

Positive Behavior Supports

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The field of positive behavior supports has grown rapidly in the last decade as a practice to address the very real and difficult challenges posed by problem behaviors. The present article defines the current status of positive behavior support and provides a vision for where this technology will lead. The article identifies four central messages that will shape the vision for the future and discusses where we are now in relation to those central themes and where we need to go as we head into the 21st century.

Positive behavior support involves the assessment and reengineering of environments so that people with problem behaviors experience reductions in problem behaviors and an increase in the social, personal, and professional quality of their lives. Positive behavior support is not a new approach; it builds directly from a long experimental history (Bijou & Baer, 1961; Bijou, Peterson, & Ault, 1968) and rich conceptual analyses of the variables influencing human behavior (Catania, 1992; Koegel, Koegel, & Dunlap, 1996; Neef, 1994). Positive behavior support is the application of behavior analysis to the social problems created by such behaviors as self-injury, aggression, property destruction, pica, defiance, and disruption. It is an approach that blends values about the rights of people with disabilities with a practical science about how learning and behavior change occur. The excitement about positive behavior support lies in the promise it holds for addressing the real and difficult challenges posed by problem behaviors.

Problem behaviors continue to be a major cause of isolation and exclusion for people with disabilities (Koegel et al.,

1996; Lehr & Brown, 1996; Reichle, 1990). Without effective support, children and adults with disabilities who exhibit problem behaviors can expect exclusion from general educational settings, community environments, and employment opportunities; increased medical risks; isolation from social relationships; and exposure to highly intrusive forms of treatment (Horner, Diemer, & Brazeau, 1992; Knitzer, 1993; Sailor & Skrtic, 1995). Families are challenged by young children who display intense self-injurious and aggressive behavior (Koegel & Koegel, 1995; Turnbull & Ruef, 1997). Schools facing fiscal and professional pressure question whether they have the ability to educate children with problem behaviors. It is in this context of intense need that the technology of positive behavior support has emerged.

The purposes of this article are to define the status of positive behavior support and provide a vision for where this technology will lead. As we look forward, excitement about recent advances is tempered by serious concern over the extent to which these advances will be allowed to touch the lives of children and adults across the country. At this point we have

better science than practice, better understanding than policy, better vision than reality.

The signature feature of positive behavior support has been a committed focus on fixing environments, not people. Building behavioral competence in children and adults with disabilities is essential, but not enough (Biglan, 1995). We must design schools, homes, and communities that effectively prevent problem behaviors. Effective environments make problem behaviors *irrelevant, inefficient, and ineffective*. The technology of positive behavior support emphasizes the fact that a child with disabilities is part of his or her environment. Effective support involves modifying environments, as well as teaching new skills and controlling consequences.

Take the example of Leslie, a 10-year-old with moderate intellectual disabilities, limited verbal communication, and a history of intense self-biting. Self-biting is a dangerous, disruptive behavior that holds the potential for serious harm to Leslie, frustration for her teacher, and reduced educational options for her classmates. One approach to this challenge is to separate Leslie from her social peers and isolate her in a special location where she must learn appropriate behaviors to earn her way back to her class. An alternative is available through positive behavior support. The alternative begins not with technology but with a social commitment to the importance of Leslie's inclusion with her peers; that is, a

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recognition of the contributions she brings to her class. The alternative further accepts that, with extra supports, Leslie's classroom probably can be transformed into an environment where self-biting is irrelevant, inefficient, and ineffective. If done well, this transformation benefits Leslie's peers and her teacher, as well as resulting in reduced self-biting. The science of behavior analysis tells us that this process begins by better understanding Leslie's behavior and how she uses that behavior to interact with the people around her. By learning where, when, and why Leslie engages in self-biting—and where, when, and why she does *not* engage in self-biting—her teachers and family move from worrying about how to change Leslie, to thinking about how to change the classroom.

In Leslie's case, the effort to understand her self-biting resulted in identification of three situations that reliably produced self-biting: (a) asking Leslie to do a task she had failed at previously, (b) asking her to speak in front of the whole class, and (c) asking her to do long (15-minute) periods of work without recognition. This information was used to redesign her day to make self-biting irrelevant, inefficient, and ineffective. It became irrelevant when her curriculum was redesigned so that she worked on exactly the same instructional goals she had before, but did so with materials that better fit her abilities. The aversive curricular features were minimized, and the need for self-biting (at least some of it) became irrelevant. She also was not asked to speak in front of the whole class but instead worked (and spoke) more within small groups of peers. Self-biting was made inefficient by teaching Leslie signals for "help" (to make a task easier) and "break" (to get away from frustrating situations), which became efficient strategies for avoiding aversive and frustrating situations. It was far easier to signal the teacher for escape than to engage in intense bouts of self-biting. These signals were taught as a regular part of her curriculum and became central to later curricular additions. Leslie also was taught how to recruit teacher attention for the

work she had done. It would be unacceptably demanding to expect the teacher to remember to pay extra attention to Leslie, and, in truth, Leslie was not interested in teacher attention all the time, only when she wanted it. A far more effective system was to teach Leslie how to monitor her own progress as well as a signal that she could use to let the teacher (or teaching assistant) know that she had done well and was interested in some recognition for her efforts. These new signals proved to be far more efficient ways of avoiding aversive tasks and gaining attention than self-biting.

Leslie's self-biting was made ineffective by not allowing it to result in escape from tasks or access to teacher attention. Because self-biting could not be ignored completely, the process was to physically block self-biting and redirect Leslie to the appropriate signal for (a) getting help, (b) asking for a break, or (c) getting extended attention. This was done by a teaching assistant. Leslie was not allowed to move away from tasks or receive teacher attention without using the appropriate signals.

Together, these procedures resulted in change from a situation where self-biting occurred 5 to 15 times per day with high levels of disruption (and increasing tissue damage to Leslie's hand) to a situation where mild self-biting occurred less than once per week. Of equal importance, the reduction in self-biting was associated with increased positive contact with peers, increased academic performance, and a girl who no longer appeared tense and distressed. The changes required extra teacher assistant time but minimal changes by the classroom teacher and no reduction in the quality of education experienced by Leslie's fellow students.

This is an example about more than behavior change. It is about a system of support that applies basic laws of behavior analysis to produce broad change in the living, learning, work, and leisure options available to people who exhibit problem behaviors. It is an approach that demands functional change in problem behaviors, but holds that behavior change in the context of a barren life is

an unacceptable goal. Positive behavior support emphasizes four central messages that shape a vision for the future:

1. Behavior support should reduce problem behaviors and affect how a person lives.
2. Functional assessment is the foundation for understanding patterns of problem behavior.
3. Behavior support should be comprehensive in structure and scope.
4. The unit of behavioral intervention must be expanded if we are to build our schools' and communities' capacity to deliver behavior support efficiently.

These messages guide the remaining structure of this article.

Behavior Support Should Reduce Problem Behavior and Affect How a Person Lives

Among the most important changes in education over the past 15 years has been an expansion in the outcomes expected from behavior support (Durand, 1990; Evans & Meyer, 1985; Horner et al., 1990). Behavior change is a necessary outcome of any behavior support effort. Since the mid-1980s, however, there has been the expectation that if problem behaviors are reduced, there will be a broad impact on the child's life. Behavior change that leaves a child in an isolated, restricted life is a hollow accomplishment (Risley, 1996). The expectation now is that behavior support affects the activities a child performs (e.g., the family can go out to eat), the people with whom the child spends time (e.g., a range of relationships that shape his or her social development), the extent to which personal choice is available, and the extent to which the child learns skills that will make him or her less dependent on paid supporters (Lehr & Brown, 1996).

This change is important because the outcomes used to define "success" shape the content of a technology. There often is a temptation to contrast positive behavior support with conventional behav-

ior management. I find this effort of minimal value. There is no difference in the theory or science between positive behavior support and behavior modification. These are the same approach with different names. If any difference exists, it is in the acceptance of much larger outcomes and the need to deliver the global technology that will deliver these outcomes. Exciting demonstrations have been reported in which the lives of people with extreme histories of problem behavior changed as their problem behaviors were reduced (Berkman & Meyer, 1988; Carr et al., 1994; Durand, 1997; Horner et al., 1996; Lucyshyn, Olson, & Horner, 1995). These examples, however, are too few. They suggest that the expectations are doable, but they stand in contrast to the day-to-day experience of teachers, families, and support personnel (Ruef, 1997). The future of positive behavior support rests directly on whether the approach can be demonstrated to produce practical change in severe problem behaviors and transform that change into constructive effects on what people do, where they go, with whom they spend time, what choices they make, and what level of personal independence they achieve. This standard should shape both the research being done and the outcomes used to assess all behavioral support. A science often is shaped by the outcomes used to measure success. In the area of behavior support, the outcomes have expanded, and the resulting science is beginning to adapt.

Functional Assessment Is the Foundation for Understanding Patterns of Problem Behavior

Functional assessment is the process of identifying events that reliably predict and maintain problem behaviors. The purpose of functional assessment information is to improve the effectiveness and efficiency of behavior support. At one level, functional assessment is a respectful process of trying to understand when, where, and why a child engages in problem behaviors. It is respectful in that the process adopts the perspective of the

person with problem behaviors. The assumption is not that individuals are defective or broken, but that they experience the world around them in a way that is different from their peers'. Events that others see as neutral or rewarding may seem aversive; events that others find commonplace may be intensely positive. Assuming that problem behavior "makes sense" from the perspective of the child with disabilities frames the challenge of assessment as one of first understanding that perspective. This approach is very different from the traditional model of diagnosis and placement.

The importance of functional assessment for behavior support is hard to overstate. The past 30 years of applied behavior analysis document that antecedent and contingent events associated with specific behaviors affect the likelihood that those behaviors will occur. If the goal is to identify the features of a classroom, home, or workplace that will reduce problem behaviors, critical information is needed about the events that reliably predict (set the occasion for) and follow (maintain) problem behaviors. Consider what information might be important to you if you were trying to respond to your 9-year-old son's pattern of pulling other people's hair. It might help you to know what it was about some people that increased the likelihood they would get their hair pulled, and to know if hair pulling were more likely if it resulted in your son's getting attention, versus the termination of an activity, versus the increased speed with which a meal is delivered. This knowledge would affect your decision to avoid some dangerous situations and your ability to predict and adapt to others, to identify new communication skills that might replace hair pulling, and to identify ways to reduce the reinforcement currently available for hair pulling. Not only is it clear that the information from a functional assessment would be of value in designing effective support, but it is scary to think about the support that might be developed without this information. If consideration were not given to the consequences maintaining problem behavior, a strategy could be

implemented that had been effective in reducing the hair pulling of some other person but would actually increase hair pulling when applied to your son.

Functional assessment is important. The products of a functional assessment are (a) operational definitions of the problem behavior(s), (b) identification of the events that reliably predict when the problem behaviors will and will not occur, (c) identification of the events that maintain the problem behavior (the function or reinforcer), and (d) direct observation data supporting these hypotheses. When we begin a functional assessment, we typically make a daily schedule for the person (this often requires different schedules for weekends, or different schedules for different school agendas) and identify both what daily routines are most common and which of those routines are most likely to be associated with problem behaviors. This overall assessment of the routines that "work" and those that "do not work" is then used in structured interviews to gather more detailed information. There are many fine descriptions of the procedures for conducting functional assessment (Axelrod, 1987; Carr, 1977; Carr et al., 1994; Durand, 1990; Iwata, Dorsey, Slifer, Bauman, & Richman 1982, 1994; Mace & Roberts, 1993; O'Neill et al., 1997; Repp, Felce, & Barton, 1988; Repp & Horner, 1999; Touchette, MacDonald, & Langer, 1985; Wacker, Steege, Northup, Reimers, et al., 1990; Wacker, Steege, Northup, Sasso, et al., 1990). They differ in the forms and steps employed, but the key outcomes remain consistent. In each case information was gathered to build a hypothesis about when, where, and why problem behaviors kept happening, and this hypothesis was tested (or verified) through direct observation. The different tools for conducting a functional assessment can be divided into three main classes: interviews, descriptive observations, and functional analyses.

Functional assessment interviews now exist in a range of forms, levels of detail, and structure (Horner & Carr, 1997; Kern, Dunlap, Clarke, & Childs, 1994; Repp & Horner, 1999). Initially, inter-

views were conducted with the family member, teacher, or support person who knew the individual best. Recently, functional assessment interviews have been developed for use with the person with disabilities (Reed, Thomas, Sprague, & Horner, 1997). Functional assessment interviews often focus on the history of the problem behavior, as well as the current events that seem to predict and maintain the problem behavior. The tremendous advantage of the interview approach is that it allows an efficient strategy for assessing the potential impact of a very large number of antecedents and consequences across a huge number of situations. Keep in mind that it is as important to know where and when problem behaviors do not occur as it is to know when they do occur. Thus, the interviews can guide us quickly to those conditions most likely to be controlling problem behavior, and to produce a hypothesis about the context, behaviors, and consequences associated with the behaviors of concern.

The major disadvantage of interviews is that they reflect the subjective perceptions of the persons interviewed, which may or may not be accurate. Time saved conducting interviews may be time wasted if the information is inaccurate. There is sufficient evidence of inaccurate interview information to require that the hypothesis developed from interviews be validated through some form of direct observation or systematic analysis (Iwata & Fisher, 1997).

Descriptive observations involve direct data collection about the occurrence of problem behaviors and their antecedents and consequences (Bijou et al., 1968; Doss & Reichle, 1989; O'Neill et al., 1997; Touchette et al., 1985). An observer uses a data sheet and watches what the child does and the events preceding and following the child's behavior as it naturally occurs. This information is examined to identify patterns. If interviews have been conducted earlier, the observed pattern is compared with the interview hypothesis. The interviews may also have guided the selection of where and when observations would occur. The result of direct observations is a hypoth-

esis about the problem behavior, to be used in the design of behavioral support. Direct observations often are used to verify hypotheses developed through interviews.

The most rigorous approach to functional assessment is a functional analysis. In a functional analysis, direct observation is combined with systematic manipulations of events in an experimental format to define exactly what controls problem behavior. Information is provided about conditions where the problem behaviors occur and do not occur, and the specific consequences that are functionally related to continued occurrence of the behaviors. As an example, consider Danny, a second-grade student with disabilities who had developed a pattern of whining and complaining about headaches and pains. His teacher was initially concerned and then increasingly frustrated by his lack of participation in class and the high level of his complaining. His complaining had further escalated into a pattern of food refusal, and he had lost a medically dangerous amount of weight. Interview information indicated that whining occurred across a wide range of conditions. Direct observation also indicated that a lot of whining was occurring, but it was unclear why. A functional analysis was conducted to compare and contrast several possible functions of whining. In one condition, Danny worked one-on-one with a teacher doing his work. If he whined, the teacher took the materials away for 30 seconds. If whining was maintained by escape from work, we would have expected to see an increase in whining under this condition. In another condition, Danny was allowed to play, but many of his favorite toys were up out of reach. If he whined he would receive his toy. This would test if whining was maintained by access to toys. In yet another condition, Danny was given simple work to do, and the teacher was present but did not attend to Danny unless he whined. This would test to see if teacher attention maintained whining.

When the behavior specialist for the school placed Danny in these conditions, it became clear that only when whining

produced attention did it become high frequency. Danny's whining was not maintained by avoiding work or getting objects. His whining was maintained by the sincere attention (or frustrated attention) of his teacher (and other important adults). This information was exceptionally helpful in designing a program of support in which Danny learned more appropriate ways of recruiting teacher attention, and whining was placed on extinction. Not only did Danny's whining decrease, but the teacher's perception of his contribution to the class and his academic gains improved. He began eating again, and his weight reached medical norms within 2 months. Whining continued to occur from time to time, especially when he really was sick, but not at a level that jeopardized his placement in the class (Gorham & Todd, 1998).

Functional assessment can be done any number of ways. The goal is always to identify the antecedents and consequences that control problem behaviors, and use that information to improve the quality of the behavior support plan. Interviews have proved to be useful and efficient but need to be used in conjunction with either direct observation or functional analysis. Direct observation procedures have the advantage of being simple and accurate but may not sample the full range of conditions in which problem behaviors occur. Functional analysis is the most rigorous approach to gathering information, but it requires substantial skill to design the manipulations and requires the setup of situations that produce problem behaviors. This can be a major concern if intense problem behaviors (i.e., aggression) are being considered. Together, however, the three approaches to gathering assessment information provide a powerful array of options from which to select (Repp & Horner, 1999).

The future of behavior support will include functional assessment. The challenges for the future lie in how to make the process efficient, accurate, and usable. I see the largest challenge in the area of usability. Moving from functional assessment information to functional plans of support remains poorly defined.

A major danger exists that assessments will be undertaken but will not influence the plan of support. As psychologists, teachers, families, and specialists struggle with how to gather functional assessment information, care must be taken to include training and systems that define how to use the assessment information to design effective environments.

Another major concern lies in the design of assessment tools that address more complex patterns of problem behavior. Behaviors maintained by multiple functions (e.g., attention and escape) or behaviors maintained by physiological consequences (automatic reinforcement) are far more complex to assess and change. There remain too many situations where children with intense, and complex, problem behaviors present challenges that outstrip assessment techniques. Rigorous research into the basic mechanisms responsible for these behaviors will be needed, in addition to adaptations of current functional assessment tools, before the technology is able to respond across the range of behavioral challenges faced by families and teachers.

Behavior Support Should Be Comprehensive in Structure and Scope

Because behavior support is about lifestyle change as well as behavior change, there must be an expansion in the structure and scope of interventions. This will involve the simultaneous application of multiple procedures across the full range of times, behaviors, and contexts needed to generate real change in a child's life. Interventions conducted in the context of careful research studies often must emphasize a narrow analysis of behavior in highly controlled contexts. Only with this level of intense analysis can we tease out the basic mechanisms responsible for patterns of behavior. In the classroom, home, or community, however, the question is less one of basic mechanisms and more one of getting important changes to occur. The technology of positive behavior support is an applied technology. It exists only because of the detailed re-

search that produced key procedures, but the day-to-day application of positive behavior support requires the application of multiple procedures. This more "comprehensive" approach is guided by five central features:

1. *Comprehensive interventions address all problem behaviors displayed by the focus individual.* Problem behaviors create physical risks, social barriers, and educational obstacles. An effective plan of behavior support has limited impact if it addresses some problem behaviors and leaves others unaltered. A comprehensive plan of behavior support addresses all the behaviors that form serious barriers for the child.

2. *Comprehensive interventions are applied across all appropriate times of the day.* Positive behavior support must do more than demonstrate change in the behavior of a child in a short, narrow context. If behavior support is to have a broad impact, it must be relevant across the full range of routines, times of day, and conditions that the child (and her family and teacher) encounters. This is an extremely important criterion. Many procedures can have dramatic effects, but only with intense effort that cannot be sustained throughout the day. Behavior support that is designed to change the living options of a child will focus both assessment and support across the full range of conditions where problem behaviors are functional barriers.

3. *Comprehensive interventions are driven by a functional assessment.* Comprehensive behavior support will be guided by the functional assessment results. The fundamental purpose of doing a functional assessment in clinical contexts is to improve the effectiveness and efficiency of behavior support. There is now a wide and compelling literature documenting that if behavior support is consistent with functional assessment, the effectiveness of the intervention increases (Carr et al., 1999; Carr et al., 1994; Didden, Duker, & Korzilius, 1997). Comprehensive positive behavior support involves taking the time to assess the broad plan for a person's future and the specific environmental events that control his or her problem behavior. The

hypotheses that arise from this process should define the central features of any plan of support.

4. *Comprehensive interventions blend multiple procedures.* Comprehensive positive behavior support often includes the simultaneous application of many different intervention strategies. A classroom might be changed in terms of the physical layout, daily schedule, curriculum focus, curriculum materials, and so forth, to prevent problem behaviors. A child might receive direct instruction on the communication and academic skills that make problem behaviors irrelevant or inefficient (Lee, Sugai, & Horner, in press). In addition, specific procedures can be applied to increase the reinforcers available for appropriate behaviors, eliminate (or minimize) the reinforcers available for problem behaviors, and in some instances apply punishers contingent upon problem behaviors. The picture is even more complex given that all these procedures might be implemented to address attention-maintained problem behaviors and a companion set of procedures implemented to address escape-maintained problem behaviors. The point is not that all behavior support must now become incomprehensibly complex but, rather, that our traditional focus on finding one strategy to eliminate problem behaviors now seems inadequate. Comprehensive support will involve the simultaneous use of multiple procedures. One reason this is both possible and desirable is that all implemented procedures must be guided by the common messages from the functional assessment. Whereas in the past there was valid concern that multiple procedures had the potential of conflicting with each other, the current model requires that all procedures be consistent with the functional assessment hypothesis. The functional assessment serves to ensure that multiple procedures will be more likely to enhance, rather than negate, each other.

The application of multiple procedures also provides the opportunity for the cumulative introduction of support procedures across time. A common assumption is that behavior support is a linear process: A plan of support will be de-

veloped, support will be designed and implemented, and behavior will change. In most cases of serious behavior support, however, the process of support is dynamic and can occur across an extended time period. The importance of the initial assessment and support plan cannot be overvalued, but initial gains often create new support needs. For example, a child who experiences behavior change and can now go into the community, is faced with new challenges in the community that were previously unidentified. These new challenges set the stage for ongoing assessment and ongoing evolution of behavior support. The process of multi-element interventions includes recognition that all elements are not implemented at one point in time but can be added in response to behavior change, context change, and new assessment information.

5. Comprehensive interventions “fit” the context. Comprehensive positive behavior support must work for all people in the context where support occurs. If support in a classroom is of benefit to the child with disabilities but hinders effective education for other children, or transforms the staff’s jobs into a set of intolerable demands, then the support either will not be implemented at all or will be abandoned as soon as the basic behavioral crisis is past. The new challenge is that behavior support must result in broad, durable impact. This challenge has changed the perception of what support procedures must look like. Behavior support must be doable: It must be (a) consistent with values of those who will implement the procedures, (b) consistent with the skills of the people who will implement the procedures, (c) consistent with the resources available to the people who will implement the procedures, and (d) matched by administrative support. To date, we have focused on identifying procedures that produce real change in behavior. There remains much to learn about how to change behavior, but the wonderful advances of the past 50 years will be of little value if we do not attend to the key variables that affect implementation. Behavior support is less

likely to be implemented if family or staff consider the intervention to (a) be too cruel or dehumanizing, (b) be unlikely to be effective, (c) include procedures they do not know how to perform (e.g., direct instruction), (d) require time and equipment they do not have, or (e) place them at risk of reprimand or abandonment by their supervisors.

Comprehensive positive behavior support builds from a functional assessment and incorporates the most advanced procedures available, but also recognizes that support must “work” for everyone in the setting. The goal in support planning is to identify a plan that is both technically sound and a good “fit” with the values, skills, and resources of people within the particular setting. This typically requires thoughtful involvement of the teachers, family, and staff in the functional assessment and design of the support (Albin, Lucyshyn, Horner, & Flannery, 1996).

The Unit of Behavioral Intervention Must Be Expanded

The fourth message for the future of positive behavior support is that we must expand the unit of analysis to include social systems. This does not mean abandoning the important attention given to understanding the behaviors of individuals, but, rather, requires adding an emphasis on the application of the technology within larger systems.

As a general approach, positive behavior support emerged from the early framework of applied behavior analysis (Bandura, 1969; Bijou et al., 1968; Blackham & Siberman, 1971; Catania, 1992; Milenson & Leslie, 1979; Rachlin, 1976) and incorporates more recent conceptual and methodological advances (Carr, 1988, 1994; Dunlap & Fox, 1996; Durand, 1990; Iwata et al., 1982, 1994; Koegel et al., 1996; Lalli, Mace, Wohn, & Livezey, 1995; Mace, 1994; Michael, 1988, 1993; O’Neill et al., 1997). Too often, however, the impact of these gains has had a limited effect on the procedures applied throughout our schools,

homes, and communities. One reason for the limited impact is that the detailed attention to individuals has not been combined with attention to the organizational systems needed to implement the technology on a broad scale.

Figure 1 provides one vision for increasing the impact of positive behavior support. The level of impact defined on the vertical axis refers to the number and range of people who use and benefit from the technology. The level of analysis depicted on the horizontal axis traces areas of current and future focus for positive behavior support. An early emphasis on understanding individual problem behaviors led to important understanding about basic behavioral mechanisms (reinforcement, extinction, punishment, generalization) but had limited clinical impact. These basic mechanisms were used to define specific intervention strategies (e.g., response cost, time-out) that proved of tremendous value in some conditions but of limited value in others. The more recent attention on functional assessment procedures has helped to identify where and when specific behavioral strategies will be effective, and the emerging emphasis on comprehensive interventions will further expand the array of conditions and settings where positive behavior support is used. Each of these developments has expanded the level of impact of positive behavior support technology.

For the next level of impact to occur, however, we must include application of positive behavior support across larger groups. Biglan (1995) argued persuasively that behavior analysis can be applied across “communities” as the unit of analysis to address social problems such as teen pregnancy and underage smoking. Sugai and Horner (1999) provide a model that applies positive behavior support with the entire school serving as the unit of intervention. They suggest that when principles of behavior analysis are applied across the entire student body, effects can be achieved that not only benefit all students in the school but also improve a school’s capacity to work with the small number of children who need

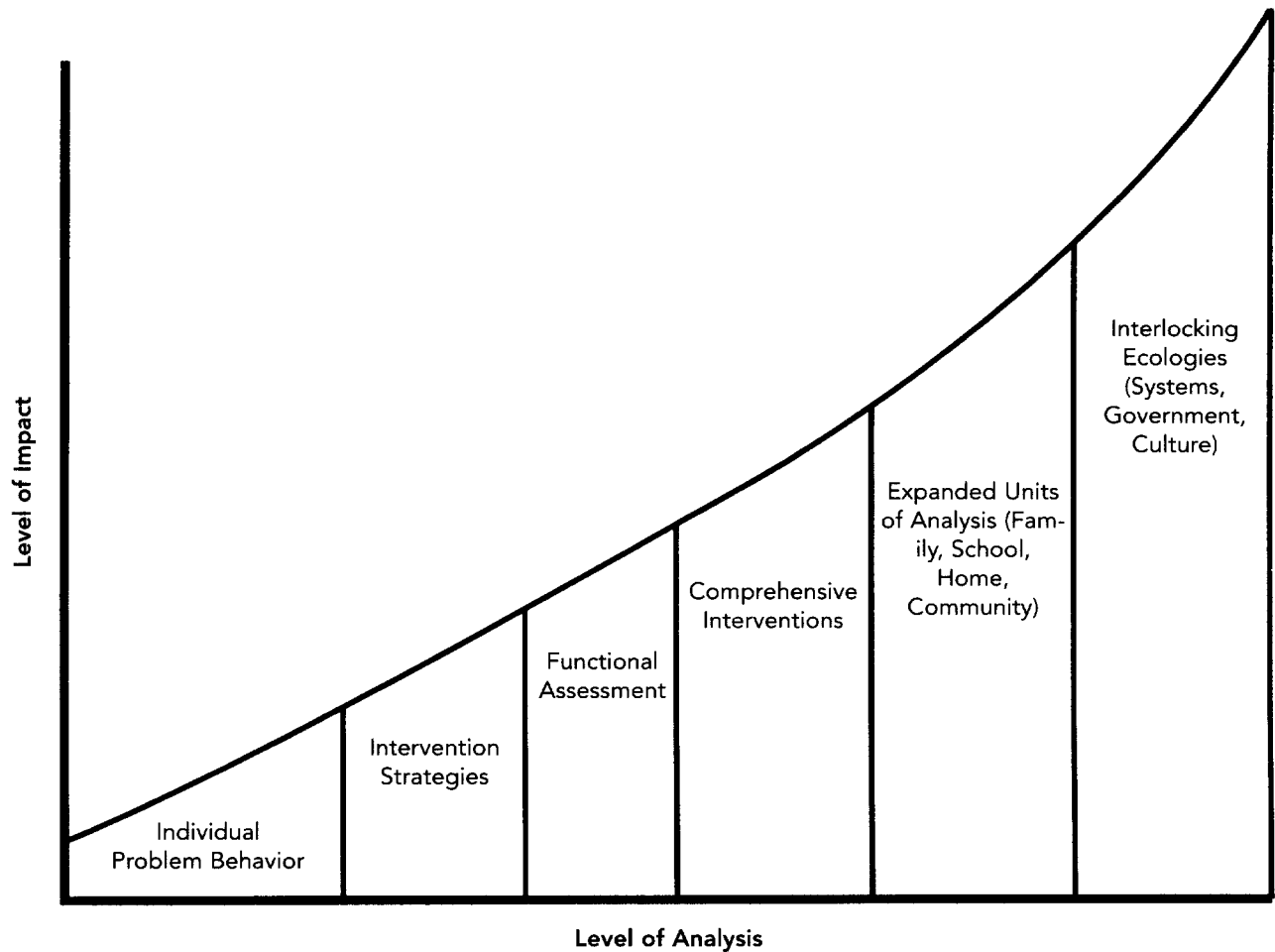


FIGURE 1. Expanding positive behavior support for maximum impact.

intense, individualized support. A recent descriptive analysis in which positive behavior support was implemented school-wide documented a 47% annual reduction in the number of office discipline referrals in one 530-student middle school (Grades 6, 7, and 8; Taylor-Greene et al., 1997). These efforts are consistent with recommendations that positive behavior support procedures be applied for preventive effects as well as a remedy for severe problem behaviors (Walker, Colvin, & Ramsey, 1995; Walker et al., 1996). The basic message for the future is that positive behavior support is more than a means of reducing disruptive behavior. It is a technology for engineering environments where people are productive and safe.

Summary

Problem behavior is an issue of intense concern for anyone interested in the future of people with mental retardation in the 21st century. The impact of problem behaviors on the lives of children and adults with mental retardation has been intense and debilitating. Positive behavior support is a technology that has emerged from a long history of research and practice. Recent developments in positive behavior support are encouraging. We are better prepared to respond to problem behaviors than we have ever been before. The challenges we face in the near future are to deliver current technical developments to schools and communities, make the existing technol-

ogy more accessible and usable by families and teachers, extend the technology so it addresses more intense and complex problem behaviors, and expand the unit of intervention to include broader support systems, such as schools, families, and workplaces. These challenges frame a constructive, if humbling, scope of work for the next several decades. The success with which these challenges are met will be reflected in the lives of people with mental retardation throughout the 21st century.

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