challenging behavior; that behavioral approaches are markedly underutilized (Emerson and Emerson, 1987), that staff working with people with

challenging behaviors spend surprisingly little time giving them attention (Felce et al., 1987) and that most services "place no legitimate demands on a particular learner because, to do so requires programming, intervention and staff effort" (LaVigna and Donnellan, 1986). In their study, Emerson and Emerson (1987) found that the underutilization of effective behavioral support plans was best explained in terms of staff's lack of understanding of behavioral principles and staff orientation towards custodial rather than community models of service. Although constraints in the institutional environment also explain the lack of service response, there is a clear need for staff training to address the first two sets of barriers to effective interventions.

## Parameters of the Organizational Response

When facing the kinds of concerns outlined above, a new service like the Callan Institute must make a number of decisions:

1. **Special Teams or Special Units:** Special teams work to support individuals and their support networks in the individual's local environment and provide staff training and consultation on interventions. Special units allow the person to leave the local environment and stay in safe, physically secure environments. Special units have a num-



ber of disadvantages. These include:

- *Low throughput.* Special units are usually full within a short time of opening (Newman and Emerson, 1991). They are generally designed to provide treatment in the short term (3 - 6 months). Even when significant change is achieved, it is difficult to persuade the client's original support network of this because of the person's behavioral history. The result is that special treatment units quickly become special long term residential centers, even though they are not designed for this purpose.
- *Poor generalization.* It cannot be assumed that replacement behaviors learned in the special unit will automatically transfer on return to the original environment (Emerson et al., 1987). Generalization must be explicitly programmed, and this requires local staff or family to develop specialized expertise. Thus, once a service begins to program for generalization, a special team is required anyway.
- *Short term rather than long term change.* Multielement interventions which combine ecological strategies, functional skills teaching, focused support program, and sensitive reactive strategies can bring about reductions in challenging behaviors with relative ease. However, short term change is only one criterion of effectiveness. The ultimate objective is to achieve improvements in the person's quality of life and to overcome barriers to community integration. Placement in segregated facilities runs contrary to these objectives.
- *Less staff development.* When a person who presents with challenging behaviors is re-

moved from his or her local environment to a special unit, staff have no opportunity to develop the skills needed to manage challenging behaviors. When a new person challenges the service, another referral to the special unit is likely. More usually, the transfer is perceived by the local staff team as a failure to support the person in the community, with consequent adverse effect on staff morale.

However, other research highlights issues which may moderate this viewpoint. Challenging behaviors are a major contributor to the stress experienced by parents (Quine and Pahl, 1985)

and staff (Emerson and Emerson, 1987), and are one of the main reasons why families seek out-of-home residential placements (Krauss and Seltzer, 1987). Challenging behaviors are one of the most frequently cited reasons for the breakdown of community placements (Schalock, Harper & Genung, 1981). And as mentioned above, severe aggressive and self-injurious behaviors are more likely to be met with aversive or intrusive responses (restraint or medication) rather than skills teaching, active listening or ecological adaptations. At least specialized units for people with challenging behaviors have the potential to overcome the dearth of service options.

2. **Special teams or staff training.** A second decision that needs to be considered in the design of an organizational response for over 400 people with challenging behaviors is, given limited resources, whether to invest in centralized expertise, or whether to attempt to spread the expertise widely across the service. Many services already have a structure in place consistent with the

centralized expertise model, usually known as the multi-disciplinary team. The danger of this model is that staff can come to rely on a psychologist, psychiatrist or behavior nurse specialist to initiate change, to conduct behavioral assessments or to coordinate individual plans, since they are believed to possess the specialist expertise

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## ***The ultimate objective is to elicit improvements in the person's quality of life and to overcome barriers to community integration.***

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to do so. In most services, the multidisciplinary team consists of 4 - 7 individuals, working in a service for 100 - 400 people. Clearly, there are insufficient resources to provide individualized service responses. In an alternative model, a keyworker is empowered to initiate and coordinate the delivery of behavioral assessments and behavioral support services. Since there are many more potential keyworkers than multidisciplinary team members in any organization, there is less likely to be a poor fit between service needs and service resources.

3. **In-service training versus out-of-service training.** Given that a service opts for a model of staff training in which expertise is widely shared, the next decision is whether to send staff to accredited courses outside the service, or whether to opt for in-service training. The St. John of God Order has had experience of sending staff away for accredited staff training. It found that too often staff returned to the organization only to be frustrated by the difficulty of initiating new ap-

proaches when the structures and ethos of the organization had remained unchanged. In many cases, the staff member left, and the expertise flowed to another organization.

4. **Integrated or aggregated conceptual framework.** The fourth decision is whether to promote a single model of intervention or whether to promote a diversity of perspectives and models for working. The advantage of the latter approach is that it fosters the creativity and stimulation that staff need to if they are to work towards delivering a quality service. On the other hand, an integrated model means that all staff are speaking a common language, and are using a common conceptual framework. The disadvantage of this is that the single model might restrict the flow of ideas, or become an institutional process itself.

Our organization has decided that the multielement model introduced to us by LaVigna and Willis (1995) through a longitudinal training program in 1993, which we refer to as the Positive Programming model, is comprehensive enough to encompass other ideas and models of intervention. For example, we have found that the model is consistent in practice with most aspects of Gentle Teaching (McGee, Menolascino, Hobbs & Mensouek, 1987), despite conceptual divergence (Jones, McCaughey &

Connell, 1991). Both approaches represent the application of nonaversive behavioral principles within the context of social role valorization and quality of life outcomes.

## The Callan Institute For Positive Programs

Our organizational response has been to opt for in-service staff training in the Positive Programming model. The purpose is to promote and maintain dignified, valued lifestyles in the community for people with challenging behaviors, thereby minimizing the need for segregated specialized units. With this purpose, the Callan Institute has embarked on a program of training a wide range of both frontline and resource staff members to become behavioral consultants working from the model of positive programming.

In addition to staff training, the Callan Institute promotes the use of a supervisory system known as the Periodic Service Review (LaVigna et al., 1994) to ensure consistency of program implementation and to set additional performance standards. Because it is constantly monitoring implementation, the Callan Institute is uniquely placed to support individualized service delivery and to advise the organization on improving the infrastructure necessary to achieve the full potential of the people it serves.

## Staff Training in Positive Programming

To date a total of 52 staff members from St. John of God services have received training in positive programming. These staff come from a variety of professional backgrounds (nursing, psychology, social work, teaching, community facilitator). The majority (53%) work with people with severe learning disabilities. More recently, however, positive programs have been introduced to people who do not have learning disabilities, but who receive services within other parts of the St. John of God services. These include schools and residential settings for children with emotional difficulties, a high dependency unit for adults with mental health difficulties, and a residential service for elderly people with senile dementia.

Staff were selected by their directors in each center. They were chosen because they were strategically placed to develop positive programs as an integral part of the organization's practice. They come from all levels of responsibility, including director of service, unit supervisor, resource team member and staff member. The largest group work in the large residential centers, reflecting the fact that it is here that the highest concentrations of people with challenging behaviors live.

Each of the staff who received the training have provided comprehensive behavioral assessment and multielement behavior support plans to at least one client. In some cases, staff have been able to provide positive programs to second, third and fourth clients. To date, we have found that staff on resource teams or at unit supervisor level have been best positioned within the organization to provide the service to additional clients. The factors that enhance this appear to include a capacity to organize a team to support the intervention plan, so that tasks can be and delegated and time can be made available for program development and report writing.

Following the process established by LaVigna and Willis in our initial train-

Table 1:  
Outcomes of Positive Program interventions after 3, 12 and 24 months

| Outcome                   | Percent of Baseline | After 3 Months |    | After 12 Months |      | After 24 Months |    |
|---------------------------|---------------------|----------------|----|-----------------|------|-----------------|----|
|                           |                     | N              | %  | N               | %    | N               | %  |
| Intervention discontinued | -                   | 0              | 0  | 3               | 13   | 1               | 6  |
| Target behavior increased | 120+                | 1              | 2  | 0               | 0    | 0               | 0  |
| Target behavior unchanged | 80 - 120            | 7              | 14 | 0               | 0    | 1               | 6  |
| Moderate improvement      | 30 - 80             | 16             | 33 | 2               | 9.5  | 1               | 6  |
| Significant improvement   | 0 - 30              | 25             | 51 | 18              | 78.2 | 13              | 81 |
| Total Number              |                     | 49             |    | 23              |      | 16              |    |

| Outcome                   | Percent of Baseline | N  | %    |
|---------------------------|---------------------|----|------|
| Intervention discontinued | -                   | 2  | 12.5 |
| Target behavior increased | 120+                | 0  | 0    |
| Target behavior unchanged | 80 - 120            | 0  | 0    |
| Moderate improvement      | 30 - 80             | 2  | 12.5 |
| Significant improvement   | 0 - 30              | 12 | 75   |
| Total Number              |                     | 16 |      |

Table 2: Outcome data after three months for clients who have a dual diagnosis.

ing, each staff member is trained to write a behavioral assessment report, support plan and quarterly progress report. On completion of the training, participants continue to submit quarterly progress reports. These are reviewed by a review committee which is drawn from the original course members. Each participant has an opportunity take a turn as a reviewer. Invariably, they find that this role further assists the development of their own programming skills. The Callan Institute coordinates this process and also collects follow up data for each behavioral assessment report submitted. Outcome data is available at 3, 12 and 24 month intervals. To date, three monthly data is available for 49 individuals. These data are presented in Table 1.

Table 1 shows that 12 months after intervention, more than 78% of the people who received positive programs achieved significant improvements in their behavior. In some of these cases the intervention was so successful that the intervention was terminated, and the behavioral consultant withdrew from providing active services. Usually, the consultant provided a maintenance plan, and in some cases monitored ongoing data collection. After 12 months, intervention plans with two clients were successfully terminated. After 24 months, interventions with 5 clients (31%) were successfully terminated.

These results need to be interpreted in the context of the following facts:

- The wide range of staff training backgrounds. Staff varied considerably in the extent to which the values and methods could assimilate into their existing concepts and practices.
- The wide range of settings in which interventions were implemented. Not all settings had experience with individual programming and many settings had exceptionally low staff to client ratios and client groups with multiple behavioral challenges.
- The wide range of staff roles. There was significant variation in the extent to which the behavioral consultant could commit him or herself to the provision of behavioral consultancy services. In some settings the consultant’s normal role and responsibilities were altered to accommodate positive programming. In the majority of cases the provision of positive programs was an additional responsibility.
- As there is no control group, it is not possible to infer a causal relationship between positive programs and the behavioral changes summarized in Table 1. However, as mentioned above, many of these clients had presented with severe challenging behaviors for many years.

Sixteen clients had clear dual diagnoses. Table 2 shows the outcome data from these clients across a range of times frames since introduction of the intervention plans.

As Table 2 shows, 75% of people who have dual diagnoses have achieved significant improvements in their target behaviors. This result is not signifi-

cantly different from the results for the group as a whole. The presence of a dual diagnosis did not impede behavioral progress, even though the diagnosis remained unchanged.

## Organizational Benefits

The introduction of Positive Programming has been associated with clear benefits for our consumers. In addition, the organization has benefited in at least three ways:

1. *The population of people with challenging behaviors.* As mentioned above, our survey of challenging behaviors in our service found that a total of 224 people showed severe challenging behavior in a one month period, using Oliver et al.’s (1987) criterion of tissue damage to self and others. One year after the establishment of the Callan Institute, 56 (25%) were receiving or had received Positive Programming (see Figure 3).
2. *Trained behavioral consultants:* An additional benefit for the organization is that there are now 52 trained

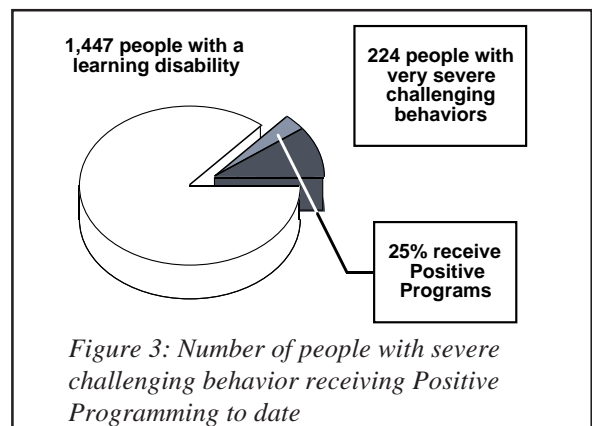


Figure 3: Number of people with severe challenging behavior receiving Positive Programming to date

behavioral consultants strategically placed across the Order's services. The direct benefit of this is that these consultants can establish Positive Programming to additional service users. Some behavioral consultants have been able to provide Positive Programming to as many as eight people with challenging behaviors. The indirect benefit of this is the improvement in services for other clients who are not in direct receipt of Positive Programming. Many of the ecological strategies designed to improve quality of life of the person and to fit better with the needs and characteristics of the person often have benefits for all service users within that setting. The introduction of an effective functional skills teaching ethos, or a reward culture has similar benefits across a client group. Similarly, a staff decision to respond to challenging behaviors by active listening, can have a powerful effect on the ways that staff attend to the client group as a whole. Our research program is also addressing the kinds of supports staff need to adopt positive ways of working with clients.

3. *Service organization:* As mentioned above, the Callan Institute also promotes the use of a supervisory system known as the Periodic Service Review (LaVigna et al., 1994). This requires a staff group to identify and operationalize its performance standards. Performance standards are then actively and objectively monitored, with regular, visual feedback on progress given to the staff team. Of the 49 Positive Programming intervention plans already implemented, 30 had also implemented a Periodic Service Review. Because the Periodic Service Review ensures the implementation of generic performance standards as well as performance standards specific to the delivery of behavioral intervention, there are quantifiable gains in quality of service. Further, since the Periodic

Service Review ensures maintenance of performance standards over time, it is likely that the behavioral improvements reported above will also be maintained.

#### References

- Dunne, T.P. (1994) Challenging behavior: "and there's more..." *Clinical Psychology Forum*, 67, 25-27.
- Emerson, E. and Emerson C. (1987) Barriers to the effective implementation of habilitative behavioral programs in an institutional setting. *Mental Retardation*, 25, 101-106.
- Emerson, E., Toogood, A., Mansell, J., Barrett, S., Bell, C., Cummings, R., McCool, C. (1987) Challenging behavior and community services: 1. Introduction and overview. *Mental Handicap*, 15, 166-169.
- Felce, D., Saxby, H., de Kock, U., Repp, A., Ager, A., and Blunden, R. (1987) To what behaviors do attending adults respond? A replication. *American Journal of Mental Deficiency*, 91, 496-504.
- Jones R.S.P., McCaughey, R.E. and Connell, E.M. (1991) The philosophy and practice of Gentle Teaching: Implications for mental handicap services. *The Irish Journal of Psychology*, 12, 1-16.
- Krauss, M.W. and Seltzer, M.M. (1987) *Community residences for persons with developmental disabilities: Here to stay*. Baltimore: Paul Brookes Publishing Co.
- LaVigna, G.W. and Donnellan, A.M. (1986) *Alternatives to Punishment: Solving Behavior problems with nonaversive strategies*. New York: Irvington.
- LaVigna G.W. and Willis, T.J. (1995) Challenging behavior: a model for breaking the barriers to social and community integration. *Positive Practices*, 1, 1, 8-15.
- LaVigna, G.W., Willis, T.J., Shaul, J.F., Abedi, M., and Sweitzer, M. (1994) *The Periodic Service Review: A total quality assurance system for human services and education*. Baltimore: Paul Brookes Publishing Co.
- McClellan B. and Ryan D., (1995) Factors affecting the use of nonaversive methods by staff who work with people with severe challenging behaviors. (Unpublished manuscript).
- McClellan, B. and Walsh, P. (1995) The identification of service users with challenging behaviors across a large service for people with learning disabilities. (Unpublished manuscript).
- McGee, J.J., Menolascino F.J., Hobbs, D.C. and Mensouek, P.E. (1987) *Gentle teaching: A nonaversive approach to helping persons with mental retardation*. New York: Human Sciences Press.
- Newman I. and Emerson, E. (1991) Specialized treatment units for people with challenging behaviors. *Mental Handicap*, 19, 113-119.
- Oliver, C., Murphy, G.H. and Corbett, J.A. (1987) Self Injurious behavior in people with mental handicap: a total population study. *Journal of Mental Deficiency Research*, 31, 147-62.
- Quine, L. and Pahl, J. (1985) Examining the causes of stress in families with mentally handicapped children. *British Journal of Social Work* 154, 501-17.
- Schalock, R.L., Harper, R.S. and Genung, T. (1981) Community integration of mentally retarded adults: community placement and program success. *American Journal of Mental Deficiency*, 85, 478-88.
- Willis, T.J. and LaVigna G.W. (1992) A-B-C Incident Analysis. Los Angeles: Institute for Applied Behavior Analysis.

*Continued from page 1*

sure says that a support plan has clinical/educational validity if, as a result and through the process of bringing the behavior itself under control, the person has a better quality of life, that the person has such things as more access, opportunity, choice and control, competencies and nurturing, caring and mutually gratifying relationships.

This complex array of critical outcomes makes it unlikely that any one strategy will produce all the desired results. Rather, full results are likely to require multielement support plans whose various components, in combination, address the full range of outcome requirements.

## Support Plans

### Proactive Strategies

The components of our multielement support plan are illustrated in Figure 1. The first major distinction within a multielement support plan is between *proactive strategies* and *reactive strategies*. Proactive strategies are those designed to produce changes over time. Reactive strategies, on the other hand, are those designed to manage the behavior at the time it occurs. Included within the category of proactive strategies are ecological changes, positive programming, and focused support. These three categories of proactive strategies, and their intended contributions to outcomes, are described below:

**Ecological Changes.** As the ABA Task Force report on "the right to effective treatment" acknowledges (Van Houten et al., 1988), behaviors occur within a context and often are a function of the person's *physical, interpersonal* and *programmable* environment. Environmental or setting events and characteristics (i.e., the ecological context for behavior) provide an important area of analysis and offer significant opportunities for change as part of a support plan. For instance, some challenging behaviors could be a reaction to the crowded or noisy conditions in which a

person must work, or could be a reflection of simple boredom. If this is the case, then the challenging behavior may be impacted by simple ecological changes in which crowding and noise are reduced and the environment is made more exciting. Some examples of ecological changes include changing the person's *setting* (Horner, 1980); changing the number and quality of *interactions* (Egel, Richman & Koegel, 1981; Strain, 1983); changing the *instructional methods* that are being used (Koegel, Dunlap & Dyer, 1980; Winterling & Dunlap, 1987); changing *instructional goals*; and/or removing or controlling *environmental pollutants* such as noise or crowding (Adams, Tallon & Stangle, 1980; Rago, Parker & Cleland, 1978). Generally speaking, ecological changes attempt to "smooth the fit" between the person and his or her environment by modifying the environment (Rhodes, 1967).

Behavior challenges may reflect a poor match, i.e., a conflict between the person's needs, characteristics and aspirations and that person's physical, interpersonal and programmatic environments. Resolution of those conflicts may require a change in those environments. For example, if the assessment concludes that the challenging behavior is a reaction to a barren and unstimulating living environment, it may ultimately be necessary for that person to have a home that provides more stimulation.

This may take some time, however. In the meantime, while a more suitable living arrangement is being pursued, strategies may be needed to reduce or manage the challenging behavior in the current location. *Focused support strategies* are designed to meet this need. The person may be reinforced for the absence or lesser occurrence of the problem; antecedents that set off the behavior may be eliminated to reduce the likelihood of the behavior (i.e., antecedent control strategies may be employed); etc.

Ecological changes do not always

produce an immediate improvement in behavior. For example, while most individuals might show improvement in moving from an institutional setting into the community, some might show an increase in challenging behavior. Such an environmental change might still be pursued, however, if it is in a normal home environment that the person can learn, through positive programming, to be successful and enjoy living in a real home. If such a goal has

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## ***It is important for support staff to acknowledge their responsibility to teach the person how to make increasingly informed choices.***

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validity, and if such a goal is most realistically achievable with a change in environment, the transitional increase in challenging behavior may have to be addressed with appropriate focused support and reactive strategies.

There are other ways in which ecological changes may have to be balanced with other elements of the framework. For example, it is often true that giving the person increased choice and control over their day to day life is a necessary change in the interpersonal and programmatic environments. However, it may be that the person exercises choices primarily to avoid participating in most activities and/or to avoid learning new skills. If the right to choose were taken as an absolute, the person may end up not having the best quality of life. It is important for support staff to acknowledge their responsibility to *teach* the person how to make *increasingly informed choices*. How are support staff to balance their responsibility to respect the right of the person to choose and their responsibility to teach the person new skills and to teach them

to make increasingly informed choices? The following anecdote shows how one support team struck this balance.

*A young, adult man with the challenges associated with autism engaged in frequent selfinjurious behavior. Assessment and analysis disclosed that most of this behavior was his way of saying "no," his way of saying that he didn't want to do what he was being asked to do. Accordingly, his support staff developed a positive program to teach him how to say "no" by holding up a wooden symbol. The instructional program was successful and self injury was avoided by staff backing off from their request whenever he held up the symbol. The quandary that they found themselves in, however, was that, in this fashion, he avoided most opportunities to learn new skills, even a recreational skill such as ping pong and the like. Whenever staff would begin instruction, he would "choose" not to participate by holding up his signal.*

*In response to these circumstances, staff then developed another positive program to teach coping and tolerance for this activity. They initially withheld the availability of the wooden "escape" symbol for a few seconds. This delay was not long enough to provoke an episode of self injury, but it did allow some initial seconds of instruction. When the symbol was available and held up by the person, staff responded by terminating the activity. Very gradually, the availability of the symbol was delayed for increasingly longer periods of time, still with self injury being avoided. This continued until the availability of the symbol was being delayed for a five minute period of instruction. This was accomplished while still avoiding self injury.*

*At this point, the symbol was made available from the beginning of instruction. It was observed that this young man would tolerate 30 seconds of ping pong instruction before he asked to stop, using his wooden symbol. Staff always complied with this request by terminat-*

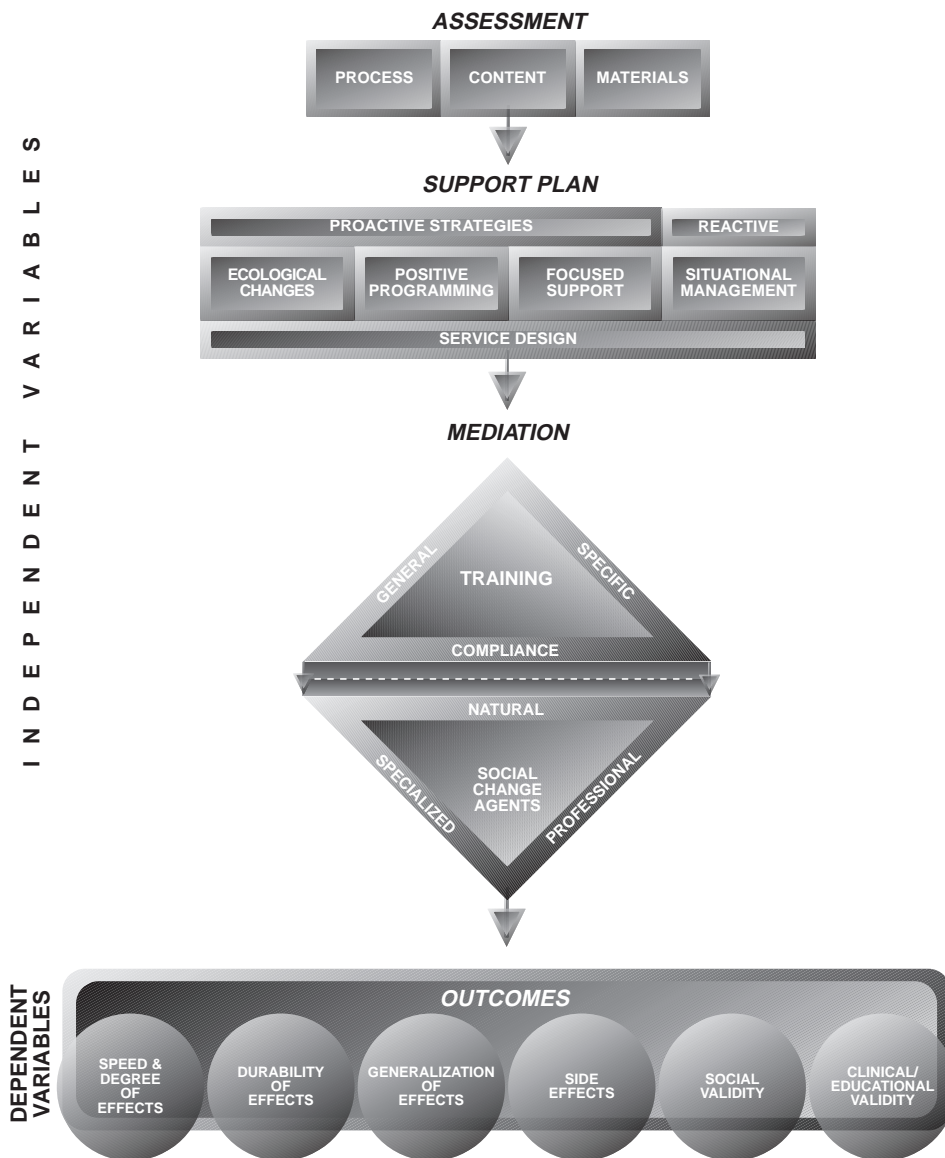
ing the instructional session. However, for any session that lasted for 30 seconds or less, they terminated the session with a sincere "...Nice game. Let's play again tomorrow." For any session that lasted for more than 30 seconds, they terminated the session with "...Nice game. Let's play again tomorrow. Why don't we go get a snack." Through this differential reinforcement, and with a gradual increase in the criterion for

reinforcement, this young man eventually got to the point where he could volley back and forth a 100 times, successfully, missing no more frequently than his opponent. More to the point, he began to seek staff out with the ping pong paddles in an effort to get them to play with him.

This example provides one illustration of how staff balanced the important ecological strategy of increasing a

person's choice and control with a *positive program* teaching tolerance for learning a new recreational skill. This was accomplished in such a way that challenging behavior was brought under control while enriching the person's quality of life, by giving him a new recreational skill that he now has the opportunity to enjoy on a regular basis. The model reminds us that ecological strategies hold a position of primacy in

**Figure 1: A Multielement Model for Breaking the Barriers to Social and Community Integration**



our support plans, but that these strategies may need to be balanced by the other strategies to produce outcomes that have the highest clinical/educational validity, that is, result in the best quality of life possible for the person.

**Positive Programming.** If Ecological changes can be described as changes in the environmental context, to smooth the fit between the environment and the individual, positive programming can be described as changes in the person's skills to deal better with the environment. Positive programming is defined as systematic instruction designed to give the individual greater skills and competencies which will contribute to social integration (LaVigna, Willis and Donnellan, 1989). There are four variations of positive programming involving the development of general, functionally equivalent, functionally related and coping/tolerance skills.

*General skill development* across the domestic, vocational, recreational, and general community domains facilitates the reduction of challenging behavior by increasing the person's repertoire of socially acceptable responses. "The increase in more adaptive and socially adequate behaviors will no doubt result in a concurrent decrease in maladaptive behaviors" (Lovaas & Favell, 1987, p. 312) (e.g., Wong et al., 1987). The opportunity to learn and engage in a wide variety of activities thereby provides a fundamental basis for other instructional efforts.

Challenging behavior occurs in certain situations because they can serve useful functions (Carr & Durand, 1985; Durand, 1990). What is much needed is an analysis of these functions and the incorporation of positive programming which teaches *functionally equivalent* but more socially acceptable responses, or responses that are otherwise *functionally related* to the identified reinforcers. (Donnellan, Miranda, Mesaros, and Fassbender, 1984; Favell, McGimsey & Schell, 1982).

Along with ecological change, positive programming has the primary goal of producing durable, generalized outcomes, with good social and clinical/

educational validity. In contrast with ecological change, positive programming involves systematic instruction while the former has to do with availability and opportunity. For example, ecological change could involve *having* access to a kitchen in one's home, *having* choices about what to do and *having* a day planner in which to schedule one's day. Positive programming might include *teaching* the person how to cook a meal independently, *teaching* the person how to make choices and *teaching* the person how to use a day planner to schedule a full day of interesting and desirable activities.

LaVigna, Willis and Donnellan (1989) describe in more detail the different variations of positive programming. We believe that among the most important functionally related skills is the ability to *cope* with and *tolerate* naturally occurring aversive events. This last category of positive programming deserves to be highlighted because it is often overlooked in support plans and because of its critical need for anyone who is living a full life in the real world.

Life's texture includes being told such things as "later," "no," and "good-bye." It includes such things as failure, frustration, criticism, being teased, being sick and performing nonpreferred tasks. While we would want to help anybody find a set of life circumstances that keeps these naturally occurring events to a minimum, anybody who has a life, has these experiences.

The rub is that these events are often the antecedents to challenging behavior. Ecologically, we may try to minimize them and it may be important to teach the person to learn how to communicate the key messages that let us know what she or he wants or what he or she is upset about. For truly durable outcomes, however, and for the best quality of life possible, support staff may need to take the responsibility to systematically teach the person how to cope with and tolerate these events, and

not just rely on the sink or swim approach or rely on the natural consequences to teach life's lessons. If the individuals we are concerned about were so able to learn from natural consequences, such an elaborate framework for addressing their behavior challenges would not be necessary. In fact, their serious behavior challenges probably would not even have developed.

**Focused Support.** Ecological changes, depending on their difficulty, may take time to arrange, and positive

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## *There are alternatives to punishment in addition to differential schedules of reinforcement...*

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programming may require some time before new skills and competencies are mastered. It may therefore be necessary to include *focused support strategies* for more rapid effects. Hence the inclusion of these strategies in our approach (see Figure 1).

There are alternatives to punishment in addition to differential schedules of reinforcement which can produce this rapid effect (LaVigna and Donnellan, 1986). These include, but are not limited to, certain antecedent and instructional control strategies (Touchette et al., 1985; Touchette, 1983; Carr, Newsom, & Binkoff, 1976) and stimulus satiation (Rast, Johnston, Drum, & Conrin, 1981; Ayllon, 1963). A comprehensive support plan could also include nonbehavioral strategies such as neurophysiological techniques, medication adjustments, and dietary changes.

Within the multielement model, the purpose of a focused support strategy is to produce the most rapid effects possible, to reduce the risks associated with the behavior and to reduce the need for reactive strategies. The model emphasizes the use of nonaversive focused support strategies, since punishment

brings a greater risk of negative side effects and itself may detract significantly from the person's quality of life. Further, the use of some punishment procedures may preclude the person from having access to certain environments, because of the relative lack of

free from the risks associated with the challenging behavior, including the risk of further exclusion. This "anti technology" sentiment may be understood within the context of a history in which many believe "behavior modification" has been used with a behavior, program

or research focus rather than a focus on the person and her or his quality of life. However, this framework proposes to harness behavioral technology toward the end of supporting human values and dignity. (See the discussion of clinical/educational validity elsewhere in this article.)

A person who is physically challenged may need a physical prosthesis, such as a wheelchair, to gain independence and full community access.

Support staff would advocate for the individual's right to the wheelchair, even though it may represent an "artificial" means by which the person would have mobility in the community, and may in fact elicit negative attention from the community. Similarly, a person who is behaviorally challenged may need a *behavioral* prosthesis, such as a formal schedule of reinforcement, to gain temporary control over behavior and to enjoy full community presence and participation, as more permanent solutions are being sought. This would suggest that support staff should be equally comfortable in advocating for the individual's right to the schedule of reinforcement, if needed, even though it may represent an "artificial" means of behavior control, and may in fact elicit negative attention from the community.

To summarize, proactive support strategies are those designed to produce changes over time and to improve the person's overall quality of life. Although there is some inter relatedness and overlap, our model delineates three categories of proactive strategies, (ecological changes, positive programming and focused support), each of which makes its own contribution to a com-

plex array of desired outcomes. While proactive support strategies are included to produce changes over time, reactive strategies are included for the narrow but important purpose of situational management.

### *Reactive Strategies*

The need for situational management is unavoidable when you are supporting a person whose behavior can be challenging. For those support staff who have been resistant to using strictly non-punitive strategies, it may be partly because many advocates of a nonaversive approach have not explicitly described what to do when a challenging behavior occurs.

Generally, nonaversive strategies create a reactive vacuum. Ecological strategies, positive programming and focused support strategies do not describe what to do when a behavior occurs; they are proactive, not reactive. Punishment, in contrast, is by definition a reactive strategy and prescribes exactly how to react when the behavior occurs. Given this critical need, in lieu of other suggestions, it is no wonder that some people have held on to their use of punishment.

As shown in Figure 1, the multielement model calls for the explicit inclusion of reactive strategies as a component of a support plan. The outcome requirement that is being addressed by a reactive strategy is a subset of speed and degree of effects. While the proactive strategies address speed and degree of effects over time, reactive strategies address the speed and degree with which individual episodes of behavior can be brought under control, with the least amount of risk of injury to the person, to support staff and to others in the environment. The role of a reactive strategy is not to produce changes in the future, but rather to keep people safe in the here and now.

The model's liberation of reactive strategies from the need to produce future effects allows more options for the rapid resolution of an episode of behavior than more traditional approaches have provided. This is because the

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## ***...a person who is behaviorally challenged may need a behavioral prosthesis... to enjoy full community presence and participation.***

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social validity of such strategies.

The use of nonaversive strategies is also dictated by the outcome requirement of speed and degree of effects, which is the primary reason for using focused support strategies. Punishment, by definition, is an after-the-fact procedure. The behavior occurs and then the punishing consequence is provided. In contrast, stimulus satiation and antecedent control may, conceptually and procedurally, preclude the occurrence of the challenging behavior altogether (LaVigna & Donnellan, 1986). Schedules of reinforcement may further strengthen the ability of a support plan to avoid or minimize the occurrence of challenging behavior.

For those support staff who favor an emphasis on an ecological approach to challenging behavior and who have a strong appreciation for the individual's rights and dignity, there may be an aversion to using focused support strategies, since such strategies are often artificial and contrived. There may also be an aversion to any procedure, such as a schedule of reinforcement, that is so blatantly "behavioral." This is of significant concern, since such strategies may be necessary for rapid control and necessary to keep the person and others

reactive strategy is planned within the context of a powerful proactive plan that *does* focus on the future. If we have ecological changes on track, if we are actively engaged in positive programming, and if we have our focused support strategies in place, it is less likely that the reactive strategy will produce a counter therapeutic effect. The following anecdote illustrates this point.

*A classroom student was engaging in tantrums, which included disruptive screaming and scratching herself, an average of 40 minutes a day, despite the use of a corner time-out procedure for the previous year and a half. Based on a thorough assessment, a comprehensive support plan was designed. For example, ecological changes included an improved curriculum and a rearranged classroom. Positive programming included teaching her a relaxation response and to communicate using a communication board, with which she could ask to get a drink of water or to go to the bathroom, ask for a break, ask for a magazine, ask for assistance, etc. Focused support included a differential reinforcement schedule of low rates of responding. However, rather than continuing to use the corner time out procedure as a reactive strategy, at the earliest sign of a tantrum or a known precursor to tantrums, she was handed a magazine. This was selected because support staff knew that when she had physical access to a magazine, she compulsively and immediately stopped whatever she was doing, even tantrums, and removed the staples from the middle of the magazine. Once she completed the removal of the staples, it was quite easy to redirect her back to her educational activities.*

From a traditional perspective, such a reactive strategy would be criticized for its potentially counter therapeutic effects. The fear would be that handing her a magazine, with which she engages in a high probability behavior, as a reaction to her challenging behavior, would reinforce and strengthen tantrums. The framework allows the inclusion of such strategies, however, relying on a fully developed proactive plan to overcome

the potential counter therapeutic effects of the reactive strategy, that might occur without the context of the proactive strategies.

In the example, what actually happened was that with the initiation of the full multielement plan, tantrums were immediately reduced to an average of less than five minutes a day, a direct result of the effectiveness of the reactive strategy to rapidly establish control over each episode and to prevent its continuation and escalation. Further, her time on-task, engaging in productive instructional activities gradually increased and the daily rate of tantrums gradually decreased. It has now been more than two years since any tantrums have occurred.

We believe that certain reactive strategies, which are in many ways, counter-intuitive, such as the one described above, may contribute rapid and safe ways of resolving individual episodes of challenging behavior, if certain guidelines are followed (Willis and LaVigna, in press). This may represent a novel contribution of the proposed multielement model to the field. It also represents a new area of much needed research, to enable us to understand how multielement plans operate and to investigate their possible synergistic capabilities.

## Assessment

The components of this multielement model, which provides for both proactive and reactive strategies, is dictated by a focus on all six outcome requirements. The design of many of these components requires specific information which only can be gathered through a comprehensive assessment, including the possible influence that neurological, medical or other organic variables may have on the challenging behavior and its meaning to the person, i.e., the function it serves or the message it conveys. *The purpose of an assessment*

*process is to determine this meaning.*

One strategy for this person centered approach to assessment is to use personal profiling and positive futures planning (Mount & Zwernik, 1988; Patterson, Mount, & Tham, 1988; O'Brien & Lovett, 1992). We have found futures planning to be particularly useful as a way of understanding how the person's ecology may be affecting behavior and what ecological changes may be helpful in trying to support the person.

Personal profiling and positive futures planning is a two step process designed to provide an understanding of a person's life and what they have experienced from their point of view and to develop a plan that helps them reach their goals and aspirations for the future. As is the multielement model, this approach is based on five quality of life values: (1) presence and participation in the community; (2) fulfilling valued roles and gaining social respect; (3) maintaining satisfying personal relationships with friends and family; (4) expressing personal preferences and making choices; and (5) gaining skills and competencies. Participating in the

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***We have found futures planning to be particularly useful as a way of understanding how the person's ecology may be affecting behavior...***

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process are the focus person and the "stakeholders" in that person's life, i.e., a circle of support that includes family, friends, past and present support staff, and/or any others that may be able to make a contribution. If this process does not provide a sufficient understanding of the behavior and its meaning for the person, a specific process of

behavioral assessment and functional analysis should be employed.

The fundamental role of behavioral assessment and functional analysis in providing behavioral services represents a hallmark in the field of applied behav-

formation may still be of questionable value to some practitioners, for example, knowing the history of the person and of the specific challenging behavior. Finally, the framework reminds us that assessment *materials* and devices are subject to exploration for their possible utility, that is, their contribution to the development of effective support plans (Ballmaier, 1992; Durand, 1990; O'Neill, Horner, Albin, Storey, & Sprague, 1990; Willis, LaVigna, & Donnellan, 1993).

## Mediation

An inclusive framework for breaking the barriers to integration caused by chal-

lenging behavior must also address a variety of mediator issues (Durand & Kishi, 1987; LaVigna, Willis, Shaull, Abedi, and Sweitzer, 1994). Hence their inclusion as illustrated in Figure 1. No support plan, regardless of its comprehensiveness and elegance, will produce the desired outcomes, unless it is fully and consistently implemented. Our model delineates a number of dimensions that relate to this issue. Firstly, three categories of *social change agents* are identified who may participate on the support team. These include *natural* mediators such as parent, siblings, regular education teachers, supervisors at work, and others whose relationship to the person is a natural one and has nothing to do with the person's disability or challenging behavior. Also included are *professional* staff whose relationship to the person is a function of their disability, such as special education teachers, job coaches, and domestic and community living support staff. Finally, included would be *specialized* staff whose relationship to the person is a function of the challenging behavior. These might include the behavior consultant, the one-to-one support staff, or others who are involved specifically because of the challenging behavior.

Secondly, the model delineates three

aspects of *training*, as they may relate to the three categories of mediators. These include teaching the *general* skills that such support people may need to support the person, teaching the *specific* skills that are necessary to implement the procedures incorporated into the plan and quality assurance systems to assure full *compliance* with the support plan. Such quality assurance systems include clear and operational definitions of what exactly needs to be done, socially valid monitoring of implementation, feedback based on the results of monitoring to improve and maintain full and consistent implementation, and outcome evaluation (LaVigna, Willis, Shaull, Abedi & Sweitzer, 1994).

We may also need to consider what is reasonable to expect of a person providing support, particularly parents or parent surrogates, regardless of training. Some support strategies may be so involved or some situations so deteriorated that they require professional or even specialized staff. For this reason, we have developed an intensive support approach that allows the provision of specialized services without placing the person in a more restrictive setting or other "challenging behavior unit" (Donnellan, LaVigna, Zambito & Thvedt, 1985).

## Conclusion

By design and definition, good research isolates independent and dependent variables and seeks to determine the effect of the former on the latter. The variables not under study are removed or otherwise controlled. In stark contrast, while individual elements may be based on a specific study or group of studies, a person centered support plan has an *array of elements*, is based on a *comprehensive assessment*, and is aimed at producing a *broad range of outcomes*. We suggest that because this broad context is often lacking, research findings may be misinterpreted and misapplied. Additionally, we suspect that the narrow interpretation of research findings has led to practices that many outside the field have perceived as an overuse,

## **No support plan, regardless of its comprehensiveness and elegance, will produce the desired outcomes, unless it is fully and consistently implemented.**

ior analysis (Kanfer & Saslow, 1969; Schwartz, Goldiamond & Howe, 1975). Assessment methods, information, and materials are considered to have utility if they have been demonstrated to contribute to beneficial outcomes (Hayes, Nelson & Jarrett, 1987). More specifically, the utility of assessment is defined insofar as it bears relevance for developing a support plan (Hayes, Nelson & Jarrett, 1989). Utility research is in its infancy in the area of challenging behavior (Ballmaier, 1992).

As shown in Figure 1, our framework provides for three aspects of assessment as having possible utility. The first of these is the method or *process* of assessment. Traditionally, the treatment of challenging behavior has relied almost exclusively on direct, naturalistic observation. Increasingly, however, interviewing, records review and analog situations are being utilized (Durand, 1990; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982; O'Neill, Horner, Albin, Storey, & Sprague, 1990; Willis, LaVigna, & Donnellan, 1991). The second aspect of assessment that bears on utility is the information gathered by the assessment process (Ballmaier, 1992). Some *content* may seem to have obvious utility, for example, knowing the controlling antecedents. Other in-

misuse and, in some cases, abuse of the punishment technology.

The model we have proposed is a framework for generating research questions, for discussing research findings, and for incorporating those findings into multielement, comprehensive, person centered support plans. It also provides a model for guiding behavior analysts in understanding the difference between a person centered support plan and the experimental investigation of isolated variables. If our strength has been in the latter, our weakness may be in the former. By adopting a model such as the one proposed here, we can only enhance the field of applied behavior analysis.

The multielement model is fundamentally derived from the outcomes desired when supporting a person who has the reputation of having challenging behavior. Speed and degree of effects has received most of the focus in the field, but this is only one of the outcomes that require our attention. The others include the durability and generalization of effects, minimizing negative side effects, social validity, that is, the acceptability of our strategies to the individual receiving treatment, to his or her family, to support staff, and to the community, and clinical/educational validity.

In this way, the proposed framework provides a values base for addressing challenging behavior. Effectiveness is ultimately measured by clinical/educational validity, that is, by the effects of the support plan on the person's quality of life, on the person's increased independence and competence, social and community presence and participation, productivity, personal empowerment and choice, and relationships and support network (O'Brien, & O'Brien, 1991). It is to these valued outcomes that this Multielement model is dedicated.

#### References

- Adams, G.L., Fallon, R.J., & Stangl, J.M. (1980). Environmental influences on self-stimulatory behavior. *American Journal of Mental Deficiency, 85*, 171-175.
- Ayllon, T. (1963). Intensive treatment of psychotic behavior by stimulus satiation and food reinforcement. *Behavior Research and Therapy, 1*, 53-61.
- Azrin, N.H. (1958). Some effects of noise on human behavior. *Journal of the Experimental Analysis of Behavior, 1*, 183-200.
- Ballmaier, H. (1992). *Psychometric characteristics of the behavioral assessment report and intervention plan evaluation instruments*. Unpublished doctoral dissertation, Pepperdine University, Malibu, California.
- 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., Newsom, C.D., & Benkoff, Jr. A., (1976). Stimulus control of self-destructive behavior in a psychotic child. *Journal of Abnormal Child Psychology, 4*, 139-153.
- Cautela, J.R., & Groden, J. (1978). *Relaxation: A comprehensive manual for adults, adolescents and children with special needs*. Champaign, IL: Research Press.
- Donnellan, A. M., Mirenda, P. L., Mesaros, R. A., & Fassbender, L. L. (1984). Analyzing the communicative functions of aberrant behavior. *Journal of the Association for Persons with Severe Handicaps, 3*, 201-212.
- Donnellan, A.M., LaVigna, G.W., Zambito, J., & Thvedt, J. (1985). A time limited intensive intervention program model to support community placement for persons with severe behavior problems. *Journal of the Association for Persons with Severe Handicaps, 10*, 123-131.
- Durand, V.M. (1990). *Severe behavior problems, a functional communicative approach*. New York: Guilford Press.
- Durand, V.M., & Crimmins, D.B. (1988). Identifying the variables maintaining self-injurious behavior. *Journal of Autism and Developmental Disorders, 18*, 99-117.
- Durand, V.M., & Kishi, G. (1987). Reducing severe-behavior problems among persons with dual sensory impairments: An evaluation of a technical assistance model. *The Journal of the Association for Persons with Severe Handicaps, 12*, 2-10.
- Egel, A.L., Richman, G.S., & Koegel, R.L. (1981). Normal peer models and autistic children's learning. *Journal of Applied Behavior Analysis, 14*, 312.
- Evans, I.M., & Meyers, L.J.H. (1985). *An educative approach to behavior problems: A practical decision model for interventions with severely handicapped learners*. Baltimore: Paul H. Brookes.
- Favell, J.E., McGimsey, J.F., & Schell, R.M. (1982). Treatment of self-injury by providing alternate sensory activities. *Analysis and Intervention in Developmental Disabilities, 2*, 83-104.
- Favell, J.E. (Chairperson), Azrin N.H., Baumeister, A.A., Carr, E.G., Dorsey M.F., Forehand, R., Foff, R.M., Lovaas, O.I., Rincover, A., Risley, T.R., Romanczyk, R.G., Russo, D.C., Schroeder, S.R., & Solnick, J.V. (1982). The treatment of self-injurious behavior (Monograph). *Behavior Therapy, 13*, 529-554.
- Gordon, T. (1970). *Parent Effectiveness Training*. New York: P.H. Wyden.
- Hayes, S.C., Nelson, R.O., & Jarrett, R.B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. *American Psychologist, 42* (11), 963-974.
- Hayes, S.C., Nelson, R.O., & Jarrett, R.B. (1989). The applicability of treatment utility. *American Psychologist, 44*, 1242-1143.
- Homer, A. L., & Peterson, L. (1980). Differential reinforcement of other behavior: A preferred response elimination procedure. *Behavior Therapy, 11*, 449-471.
- Horner, R.D., (1980). The effects of an environmental "enrichment" program on the behavior of institutionalized profoundly retarded children. *Journal of Applied Behavior Analysis, 13*, 473-491.
- Iwata, B.A., Dorsey, M.F., Slifer, K.J., Bauman, K.E., & Richman, G.S. (1982). Toward a functional analysis of self-injury. *Analysis and Intervention in Developmental Disabilities, 2*, 3-20.
- Kanfer, F.H., & Saslow, G. (1969). Behavioral diagnosis. In C.M. Franks (Ed.) *Behavior Therapy: Appraisal and status*. New York: McGraw-Hill.
- Koegel, R.L., Dunlap, G., & Dyer, K. (1980). Intertrial interval duration and learning in autistic children. *Journal of Applied Behavior Analysis, 13*, 91-99.
- LaVigna, G. W., & Donnellan, A. M. (1986). *Alternatives to punishment: Solving behavior problems with nonaversive strategies*. New York, NY: Irvington Publishers.
- LaVigna, G.W., Willis, T.J. and Donnellan, A.M. (1989). The role of positive programming in behavioral treatment. In E. Cipani (Ed.), *Behavioral Approaches to the Treatment of Operant Behavior* AAMD Monograph series, American Association on Mental Deficiency.
- LaVigna, G.W., Willis, T.J., Shaull, J.F., Abedi, M., & Sweitzer, M. (1994). *The periodic service: A total quality assurance system for human services and education*. Baltimore: Paul Brookes Publishing Co.
- Lieberman, R.P., King, L.W., DeRisi, W.J., & McCann, M. (1976). *Personal effectiveness*. Champaign, IL: Research Press.
- Lovaas, O.I., & Favell, J.E. (1987). Protection for clients undergoing aversive/restrictive interventions. *Education and Treatment of Children, 10*, 311-325.
- Mount, B., & Zwernik, K. (1988). *It's never too early, it's never too late: an overview of personal futures planning*. Minnesota Governor's Planning Council on Developmental Disabilities, 658 Cedar Street, Saint Paul, MN 55155.
- O'Brien, J. and Lovett, H. (1992) *Finding a way toward everyday lives: the contribution of person centered planning*. Pennsylvania Office of Mental Retardation, 569 Commonwealth Avenue, Harrisburg, PA 17120.
- O'Brien, J. and O'Brien, C.L. (1991) *More than just a new address: Images of organization for supported living agencies*. Lithonia, Georgia: Responsive Systems Associates.
- O'Neill, R.E., Horner, R.H., Albin, R.W., Storey, K., & Sprague, J.R. (1990). *Functional analysis of problem behavior: A practical assessment guide*. Baltimore: Brookes/Cole Publishing.
- Patterson, J., Mount, B., and 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 06108.
- Rago, W.V., Jr., Parker, R.M. & Cleland, C.C. (1978). Effects of increased space in the social behavior of institutionalized profoundly retarded male adults. *American Journal of Mental Deficiency, 82*, 554-558.
- Rast, J., Johnston, J., Drum, C., & Conrin, J. (1981). The relation of food quantity to rumination behavior. *Journal of Applied Behavior Analysis, 14*, 121-130.
- Rhodes, W.C., (1967). The disturbed child: A problem of ecological management. *Exceptional Children, 33*, 449-455.
- Schwartz, A., Goldiamond, L., & Howe, M.W. (1975). *Social casework: A behavioral approach*. New York: Greenville University Press.
- Strain, P.S. (1983). Generalization of autistic children's social behavior change: Effects of developmentally integrated and segregated settings. *Analysis and Intervention in Developmental Disabilities, 3*, 23-34.
- Touchette, P.E. (1983). *Nonaversive amelioration of SIB by stimulus control transfer*. Paper presented at the Annual Convention of the American Psychological Association, Anaheim, CA.
- Touchette, P. E., MacDonald, R. F., & Langer, S. N. (1985). A scatter plot for identifying stimulus control of problem behavior. *Journal of Applied Behavior Analysis, 18*, 343-351.
- Van Houten, R., Axelrod, S., Bailey, J.S., Favell, J.E., Foff, R.M., Iwata, B.A., Lovaas, O.I. (1988). The right to effective behavioral treatment. *The Behavior Analyst, 11*, 111-114.
- Willis, T.J., & LaVigna, G.W. (in press). *Challenging behavior: Crisis management guidelines*. Los Angeles: Institute for Applied Behavior Analysis.
- Willis, T.J., LaVigna, G.W., & Donnellan, A.M. (1993). *Behavior assessment guide*. Los Angeles: The Institute for Applied Behavior Analysis.
- Winterling, V., & Dunlap, G. (1987). The influence of task variation on the aberrant behaviors of autistic students. *Education and Treatment of Children, 10*, 105-119.
- Wong, S.E., Terranova, M.D., Bowen, L., Zarate, R., Massel, H.K., & Liberman, R.P. (1987). Providing independent recreational activities to reduce stereotypic vocalizations in chronic schizophrenics. *Journal of Applied Behavior Analysis, 20*, 77-81.

# A Person Centered Approach to Supporting People with Severe Reputations

Glenn Metlen, Ann Majure and Cheryl Stroll-Reisler

*Editors' Note: In the following column, you will have the opportunity to meet two members of the IABA family. Glenn Metlen is a consumer of our services and Ann Majure is a Manager of supported living services in Ventura, California. Cheryl Stroll-Reisler assisted in developing Glenn's support strategies and is a Manager of supported living services in Los Angeles. This paper was originally presented jointly by them at the 1994 Supported Life Conference in Sacramento California.*

## ANN:

How do you support people so they can live in and be a part of the community, have friends and acquaintances in their lives, and have work and leisure activities they enjoy and find meaningful? Most of us know the answer to this generally - we focus on and respond to the needs and desires of each individual person. Many of us use tools such as "personal futures planning," "circles of support," "lifestyle inventories," "MAPS" to help us come to know someone who needs our help to succeed in the community. These tools have helped us move away from the old deficit model of understanding a person. Most of us no longer define people by what they cannot do or by some negative characteristic described in great detail in every IPP the person has ever had. We now know to look for capacity, for positive attributes, and to help the person build on these. We know that the most important person to have involved in planning and deciding what supports are needed is the person who will be using the supports. We know to listen to people and regard their wishes when it comes to where they will live, with whom they will live, what kind of job they want, with whom they want to spend leisure time, etc. But what do we as paid staff do when we have listened and responded to all of a person's choices and preferences and the person still has issues

which jeopardize his or her living in the community? What happens when someone's choice is impossible to provide or even illegal? What about the people who have many abilities and positive attributes but also have been very wounded by the service system? Some of these people have learned to cope with the injustices of their lives by engaging in behaviors which present a danger to themselves or others or behaviors which the community simply will not tolerate?

What about these people, the ones who have the most "severe reputations?" They are often the people who never get a chance to live in the community because they are considered "not ready" or they get sent back to more restrictive settings after a short stay because their behavior was considered too difficult to be "handled" in the community. These are the people we want to address. We want to share with you some of the tools we use to help people with "severe reputations" succeed in living in and being a part of the community.

One of the tools we use has developed a bad reputation lately - behavioral technology. It's sort of politically incorrect these days to admit that we use or believe in the value of behavior technology as a part of the supports we provide for people. We may reject and abhor the use of aversive behavioral techniques (restraints, behavior controlling drugs, isolation, noxious substances, etc.) and

recognize them for the abusive, dehumanizing things they are. But even the nonaversive techniques such as positive reinforcement and positive programming have been seen as controlling and denying individuals their right to self-determination. "Natural consequences" are supposed to be the best teacher and reinforcer. We want to share with you the story of someone whose needs required that we use a range of supports, including behavioral technology, and how he and we together designed a support plan which we all feel accommodates his particular needs and helps him succeed in the community.

The best person to begin to tell you about all this is the person who receives the supports. We are very pleased that Glenn Metlen has agreed to talk with us about his life and the things he feels are important to him.

## GLENN:

Hi, my name is Glenn Metlen. I'm here today to talk to you about some of the things that have helped me live the kind of life I want to live and do the things I want to do.

Over the years, I have been described in many ways, some not too flattering. I'm someone a lot of people may describe as having a challenging reputation. I also am someone who lives in my own apartment. I have a job at Ross Clothing. I play the piano. I enjoy reading and writing. I like to eat out.

There have been times in my life, though, when these were not the things about me that people spent a lot of time talking about. They were too busy talking about things like "aggression," "intolerance," "perseveration," and a whole list of other negative things. Because some people looked mostly at the negative things, I had to live in institutions and group homes for 12 years.

In 1990, I was able to move into my own apartment in West L.A. I really enjoy living there. I like paying my own bills and deciding what to do and how to do it. I enjoy learning how to cook the foods I like. I enjoy going to concerts

and going to the library.

The people I work with at IABA listen to me and try to respond to the things I tell them are important to me. For example, they helped me organize my apartment so it's clean, orderly, and quiet. They helped me find a roommate who is not disabled. They are nice to me and listen to me when I need to talk. They talk to me about things that worry me, like crossing busy streets, approaching cats and dogs, or just saying "no" to people on the street who ask me for money.

Just talking about the things that worry me helps a lot. But there are times when I need something more to help me cope with the things that worry me. My staff and I have come up with some other pretty creative things I want to tell you about. One of the most important things I use is my "Almanac of Solutions." I use this when I feel anxious about something. My support staff and I have thought about all the situations that have caused me to get anxious in the past and ways I can handle the situation so I don't have to worry about it over and over. I have all these situations and solutions written down in a book. When I feel anxious, I can just look in my Almanac and read about a solution. For example, sometimes I get anxious when my support staff are late. I can look in my Almanac and read what I can do until my staff get there. I can play my piano. I can call the IABA office and talk to someone there. Then I don't have to get too worried while I wait for my staff.

My weekly planner is another thing I use that helps me cope. My support staff write down all the things I have scheduled for the week. When I start to worry, I can look at my schedule, and it reminds me what's going to happen on which days. If something happens to change my plans, I can change it on my weekly planner. Then my support staff and I can discuss anything about the change that bothers me and how to handle it.

I also have what some people call "formal behavior programs." They help me avoid doing some of the things that

might cause me serious problems in the community - like aggression and property destruction. I get a reward every day that I don't have one of these behaviors. Recently, my support staff asked me if I thought I still needed these programs, and I told them that I did. I told them that I liked signing my card every night to get my reinforcement.

All of these things I've talked about are important to me and help me live in the community. I like it when my support staff ask me what I need from them. That way, when I change, my supports can change too.

## ANN:

Glenn has described the things that help him cope with life in the community. Some of these things you may see as just common sense. For example, most of us would like to live in a neat, clean apartment and be around nice people who will listen to us when we need to talk about something. These things may be important to many of us, but to Glenn they are critical to his being able to cope with the stresses he finds in the community and are essential to his well-being and safety. We have learned how critical they are by spending the time to really come to know Glenn as a person. We refer to these types of things as environmental or ecological strategies.

Just addressing the environmental things Glenn needs is not enough to assure that he can cope with everything the community throws his way. His almanac, his written schedule, his way of using his staff to problem-solve came about because we tried to look at Glenn as a unique human being and design strategies based on how he best learned and coped. These were all things that we and Glenn together decided helped him deal with anxiety and cope with things in the community. These types of strategies fall into the category of what we call "positive programming" or ways of teaching and interacting with someone to help them develop new or better ways of dealing with life. For Glenn these strategies are just as essen-

## GLENN'S SUPPORT STRATEGIES

- I. **ECOLOGICAL OR ENVIRONMENTAL STRATEGIES**  
*(These involve planned changes designed to improve the match between Glenn and his environment. Environment can include people, places, and things.)*
  - living in an apartment with a nondisabled roommate
  - living in a quiet neighborhood
  - having opportunities to participate in vigorous exercise
  - having staff who help Glenn talk through solutions to problems (e.g., "Columbo Method")
  - using a written weekly planner to know "what is expected"
  - using a personalized "Almanac of Solutions"
- II. **POSITIVE PROGRAMMING**  
*(This involves opportunities and instruction which promote development of a rich repertoire of appropriate behaviors that are incompatible with Glenn's undesired behavior.)*
  - expanding general vocabulary
  - learning how to say STOP, I DON'T WANT TO, NO, etc.
  - general social skills training
  - personal effectiveness training
  - positive self-talk/optimistic thinking
  - relaxation training
  - journal writing
  - discussion time
- III. **FOCUSED SUPPORT STRATEGIES**  
*(These involve ways of helping Glenn gain rapid control over those behaviors which place him and others at imminent risk. They are used only in conjunction with environmental and positive programming strategies.)*
  - Antecedent Control Strategies (eliminating the "cues" for the problem behavior and increasing the "cues" for the absence of the problem behavior):
    - Interactions should be indicative of respect and dignity.
    - Provide additional support in large groups and crowds.
    - Don't express concern when Glenn is anxious. Stay neutral.
    - Always have access to a bathroom.
    - Avoid arguing or threatening Glenn with consequences.
    - Do not ignore Glenn.
  - Differential Reinforcement of Other Behavior with Progressively Increasing Reinforcement (DROP):
    - Glenn receives a tangible reward each day for the absence of agitation, aggression, and property destruction.

tial to his success as having the right apartment, the right roommate, and the right staff.

Environmental strategies and positive programming are both part of the multielement model we employ in using behavioral technology in support of people who have challenging reputations. In fact, most of the things we do fall into these two types of support. Yes, we may also use some of the more traditionally recognized behavior techniques, like contingent reinforcement, as Glenn described to you. We use this not to exercise control over a person but to help the person learn to control urges within themselves which will put them or others in some type of jeopardy.

We do not use these techniques to deny a person their right to self-expression, but to help the person learn what society will and will not allow them to express. (Sometimes natural consequences can be very dangerous for a person with a severe reputation if those consequences result in jail, return to an institution, or worse.)

We have found that to support people

with challenging reputations, it is essential that we truly use a person-centered approach. We must come to know each person and learn with them what it takes to help them succeed. This is not just a surface understanding, but an understanding that comes from spending time with people, asking them what they really want and/or need. It is an understanding that comes from careful analysis of what we learn from the people and how they best learn and communicate. We then look at the range of nonaversive technologies and make available to the person any we jointly feel will help him or her be more successful, more able to fully participate and enjoy the community.

When we look at nonaversive behavioral technology or any other strategy or theory we use when we develop supports for someone, we try to always keep in mind that our application of any of this is a product of our values, consciously or unconsciously. We at IABA have spent a lot of time over the past year looking closely at our values, both as an organization and as individual

practitioners within the organization. Examination of values is a lifelong process that we believe is essential for those of us in this work. So, when we come together with someone who needs our support, we always look for the ways of support which are the least intrusive and the most respectful of the individual. Even when we and the person we support decide that some type of formal behavioral strategy is needed, we always try to keep sight of the fact that it is the people who implement this strategy who are the most important ingredient. Our relationships with the people we support are not just “nice to have.” It is through relationship that we get to know someone well enough to read the cues and know what to do. It is through relationship that we begin to see the person, not as just a client or consumer, but as a valued, unique human being.

We see our business as offering people opportunities. Nonaversive behavioral technology is just one means of expanding those opportunities for some people.

## Behavioral Definition of a Problem Behavior

*Editors' note: In each issue of this newsletter we plan to have a column which addresses a technical issue in writing a behavioral assessment report. Typically, this will include an excerpt from an actual report. In this issue, we show how the description of the behavior and the operational definition should include separate descriptions of the topography, cycle, course, and strength (e.g., rate, duration, latency, and/or severity) of the target behavior. Since the course description cross references to the Antecedent Analysis, we have included this section of the report as well.*

### Description of Behavior and Operational Definition of Aggression.

A. *Topography.* Two intensities of aggression have been defined:

1. *Minor Aggression:* This is defined as any response toward another person which causes, or is unlikely to cause anything more than, minor physical injury or pain, such as poking (i.e., thrusting finger or knuckle into the body of another such that the skin and/or clothing of another are depressed), pinching (i.e., grasping the skin of another between a finger and thumb or between fingers and the palm such that a fold of skin can be observed), or

spitting on another person (i.e., projection of saliva from the mouth such that it makes contact with another person); and,

2. *Major Aggression:* This is defined as any response toward another person which could cause significant physical injury or pain. Some specific examples of major aggression include hitting (i.e., striking another person with an open hand or closed fist such that the contact is audible and/or results in movement of the person's body), butting with her head (i.e., contact of the head to the body of another such that the person's body is moved even slightly), biting (i.e., any contact of teeth to a body part of another person), kicking (i.e., any contact of a foot to the body of another,

with the exception of contact as part of organized games), and/or scratching (i.e., contact of the fingernails to the body of another such that a depression is made at the time of contact, and/or a mark is observed on the surface of the skin). Major Aggression may also include attempts to strike a person with an item in her hand, such as a pencil or a thumbtack.

B. *Cycle.* For the purposes of counting the number of times aggression occurs, an episode of aggression begins (i.e., onset criterion) with the first occurrence or appearance of any one or combination of the above topographies. An episode of aggression ends (i.e., offset criterion) when 60 seconds have gone by without any of the above topographies.

C. *Course.* While Sally's aggression has been reported to occur without warning, typically it is preceded by one or more known precursors (i.e., actions on the part of Sally that precede or signal the likelihood of a problem behavior). Some precursors manifested by Sally include falling on the floor, burping and spitting, refusal to do something, demanding that someone do something for her, throwing, shredding and/or breaking clothing, furniture or other objects, and general yelling and tantrum behavior. Precursors may also include pouting and saying that she is not feeling well.

While aggression may appear to occur suddenly, more typically it results within the context of an episode where she is getting visibly more and more upset, as indicated by her precursor behavior. For example, on her most recent home visit, she got into a verbal battle with her parents at bedtime about who was going to make her bed. Earlier in the day she had become upset about something and had removed her sheets and blankets from her bed and tossed them away. Sally

was demanding of her mom "you make-up and fix" and mom was equally insistent in saying "no, you make the bed or sleep as it is." After some back and forth of this kind, with voices becoming louder and louder, and after emotions becoming more and more raised and the interaction escalated, Sally began to yell and then to hit out at her mother. At this point her mom and dad had to physically move her into her bedroom and shut the door. There then proceeded to be a period of about an hour and a half of general yelling and tantruming and property destruction in the bedroom, before Sally was able to calm down.

Such episodes were described as not typical of her behavior at home, although an episode with a course of such as this was not uncommon at school. On the other hand, the staff at school described another typical pattern that was much quicker in developing. As an example, they described the time when the buzzer went off in the classroom and she was "told to stop drawing," at which point she started throwing things, and then began to hit the staff person. While precursor behavior still occurred, the escalation to aggression was much quicker in this situation, and a significant number of episodes are described as being on this faster track.

However, it was also acknowledged by both parents and staff that the degree and speed of escalation very much depended on what was happening to her at the time and how she was being treated by the person or people with whom she was having the interaction. The interaction of antecedents with Sally's behavior and those that are more or less likely to produce a significant and rapid escalation are described below in the Antecedent Analysis section of this report.

D. *Strength.*

- *Rate.* As described above, until recently, Sally was said not to display significant amounts of

aggression at home. The current rates at her residential school, at the time of the assessment, were zero to *four* minor incidents a day, with an average occurrence of .75 episodes a day, i.e., an average of three episodes every four days, with most of these occurring in the residence, and zero to seven *major* incidents a day, with an average of 1.25 episodes a day. Most of these major episodes are reported to occur in the school environment.

- *Severity.* As indicated, an episode of aggression could be over quite quickly or continue for an extended period of time. While it could be over after a period of only 90 seconds, episodes of more than an hour were not uncommon, although such extended episodes are less frequent at the present time. Very rarely, an episode could last for a half day. The most common topographies were reported to be pinches and scratches and when she is really upset, the school reports that it requires three people to physically control her. On the other hand, there is typically only one person on at a time in the residence, and they expressed their confidence in being able to manage Sally, even if an episode of aggression occurred. The higher number of incidents of major aggression in the school, and the greater number of people required to manage her there, adds importance to the clearest understanding possible of how different interactional styles effect Sally's behavior. Finally, while it is not typical that actual injury occurs to a person as a result of Sally's aggression, on separate occasions, it has caused a bruised (possibly cracked) ribs, a black eye, and a bloody nose.

## Antecedent Analysis

Based on a review of records kept by staff and based on in depth interviews of staff and parents, an antecedent analysis disclosed a number of events associated with a higher likelihood of aggression and a number of events associated with a lower likelihood. As with virtually all antecedent analyses, no events were identified that would allow a prediction of occurrence or non occurrence of aggression with 100% accuracy. This typical lack of a perfect relationship between antecedents and behavior explains some of the difficulty that may have been experienced in previous attempts to understand the meaning of Sally's aggression.

However, there was one set of antecedents generally recognized for their strong relationship to Sally's refusal to comply with a request, the most common precursor associated with aggression, occurring in more than 85% of the episodes involving this target behavior. Since Sally's refusal to do a task is a recognized and frequent precursor to aggression, antecedents to task refusal can also be considered as antecedents to aggression, as they initiate a behavioral chain that can escalate to aggression. Specifically, it was generally recognized that she is more likely to refuse what is being asked of her if: the request is made as a way of getting her attention, especially when she is being distracted by surrounding stimulation; if the adult is speaking fast to her; if the adult is using a demanding, cold, unfriendly and impersonal tone; if the adult is asking her do certain known, non preferred tasks, such as working on her sight words out of the context in which those words are used functionally; if the adult is making the request without offering any choice, without providing a friendly explanation or without offering a sympathetic ear for the need to do the task; and making the request in an authoritative manner.

These antecedents are well known to increase the likelihood of Sally's refusal to do a task or participate in or terminate an activity. There are also a

number of antecedents associated with the higher likelihood of refusal escalating to property destruction, tantrum behavior and the other precursor behavior, and for the incident to continue escalating to aggression. They may also directly initiate precursor behavior by themselves, and subsequent escalation to aggression. Finally, on very rare occasion, they may provoke aggression outright, without any precursor behavior.

These high probability antecedent conditions include responding to her refusal to comply with a repetition of the request in the manner described above; moving into closer proximity to Sally, in response to her refusal; attempting to physically restrain her because she *appears* to be *about* to engage in aggression; physically "escorting" or directing Sally to another area, as a consequence for refusal to comply or as a consequence for another behavior; directing Sally to stop an activity, as a consequence for a behavior, such as the day she was told to get off the swing because she was spitting and burping; having her lose a reinforcer as a consequence for a behavior; categorically denying her something that she has asked for, without a friendly and sympathetic ear and active listening; and/or confronting her with a hostile tone and stance.

From the above analysis, it is also possible to identify those events associated with the low likelihood of aggression and the precursor behavior that can lead to aggression. These include, first of all, the antecedents associated with a higher likelihood that she will comply with a request. Specifically:

1. Making sure you have her attention *before* the request is made, especially when she is being distracted by surrounding stimulation.
2. Speaking slowly to her when making the request.
3. Making the request using clear, concise and simple language.
4. Using a friendly and warm tone that communicates a firm, personal *expectation of cooperation*, rather than a *demand for compliance*.
5. Designing lesson plans so that non

preferred tasks are taught in the most natural and functional context possible.

6. Making the request within the context of a choice with legitimate options, both of which would be acceptable, making it a win-win situation for everybody. An example of a win-win choice would be one in which the teacher wants Sally to work on math but gives Sally the choice as to whether she wants to work on the computer or the calculator; for example, "It is time for math, which do you want to work on first, the calculator or the computer?" (Win-lose choices should be avoided, such as "You can either start your math or I will go into the other room and leave you alone.")
7. If a choice is not possible, at least providing a friendly explanation and offering a sympathetic ear for the need to do the task.
8. Making the request in an egalitarian, as opposed to an authoritative manner.

The following antecedent conditions make it less likely that refusal, if it occurs, will escalate to aggression, that other precursors will occur and/or escalate to aggression, and/or that aggression will occur without any precursors:

1. Responding to her refusal to comply with a repetition of the request, but with special care to use the manner described above;
2. Continuing the interaction with no change or threatened change in proximity, in response to her refusal or as a consequence for another behavior; rather than moving into closer proximity to Sally or physically leaving the area she is in or threatening to do so;
3. Developing a support plan for addressing her refusing to comply and her other identified behavior problems using one or more of the procedures based on established nonaversive technology, in order to:
  - a. avoid physically "escorting" or directing Sally to another area, as a consequence for re-

- b. avoid the use of physical restraint;
  - c. avoid directing Sally to stop an activity, as a consequence for a behavior;
  - d. avoid the removal of a reinforcer as a consequence for a behavior; and,
  - e. avoid aversive consequences, generally, for problem behavior.
4. Offering a friendly and sympathetic ear and actively listening when it is necessary to categorically deny her something that she has asked for or that you know she wants; and,
  5. Using an open, friendly, warm and

non hostile, non confrontational tone and stance when interacting with her.

In addition to these relatively immediate antecedents, which lead to a higher or lower probability of occurrence for aggression and its precursors, there are also a number of setting events that effect the likelihood of these behaviors. One of these is Sally's physical health at the time. That is, when she is sick or otherwise not feeling physically well, she is even more likely to respond to the high probability antecedents with aggression or its precursor behaviors. During these times, it would be especially important to employ the antecedents associated with a low probability

of problems, as described above. Similarly, staff described how it is relatively easy to determine by her manner if Sally is in a good mood, or if she got up on the wrong side of bed. Her being in a bad mood is also a setting event for aggression and its precursors. Staff report, however, that the use of humor and an easy going manner works quite well in breaking her out of her mood, giving them greater confidence that they can then proceed with the regular business of the day. To push ahead with business as usual when Sally is in a bad mood or is not feeling well, increases the chances that aggression and its precursors will occur.

## Procedural Protocols - Interpersonal Style

*Editors' Note: A Procedural Protocol is a written "recipe" describing how an important part of a support plan should be carried out. Perhaps one of the major reasons that plans are carried out "inconsistently" is the lack of a clear description of what needs to be done. Procedural Protocols can take many forms. What is common to all is a description of what to do, when to do it, and who is to do it. A protocol may be as simple as a statement of "do's and don'ts." It may be a simple description of how support staff should carry out a simple Differential Reinforcement Program. The steps of a procedural protocol should not be in a long, drawn-out paragraph format. Rather, the steps should be seen as "visual bites" (bullets of information) that grab the person's attention.*

*In the following column, we present two sample procedural protocols, to illustrate how different protocols can be written. These protocols, and the ones we will publish in this column in the future, can be added to the reader's library of protocols for future reference and adaptation as the need arises. In this case, the protocols were developed as part of Sally's support plan. Excerpts from her assessment report appear elsewhere in this newsletter.*

### Protocol #1

**Name:** Sally Mellior

**Date Protocol Developed:** June 14, 1993

**Protocol Name:** Ecological Strategies - Interpersonal Style

**Materials:** None

**Schedule:** During all interactions with Sally.

**General Statement:** When working

with Sally, a key to continued success over time is to always use simple, clear, concise language that is spoken slowly. The tone of the interaction must be friendly and warm, but with a definite expectation of cooperation. The style should be that engaged in with any friendly teenager. This format of friendly, warm, firm, nonauthoritarian interaction is key to success in working with her.

#### Key Elements:

1. Obtain Sally's attention before beginning to talk to her. (This is particularly important when she is being distracted by surrounding stimuli.)
2. Speak slowly.
3. Use clear, concise and simple language.
4. Use a friendly, warm, engaging tone of voice.
5. Convey openness nonverbally, using body language and gestures.
6. Use nonauthoritarian interactional style.
7. Convey respect for Sally as an active teenager.
8. Avoid using a bossy, confrontational, demanding manner.
9. When making a request, communicate a firm, personal expectation of cooperation.
10. When a choice is not possible, at least provide a friendly explanation and offer a sympathetic ear for the need to do the task.
11. Specific scripts should be used when: 1) Making requests to perform nonpreferred activities, 2) Denying her something and/or saying no, 3) She must delay gratification, 4) Interrupting a reinforcing activity, 5) Disagreeing with her,

- 6) Confronting her about misbehavior.

### Comments

When things are going well, it may be relatively easy to adopt the interactional style described. However, it is even more important to follow the above guidelines when things seem to be getting off track and you find yourself getting upset with Sally.

## Protocol #2

**Name:** Sally Mellior

**Date Protocol Developed:** June 14, 1993

**Protocol Name:** Script - Denial and Saying No

**Materials:** None

**Schedule:** Whenever you must deny her something she is asking for and she becomes the slightest bit upset or oppositional.

**Responsible Person:** Everybody who interacts with Sally

**General Statement:** There are a number of antecedent control strategies that may act to preclude the occurrence of Sally's targeted behaviors. These are described in her assessment report, with which everybody should be familiar. Eventually, perhaps after a year of success, the gradual fading of strict adherence to some of these antecedents can occur. The fading process will be initiated very carefully. In addition to going a long period of time without aggression and its precursors, the most important indicator that fading can begin will be when the goals and objectives of the positive programs have been met.

Scripts have been developed to give you crystal clear guidelines on what to say and how to say it for those situations that are known to have a tendency for eliciting aggression and its precursors. In addition to providing the words, these scripts include directions to use those styles of interaction that are known to work best for her.

### Script:

#### General:

1. Obtain Sally's attention before beginning to talk to her. (This is particularly important when she is being distracted by surrounding stimuli.)
2. Speak slowly.
3. Use clear, concise and simple language.
4. Use a friendly, warm, engaging tone of voice.
5. Convey openness nonverbally, using body language and gestures.
6. Use nonauthoritarian interactional style.
7. Convey respect for Sally as an active teenager.
8. Avoid using a bossy, confrontational, demanding manner.

#### Specific:

1. Spend time applying active listening protocol until it is clear to her that you understand what she wants.
  - a. Determine her message and provide a sympathetic ear.
  - b. You should then put what you understand Sally to be saying into your own words, in order to verify with her your understanding of what she is feeling.
  - c. During this listening and verifying process, **DO NOT** evaluate, give an opinion, advise, analyze or question.

*Example:* Sally says, "I don't want to go shopping in Dad's car. I want to go in Jane's car. Dad says, "It sounds like you don't want to ride in my car and you want to ride in Jane's car."

2. Monitor your progress during the active listening process, i.e., track things to determine if Sally is beginning to calm down or to escalate.
  - a. *Verbal Indications:* For example, voice is closer to normal volume and pace.
  - b. *Nonverbal Indications:* For example, Sally begins to look calmer, physically more relaxed, less tense.

3. Review with Sally the issues brought up during active listening, using slow, clear, concise, and simple language, e.g., "Let me make sure I understand everything... Is there anything I missed?"
4. Listen for Sally's indication that she has been heard.
5. Keeping a warm, friendly attitude, ask Sally if you can now relate to her your reason for saying no, e.g., "Sally, I've listened to you, now will you listen to me? Can I tell you what I think?"
6. Try to get Sally to a "neutral" environment, e.g., "Sally, would it be O.K. with you if we went to sit down over here and continue to talk about this?"
7. After gaining Sally's acceptance, go to the "neutral" place and have her listen to your explanation, remembering to make sure you continue to hold her attention, and you are not being authoritarian. E.g., "I feel it would be better to take my car because Jane's car has no gas. We will have more time to shop, if we take my car. Do you understand?" Or... "I feel \_\_\_\_\_ because \_\_\_\_\_. Do you understand?"
8. Enter into a negotiation process. E.g., "What do you think we should do to fix this situation, Sally?"
9. Provide Sally, with some options that would be acceptable to you both. E.g., "Can we take my car now and Jane's car later?" Or... "How about doing *this* or *this* instead of *that*?"

### Comments

It is important to remember that if you have gotten into a situation involving denial, and if Sally seems upset about it, as soon as possible, the forward motion of the activity should be stopped and this script should be played out with as much time as it takes. Having reached an understanding, the regularly scheduled activity can then proceed.

## Resources

### Training Calendar

#### **Assessment and Analysis of Severe and Challenging Behavior**

**Gary W. LaVigna, PhD & Thomas J. Willis, PhD**  
This competency-based training practicum provides participants with the clinical skills required to design a multielement nonaversive support plan.

**Australia** • Bendigo, Vic • November 5-17, 1995  
**USA** • Los Angeles, Ca. • July 28-August 10, 1996  
**England** • November, 1996

#### **Positive Approaches to Solving Behavior Challenges and The Periodic Service Review**

**Gary W. LaVigna, PhD or Thomas J. Willis, PhD**  
Positive Approaches... is a 2 day seminar that presents IABA's multielement model for providing person centered nonaversive behavioral supports to people with challenging behavior. The Periodic Service Review is a 1 day seminar that teaches participants a staff management system that ensures the agency/school is providing quality services.

**October/November, 1995** - Australian Seminars (Sydney, Canberra, Brisbane, Adelaide, Hobart, Melbourne)

**November, 1995** - New Zealand Seminars (Auckland, Christchurch)

**January, 1996** - US Seminars (Florida, US Virgin Islands)

**February, 1996** - US Seminars (Virginia)

**March, 1996** - US Seminars (New Jersey, Ohio)

**June, 1996** - Australian Seminars (Melbourne, Perth, Darwin); Oslo, Norway; Belfast, Ireland; London, England; Cardiff, Wales

**October/November, 1996** - Great Britain Seminars (London, Taunton, Manchester, Birmingham, Sheffield, Edinburgh)

Other venues will be arranged and announced at a later date.

#### **Supported Employment**

**Julie Shaul, Diane Sabiston, Chris Pellani**  
This is a 2 day workshop that provides participants with all of the "nuts and bolts" of providing quality supported employment services to people with challenging needs.

**March, 1996** - Great Britain Seminars (London, Manchester, Edinburgh)

#### **Dual Diagnosis**

**Robert Sovner, MD**

This 1 day seminar will examine current diagnostic trends and medication issues of people that have a dual diagnosis.

**March 18, 1996** - Los Angeles

**Seminars and workshops are available for in-house presentation and local sponsorship. For detailed information on any seminar, contact:**

John Q. Marshall, Jr., Seminar Coordinator  
**Institute for Applied Behavior Analysis**  
PO Box 5743  
Greenville, SC 29606-5743 USA  
Telephone: (864) 271-4161-Fax: (864) 271-4162  
Internet: jmarshall@iaba.com  
Toll Free (USA and Canada): (800) 457-5575

or in Australia - Jeffrey McCubbery (054) 416 344

or in England - Cherry Connell (01562) 747 881

or in Auckland, New Zealand

Ray Murray (09) 623 8899 ext. 8681

or in Christchurch, New Zealand

Rebekah McCullough (03) 379 3980

### Multimedia Training Programs

#### **Competency Based Training Program**

This is a systematic, criterion-referenced, self-instructional multimedia course for staff development that is customized to your agency. It is being used by adult service agencies and schools in Australia, Great Britain, Spain and the US. \$1,500.00

For more information on the CBT, contact:

Diane Sabiston

**Institute for Applied Behavior Analysis**

PO Box 30726

Savannah, GA 31410-0726 USA

Telephone: (912) 898-0390 • Fax: (912) 898-8077

#### **Positive Approaches to Solving Behavior Challenges**

This is a 6 module video training program that teaches viewers IABA's person centered multielement model for developing nonaversive support plans for people with challenging behavior. Two text books, lecture notes and pre/post tests are included. \$1,250.00

#### **Staff Supervision and Management Strategies for Quality Assurance**

This is a 4 module video training program based on *The Periodic Service Review: A Total Quality Assurance System for Human Services and Education*. Viewers will learn concrete strategies to ensure that the highest quality services are being provided by their agency/school. Text book, lecture notes and participant exercises are included. \$750.00

For more information, contact:

John Q. Marshall, Jr., Seminar Coordinator

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### Printed Resources Available from IABA

#### **Alternatives to Punishment: Solving Behavior Problems with Nonaversive Strategies**

G.W. LaVigna and A.M. Donnellan

"(This book) provides a comprehensive treatment of alternatives to punishment in dealing with behavior problems evidenced by human beings at various levels of development and in various circumstances. Based upon their own extensive observations and a thorough-going analysis of relevant experimental studies, (the authors) have put together a document that is at once a teaching instrument, a summary of research, and an argument for the use of positive reinforcement in the treatment of inadequate or undesired behavior... a landmark volume which should forever lay the ghost that aversive methods (even the ubiquitous 'time out') need to be applied to the delinquent, the retarded, or the normal 'learner,' whether in the home, the school, the clinic, or other situations." — Fred S. Keller (From the Preface to *Alternatives to Punishment*) - paper, \$19.50/ISBN 0-8290-1245-1

#### **The Behavior Assessment Guide**

T.J. Willis, G.W. LaVigna and A.M. Donnellan

The Behavior Assessment Guide provides the user with a comprehensive set of data gathering and records abstraction forms to facilitate the assessment and functional analysis of a client's behavior problems and the generation of nonaversive behavioral intervention plans. Permission has been granted by the authors to reproduce the forms for professional use. -spiral, \$21.00

#### **Progress Without Punishment: Effective Approaches for Learners with Behavior Problems**

A.M. Donnellan, G.W. LaVigna, N. Negri-Schultz, L. Fassbender

As individuals with special educational and developmental needs are increasingly being integrated into the community, responding to their problem

behaviors in a dignified and appropriate manner becomes essential. In this volume, the authors argue against the use of punishment, and instead advocate the use of alternative intervention procedures. The positive programming model described in this volume is a gradual educational process for behavior change, based on a functional analysis of problems, that involves systematic instruction in more effective ways of behaving. The work provides an overview of nonaversive behavioral technology and demonstrates how specific techniques change behavior through positive means. The extensive examples and illustrative material make the book a particularly useful resource for the field. - paper, \$17.95/ISBN 8077-2911-6.

#### **Social Skills Training for Psychiatric Patients**

R.P. Liberman, W.J. DeRisi, K.T. Mueser

This guide to the application of social skills training with psychiatric patients systematically provides clinicians with the ingredients necessary to start and run their own social skills groups. Case examples, transcripts of social skills training sessions and exercises aid the reader in applying the training methods. -paper, \$25.95/ISBN 0-08-034694-4

#### **The Role of Positive Programming in Behavioral Treatment**

G.W. LaVigna, T.J. Willis, A.M. Donnellan

This chapter describes the role of positive programming in the treatment of the severe behavior. After discussing the need for positive programming within a framework for research and treatment based on outcome needs, variations of this strategy are delineated. Then, assessment and analysis are described as critical for comprehensive, positive, and effective support. A case study of severe aggression is presented to illustrate the process of assessment and analysis, the supports that follow from this process, and the long term results of this approach. - spiral, \$5.00

#### **The Periodic Service Review: A Total Quality Assurance System for Human Services & Education**

G.W. LaVigna, T.J. Willis, J.F. Shaul, M. Abedi, M. Sweitzer

Evolving from more than a decade of work at IABA, this book provides the tools needed to enhance and maintain high quality service delivery. Translating the principles of effective management into concrete policies and procedures, the *Periodic Service Review (PSR)* acts as both an instrument and a system. As an instrument, the PSR provides easy to follow score sheets to assess staff performance and the quality of services provided. As a system, it guides managers step-by-step through 4 interrelated elements — performance standards, performance monitoring, performance feedback, and systematic training — to offer an ongoing process for ensuring staff consistency and a high level of quality for services and programs. Practical examples show how the PSR is applied to group home, supported living, classroom, and supported employment settings, and the helpful appendices provide numerous tables and charts that can easily be tailored to a variety of programs. - \$36.00/ISBN 1-55766-142-1

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