TOPIC. Structuring of inpatient behavioral programming in child-adolescent psychiatric, residential treatment, and juvenile justice settings.

PURPOSE. To review the underlying theory underpinning current practices and recommend remedies to the uncovered problems.

SOURCES. A review of the literature from 1965 to 2001 from selected nursing and medical psychiatric and mental health publications.

CONCLUSIONS. Intensive professional and staff education and greater precision in communication about patients’ behaviors are needed in many settings. There is also a need to move away from generic treatment approaches and return to individual treatment planning based on individual assessments and the unique needs of an increasingly volatile and complex in-patient population.

Search terms: Child and adolescent psychiatric inpatient care, behavioral intervention programs, juvenile justice interventions, residential care, psychiatric staff education

Behavioral intervention programs are designed to produce changes in a person’s behavior in the context of daily life. With advances in behavioral technology, this treatment approach, and its close relative cognitive behavior therapy, have much to offer the field of psychiatric nursing. Moreover, both forms of treatment, which have their foundation in learning theories, are well established and have been demonstrated to be empirically efficacious in the treatment of a wide variety of psychiatric conditions (Crits-Christoph, 1998; DeRubeis & Crits-Christoph, 1998).

Behavioral intervention programs emerged in psychiatric settings as a result of discontentment with milieu therapy approaches (Hersen, 1985). Therapeutic approaches that are behaviorally oriented were shown to be both cost-effective and effective in residential and outpatient psychiatric settings (Donat & McKeegan, 1990; Liberman, Cardin, McGill, Falloon, & Evans, 1987; Paul & Lentz, 1977). Applied behavior analysis became the sine qua non of these programs, which emphasized structural and functional analyses of behaviors.

Despite repeated demonstrations of the utility of behavioral interventions, research has demonstrated that behavioral interventions are seldom employed effectively, and that direct care staff often have low levels of competence in behavioral programming and indeed may inadvertently reinforce unwanted behaviors (Donat, 1998; Donat & McKeegan, 1990; Gelfand, Gelfand, & Dobson, 1967). Such a lack of competence may undermine any therapeutic benefit of a hospitalization or stay in a residential treatment facility. It also may result in the increased use of physical and chemical restraints (psychoactive medications) and the seclusion of patients with both little therapeutic benefit and much risk to the safety of the patient.
As a discipline with scientific underpinnings, nursing practice ideally should be influenced by sound theory and research. Practitioners have an ethical obligation to use, where possible, treatments that are research-based, and interventions with demonstrated efficacy, safety, and efficiency should be supported programmatically and educationally within the discipline.

In this article we review the theory underpinning a common way of structuring inpatient behavioral programming in child-adolescent treatment settings. We also discuss and challenge the utility of that structure in practice. We make a number of recommendations for staff education and training and call for a return of individual treatment planning based on individual assessments and unique needs of an increasingly volatile and complex inpatient population.

Background

Behavior therapy, behavior management, behavior modification, or any number of similar approaches to behavior are based on the same foundation. They are founded on the premise that environmental consequences, when linked to particular behaviors, either increase (reinforce) or decrease (extinguish) the likelihood of a person responding in the same manner when confronted with similar consequences in the future. The idea behind these approaches is that behavior is developed through associative learning. The notion of emphasizing conditioning was pioneered in the 1910s by the Russian physiologist Pavlov and is referred to as classical conditioning or stimulus-response (S-R) theory (Shorter, 1997). Pavlov’s work was further elaborated and refined by several psychologists, such as John B. Watson, Edward L. Thorndike, John Dollard, Neal E. Miller, Joseph Wolpe, and B.F. Skinner (Hall, Campbell, & Lindzey, 1997).

All behavior theories posit that two basic learning processes underpin two kinds of behavior: classical conditioning and operant conditioning.

Key concepts within Skinner’s system are the principles of reinforcement and punishment. Reinforcing a particular behavior involves carrying out an operation that changes the probability of occurrence of that behavior in the future. A positive reinforcer is one that is introduced and strengthens the likelihood of a particular behavior. It is usually, but not always, a pleasant event. A negative reinforcer is a stimulus whose withdrawal in-
creases the strength of the behavior that follows it. It is usually, but not always, a negative event. The descriptors "positive" and "negative" in this theory have nothing to do with the value of the reinforcer. Positive reinforcement (being rewarded) and negative reinforcement (getting rid of something unpleasant) influence the immediately preceding behavior in the same way; they both strengthen it. Another concept in operant conditioning theory—punishment—is also frequently confused with negative reinforcement, partly because of the negative label but primarily because the threat of some punishment is often the cause of the stress that is avoided or escaped (producing the relief). An easy way of telling the difference between punishment and negative reinforcement is to consider the effects. If the target behavior declines rapidly, it was probably punished; if the target behavior increases, it was surely reinforced.

Clinicians sometimes have difficulty grasping these ideas, thus a clinically meaningful example might be relevant. Suppose you try to quiet a child who is acting out by offering a cookie, and the child responds by smiling and reaching out to hug you. The smile and hug are positive reinforcers, and the chances are that you will respond with a cookie the next time the child acts out. Suppose that the child responds in a screeching rage and knocks the cookie out of your hand. Your approach to the problem has been punished by the duld; you won’t try that again. Then, suppose you become angry and lash out at the child in anger, and the child immediately becomes quiet and compliant. Your angry outburst has just been negatively reinforced (you would say "rewarded": i.e., the unpleasant crying stopped) and you have become a little more likely to become angry and yell when faced with a screeching child in the future. This child becoming quiet has had the same effect on your behavior as if the child had given you a cookie for getting angry and yelling.

Operant behavior involves individuals operating on their world directly or indirectly and emphasizes the role of consequences on behavior. One major difference from the classical paradigm is that in the classical S-R model, behavior is elicited (by a certain stimulus), whereas in operant conditioning, behavior is emitted. Although Skinner recognized the importance of stimuli (antecedent events), he said that some responses do not appear to be tied to a readily identifiable eliciting stimulus. He observed that these responses appeared to be spontaneous and voluntary. Moreover the frequency of the response seemed to change according to the event that followed it—the event being either a reinforcer or punishment (Skinner, 1953).

Research on these two basic and distinct learning processes (operant and respondent) have resulted in much of our knowledge of learning and human behavior. They also underpin our behavioral interventions in psychotherapy and in many organizational settings. Most behavioral programming is based on operant principles.

A critical aspect to both these processes, however, is their requirement for specificity of the behavior being modified and the associated consequential stimuli (Carson & Mineka, 1999). Although behavior researchers have demonstrated the capacity for humans to generalize behavior and learning to a broader repertoire of behaviors and environmental settings, the power of these learning processes is directly correlated to how individualized and focused the learning process is designed to be (Singh, 1997).

Level Systems: One Size Does Not Fit All

Therapeutic programming in residential treatment facilities and inpatient child-adolescent psychiatric hospitals is based on principles of behavior theory, stressing positive reinforcement for appropriate behavior (Johnson, 1995). Youngsters are rewarded for following rules and routines and attaining daily goals. In programs using a behavioral system, the number of points earned determines the children’s level and privileges for the next day or days. More points result in a higher level and more privileges. Higher levels presumably reflect the appropriateness of a child’s behavior, as well as his or her progress. Patients or residents are expected to participate in the daily activities with clear appropriate consequences if they choose not to participate. The level system method
of programming is considered to be a contingency approach. More privileges and a higher level are contingent on patients demonstrating certain desired behaviors and withheld for demonstrating undesired behaviors (Foxx, 1998; Johnson).

On the face of it, a level system appears to be a straightforward positive reinforcement arrangement, based on operant reinforcement principles. In our clinical experience with such programs, however, rather than withholding points, privileges are often removed and levels are often "dropped" in response to undesirable behavior. Research by scholars and study by other practitioners underscore our own findings (Braxton, 1995; Kazdin, 1981, 2001; Singh, 1997). While the word "consequence" is applied to what is meted out for undesirable behavior, the child is actually punished, punishment being defined in classical behavioral terms as a consequence introduced in order to lessen certain behaviors by aversive means (Mateson & DiLorenzo, 1984). While punishment sometimes reduces inappropriate behavior quickly, it also is known to reduce it only temporarily, usually only until such time as the aversive situation ceases for the youngster (Kazdin, 2001; Kumboltz & Krumboltz, 1972). After a time, inappropriate behavior gradually resumes.

Another difficulty with a level system as practiced in psychiatric and residential treatment settings is that behavior generalization is highly unlikely from inpatient to contexts from which patients come and to which they return (Kazdin, 1996a). Indeed, the Surgeon General's report (U.S. Department of Health and Human Services [USDHHS], 1999) on residential treatment programming for children is pessimistic about its outcomes, citing a lack of adequate research demonstrating its long-term efficacy.

In theory, when appropriate behaviors have been reinforced, as in the case of youngsters' responses to a level system of privileges in residential treatment programs, those behaviors are expected to be maintained according to the principle of generalization. In other words, the children should continue to exhibit the appropriate behavior at home and community when they are discharged from inpatient settings. However, behavior theory posits that generalization responses vary considerably in strength depending on the similarities of generalized stimuli to conditioned stimuli (Blackwood, 1971; Goldfried & Davison, 1994). As those stimuli become less similar, the strength of responses becomes weaker. Locked inpatient units and residential treatment facilities are relatively controlled, and as such they are very dissimilar to patients' homes and communities. The contingencies present in residential programs and hospitals represent significant departures from the contingencies present in everyday life for children. Kazdin (1996a, 2001) posits that although it is not inevitable that behaviors return to baseline levels when contingencies are withdrawn, they usually do. Understanding this, scholars suggest that such programs should not be expected to achieve long-term, real-world behavior change without a careful consideration of larger systems issues (Kazdin, 1996a, 2001; Leventhal, 1984; Singh, 1997).

Children's behavior, no matter how aberrant, is always meaningful.

In addition to the issue of generalization, there is the problem of staff members assuming that aberrant behavior that appears similar on its face is deviant (Fagan & Fantuzzo, 1999; Fantuzzo et al., 1995; Feldman & Griffiths, 1997). Those of us who have worked with children know that often their behaviors, while appearing similar across different populations, may have very different underlying motivations. Children's behavior, no matter how aberrant, is always meaningful. Meaningful in this sense refers to the fact that particular behaviors are dependent on many factors, which include a myriad of historical and contemporary variables (Cicchetti, 1984, 1993; Fagan & Fantuzzo; Fantuzzo et al.). Depending on this complex stew of variables, one child's aberrant behavior...
may have very different functions than another’s. Those functions may span a range from sensory stimulation, avoidance or escape from pain or frustration, attention from peers or staff, response to overstimulation, exhaustion, escape from boredom, and opposition or defiance (Coucouvanis, 1997; Singh, 1997).

The fallacy of the level system is that it fails to take into account that the same stimuli operate in different ways across highly diverse groups of children. These children differ in gender, race, socioeconomic status, culture, cognitive skills, family structure, family background, and so forth. All these differences lead to different sets of environmental contingencies operating on the child, with different factors reinforcing or extinguishing behaviors. These factors go beyond the diversity in individual psychopathology, but in tandem they determine the child’s previous cognitive and behavioral “programming” (Sroufe, 1997).

A fourth problem with the use of generic level systems for children in treatment settings is that they fail to take into consideration children who have developmental or constitutional inability to profit from consequences. Some scholars suggest there is a subset of children who are diagnosed with conditions who simply may not be amenable to contingency approaches, no matter how attractive the reward or how harsh the punishment. These explosive, impulse-driven, and inflexible children can have a number of diagnoses (e.g., BPD, OCD, ADHD, Tourette’s syndrome) and may be prone to intense and overwhelming seizure-like rages during which they cannot appreciate the meaning of what parents or caregivers are attempting to teach them (Greene, 1998; Papalos & Papalos, 1999). Moreover, during these rages they also may be incapable of drawing on prior information learned from previous experiences (Papalos & Papalos). Thus, in the case of these extremely volatile youngsters, the threat of an aversive consequence in the face of unwanted behaviors may actually provoke a violent reaction. The promised rewards of a potential rise in privilege level, coupled with warnings of aversive consequences, presents these children with a cruel give-and-take cycle in which they are unable to understand the rules of the game or to benefit by them.

Likewise, there is a subset of child patients who, because of their difficulties with receptive speech, may misinterpret a staff member’s directives. The neuropsychological deficits in children who exhibit disorders of conduct and behavior have been demonstrated to be in verbal and executive functions (Moffitt, 1993). Their low levels of encoding skills may limit both their understanding of what behavior is desired and how to convey their thoughts and feelings about those expectations (Weisz, 1998). Staff members often are taught to issue a directive only once or twice before applying a consequence for noncompliance. These children may be unable to process the directives and, therefore, may ignore the directive, or they may interpret it as a menace to their well-being. In either case, they are penalized for not having sufficient linguistic facility or processing skills.

Although generic level systems are not effective in practice, behavioral management techniques based on solid learning theory have been shown repeatedly to be effective therapeutic tools.

Moreover, many children who have histories of trauma or maltreatment are at a significant disadvantage in situations of high stress where demands are put on them to make “appropriate” decisions and remain rational. Statements by staff members may appear to be threatening to these children. For example, a frequent staff member communication goes something like this: “If you don’t [blank], then [blank].” Presumably the staff member is stating a consequence that will be invoked, or
may be stating to the child that he/she will not earn points and, thereby, not earn more privileges and a higher level. Such a statement to a child with a history of maltreatment of trauma may evoke a catastrophic reaction based on the interpretation of this statement and the meaning that such statements have had in their previous contexts (Perry, 1997; Perry & Pollard, 1998; Perry, Pollard, Blakley, Baker, & Vigilante, 1995).

Another issue, and one that has been acknowledged in the psychiatric literature, is the issue of staff training and knowledge (Braxton, 1995; Donat, 1998; Donat & McKeeegan, 1990; Petti, Mohr, Somers, & Sims, 2001). Although our argument in this article is that generic level systems are not effective in practice, behavioral management techniques based on solid learning theory have been shown repeatedly to be effective therapeutic tools. Appropriate rewards applied to children that are tailored to them as individuals can be extremely powerful tools to help shape appropriate behaviors. However, in too many instances, line and professional staff are unaware of when and how to reward, and when to withhold rewards.

For many years, scholars have commented on the fact that the people with the least amount of training and knowledge have the greatest contact and responsibility on a daily basis with patients in psychiatric settings (Braxton, 1995; Goffman, 1961; Perrow, 1965). Their observations are also borne out in empirical studies underscoring staff members' lack of a solid theoretical foundation for practice. Research suggests that behavioral management techniques have not been widely adopted by practitioners, and that staff members working with psychiatric patients have little knowledge of behavioral principles on which behavior management and behavior modification are based. More than two decades ago, this issue was being discussed in the nursing literature. Niemeier (1983) observed that patients' desirable behaviors were inadequately reinforced when she conducted a naturalistic study that included nurses and nursing assistants. These observations were confirmed in a later study by Burdett and Milne (1985).

A 1986 study commissioned by the state of Virginia (Virginia Department of Planning and Budget, 1986) concluded that institutional settings fostered and reinforced passive institutional behaviors and at times actually promoted behavioral management problems. Similar findings were reported by Gelfand et al. (1967), who found a positive correlation between the severity of patients' psychotic behavior and the inappropriateness with which they were reinforced. In fact, they observed that patients themselves were the best behavioral engineers with respect to providing appropriate behavioral principles to their fellow patients.

Finally, with the great cultural diversity of the U.S. population, therapies and treatments should be at least adaptable to ethnic and racial minorities on the assumption that they will generalize to individuals who are not from the dominant culture. However, given that there is little empirical research that generic level systems are efficacious at all, there are important considerations with respect to cultural appropriateness to be considered. Although the available studies on treatment effectiveness of psychotherapies are limited in number and design, some researchers have found that some treatments and their adaptations may actually be harmful to minority group members (Chambless & Williams, 1995; Gibbs & Huang, 1997; Telles et al., 1995). Thus, assuming that therapeutic approaches have been conceptualized by and for the dominant culture, they may not be applicable to all patients (Sherev, 1997).

Treatment Implications

Although systematic data collection has not been conducted to substantiate that the children seen in psychiatric settings are more acutely ill than in the past, certainly with the large-scale changes in health care that have influenced reimbursement practices, practitioners' anecdotes and our own clinical experiences would suggest that this is the case. Our colleagues report that psychiatric settings are analogous to intensive care units, with higher levels of acuity and a higher proportion of violent and impulse deficient patients (USDHHS, 2001). Bearing out such experiential reports, research by Achenbach and Howell (1993) suggested that children's psy-
chological distress in hospitals and residential settings has increased as measured by the Child Behavior Check List (CBCL) (Achenbach & Howell). Yet the structure of treatment settings remains fixed, and little research has been conducted to determine whether level systems, or for that matter any modality employed in residential treatment settings, produce the outcomes for which they were intended (Lundy & Pumariega, 1993; USDHHS, 1999).

The changes in reimbursement and the changes in our patient populations underscore the need to move forward to develop new approaches, or to validate the old ones by way of research study.

**Recommendations**

Some of the practices we recommend are not new, but bear repeating; there are many settings where they have not been employed (Donat & McKeegan, 1990; Kazdin, 1984, 1996a, 1996b; Gelfand et al., 1967; Niemeier, 1983).

**Interventions and treatments are bound to fail when they are not developed on the basis of individuals’ development and are not sensitive to their various cognitive, social, and emotional domains and needs.**

**Contextualized assessment, behavior analysis, and individualized interventions.** The psychology literature is replete with the vicissitudes of unidimensional approaches to practice and research. One prominent example is the exclusive dependence on global IQ in diagnosing mental deficiency in children (Grossman, 1983). Thus, a recommendation that children’s assessments should be individual and multidimensional may be neither original nor new. The most significant feature of multidimensionality is its ability to provide more comprehensive and generalizable assessments. Another feature is that it allows for more precise treatment programming.

Interventions and treatments are bound to fail when they are not developed on the basis of individuals’ development and are not sensitive to their various cognitive, social, and emotional domains and needs (Johnson, 1995; Kazdin, 2001; March, 2000; Singh, 1997). As obvious as the above might be, in our years of clinical experience we have found the reality that individual assessment, and often individual treatment, may be an unrealized ideal. The use of checklists, structured interviews, and standardized instruments, though efficient, runs the risk of practitioners building assessments and asking questions that are devoid of context, thereby omitting many important portions of clinical reality (Kazdin, 2001; King, Schwab-Stone, Peterson, & Thies, 2000; Singh, 1997). Without knowing the context of the child’s home, many questions may be virtually meaningless. One such example is asking a child if he/she has ever attacked a member of the family. While such activity is undesirable, it is understood very differently when viewed from the context of repeated abuse of the child’s mother and the youngster’s trying to intervene in the domestic violence situation.

This kind of decontextualization is a serious drawback of current assessment in many mental health settings (Offord et al., 1996). We have observed in our clinical practices that assessments in progress notes in many inpatient and residential settings are too often vague and imprecise, in spite of the vast empirical literature available that speaks to the value of deciphering an individual’s cognitive and behavioral “programming.” How that programming “operates” for each child is key to knowing how, when, and why to intervene (King et al., 2000; March, 2000). Thoroughly assessing orbits of influence such as family, peers, schools, and community provides clues as to antecedent conditions that elicit, as well as conditions that reinforce or maintain, certain behaviors. For example, families of origin may range in their
childrearing practices from very punitive to very lax, making it crucial that assessment include an appraisal of learned "disciplinary" approaches and the natural environmental contingencies for the individual child. Failure to do so may waste much time and resources, while attempted interventions fail (King et al., 2000; Singh, 1997).

Two kinds of analyses have been found useful in precisely establishing the factors (contexts) under which certain behavior takes place: structural analysis and functional analysis of behaviors. The former involves assessing factors antecedent to or concurrent with the behavior, and the latter attempts to isolate the consequent effect that a behavior has on the environment (Axelrod, 1987).

An assessment and analysis of structural variables is critical to any effort at understanding the behavior of any individual. While behavioral acts are not elicited by environmental events, many environmental events can function as a source of control over behavioral events. Examples might be the size of a child's classroom or the presence of loud background noise. Environmental factors involve the internal environment as well; thus, other variables might include boredom, hunger, cognitive deficits, or fatigue.

In applied behavior analysis, a functional analysis is done to examine contingencies and use causal information to identify effective interventions (Kazdin, 2001). The idea here is that there is no single function that a particular behavior serves for all or even most individuals. Based on the available research, aberrant behavior can be clustered into three major propositions: (a) Aberrant behavior is an operant behavior maintained by positive social reinforcement (positive reinforcement hypothesis), (b) aberrant behavior is an operant behavior maintained by the termination of an aversive stimulus (negative reinforcement hypothesis), and (c) aberrant behavior is maintained by the production of sensory stimulation (sensory reinforcement hypothesis). Thus, the vast range of possible functions underlying behavior, as well as the wide range of structural variables to which a child is exposed, argues for individual programming. The very complexity of contextual factors argues that simple explanations of individual behavior should be avoided, and it predicts that assessment and intervention program expressed as boilerplate treatment approaches to children and their families are doomed to failure (Axelrod, 1987; King et al., 2000; Kazdin, 2001; MARSH, 2000; Singh, 1997).

Moreover, assessment must be informative and useful. The value of an assessment can be thought of in terms of its "consequential validity" (Messick, 1980). The psychometrician Samuel Messick posits that consequential validity is at the core of successful measurement and assessment. What he means is that the ultimate purpose of conducting an assessment is to identify a problem precisely, which in turn should invoke the most promising treatment or intervention. Thus, any assessment that fails to do so is an assessment of dubious value.

Finally, there is a moral obligation to assessment. Clinicians must identify areas of maladaptation as well as areas that can be thought of as strengths or competence. Without the inclusion of competence and strengths, our assessments are not just incomplete, but they also may lead to negative labeling that has the potential to stigmatize.

Clarity of behavioral description is critical in communicating about patients with others.

Descriptive analysis, data language, and operationalization. Complementing assessment that is contextually based and employs functional and structural analyses is the use of a data language in documentation. Serious problems can arise when language that lacks clarity is employed in clinical settings. Clarity of behavioral description is critical in communicating about patients with others. While patients remain the same people in their medical records, the people recording in that
record are very different and may frequently change. Thus, it is important that case histories and other reports be written in clear, unambiguous language so that clinicians over time will have accurate pictures of behavioral changes that may have occurred and will be able to make meaningful behavioral comparisons. Rigorous behavioral descriptions play an important role in assessing the effectiveness of any treatment programs (Kazdin, 2001; March, 2000; Singh, 1997).

Three decades ago Greenspoon (1976) suggested that a rigorous data language should meet at least two criteria: (a) individuals using a given word or set of words should employ those words in the same manner, and (b) the data language should consist of a relatively small vocabulary. These are crucial considerations in clinical settings where professional jargon is used, sometimes indiscriminately (Mohr, 1999). While professional jargon serves as a kind of shorthand between caregivers and can be efficient and useful, it often obscures rather than illuminates when used inappropriately (Lutz, 1989).

The word “affect” and its various modifiers come to mind as frequent examples of imprecise language that signifies very little and that often is used in very different ways by different staff members. In a review of more than 4,000 entries in children’s medical records, Mohr and Noone (1997) found imprecise labels applied to the term affect such as superficial, belligerent, dysfunctional, and argumentative, although these qualifiers can hardly be thought of as describing one’s mood state and are not listed as such in the DSM. Illustrating staff members’ confusion over the term, Mohr found an entry that stated: “[Patient] lying in bed with eyes closed. Appears to be asleep. Affect flat” (p. 1056).

Rather than employing jargon, simple description of behaviors, their frequency, and the circumstances under which they occur are more empirical and precise ways of assessing patients at baseline and throughout their hospital stay. Directing staff members to describe discrete behaviors and when they occur without the use of jargon words and vague modifiers (such as the word “manipulative,” for example) would reduce ambiguity. Moreover, such documentation would enhance clinicians’ effectiveness because they can make objective evaluations of the behavioral changes that occur in patients. Such objective evaluations are helpful in determining the success or failure of interventions by communicating patient behavior in more unambiguous and quantifiable terms (Olson & Mohr, 2002).

**Professional and staff training and education.** As we have mentioned, studies have highlighted the need for adequate training of direct care staff (Burdett & Milne, 1985; Knowles & Landesman, 1986). One of the most disturbing studies that flies in the face of conventional belief that supervising nurses might be better prepared than the mental health workers was conducted by Donat and McKeegan (1990). They found that mental health workers scored higher than registered nurses on tests of behavioral knowledge, despite their lower educational attainment. The same study found no difference between behavioral knowledge of RNs and LPNs. While we can only speculate as to reasons for these findings, our own review of the following psychiatric nursing texts yielded scant information about children’s programming or behavioral management techniques for child or adolescent populations (Burgess, 1997; Fontaine & Fletcher, 1999; Frisch & Frisch, 1998; Johnson, 1995; Townsend, 1999). In our review of several undergraduate psychiatric mental health nursing texts, we found one textbook omitted learning and behavior theories completely (Townsend), and two contained less than one page on the subject (Burgess; Fontaine & Fletcher). Yet another was completely in error in its explanations of positive and negative reinforcement (Frisch & Frisch). Only one textbook that we reviewed (Varcarolis, 1998) spoke to the issue of child inpatient and residential treatment in any depth.

Stuart (2001) noted that nursing texts are woefully devoid of discussions on empirically validated theory and evidence-based interventions. Both Stuart and McCabe (2000) have called for incorporating evidence-based psychiatric nursing care in educational programs. We concur, and urge that textbooks and curricula focus on evidence-based interventions and practice, on promising but tentative interventions, practice guidelines, and
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away from “traditional and intuition driven practice” (Stuart, p. 110).

In addition, the low level of behavioral knowledge among direct care staff noted by several scholars (Corrigan, Holems, Luchins, Parks, & Basit, 1994; Donat, 1998; Donat & Keegan, 1990; Harchick, Sherman, Hopkins, Strouse, & Sheldon, 1989) make staff training and education as crucial a component of service delivery as the actual patient care that is rendered. Given that these same studies indicate that professional leaders themselves may have inadequate knowledge of how behavioral methods can be applied in inpatient settings, it means that the entire staff culture (line staff as well as professional staff) must be imbued with, committed to, and guided by a strong theoretical grounding.

Ideally, before they work with vulnerable and challenging children, staff and professionals should be assessed on their knowledge of behavioral interventions and the underlying theory and rationale. Those presently working with these children should be assessed in order to remediate those areas that evidence weakness, low levels of competence, and represent myth-based, ritualistic practices learned “on the job.” Moreover, given the propensity of new learning in behavioral procedures to be abandoned shortly after training or consultation (Harchick et al., 1989), ongoing professional oversight is necessary to preserve the investment that has been made to educate staff.

Not only should staff education and training include solid learning theory and technique, but such training also should include content on the differences between the average child and the child with a serious emotional disorder (SED). Moreover, staff members’ expectations of children with cognitive and emotional challenges should be clearly in line with the capacities of their charges. Educational programs should stress that children with an SED are not average children who have learned to tolerate a great deal of caregiver inconsistency and ambiguity of contingencies, as well as parental reactivity, and that their needs for structure and consistency may vary.

Finally, education and training should not be limited to staff members alone. Rather, parents should be active participants in such education. Not only would there be great value in offering such workshops to parents as part of the menu of residential treatment or hospital services, but parents also should be integral participants in designing interventions based on what they learn. They could then test their individual child’s behavioral plan at home in a more informed manner.

Conclusion

We have argued that the level system as standard behavioral programming in child and adolescent psychiatric settings is a flawed intervention from a theoretical standpoint. There is little empirical evidence that settings using generic level systems produce better patient outcomes, and yet they are virtually ubiquitous in children’s psychiatric hospitals and residential treatment facilities. Scholars (Dawes, 1994, 2001; Meehl, 1973; Stanovich, 2001; Stuart, 2001) have called for grounding the practice of psychotherapeutics in empirical study. Our practices in psychiatric settings must be based in empirical study and demonstrate efficacy in terms of outcomes (Lundy & Pumariega, 1993).

The entire staff culture (line staff as well as professional staff) must be imbued with, committed to, and guided by a strong theoretical grounding.

Admittedly, not every intervention that we employ in psychiatric settings meets this standard, but those that do not deserve to be evaluated critically. Level systems are such interventions. They constitute a practice whose time has passed in psychiatric care of patients. Perhaps in the days before managed care, when patients were placed for many months into milieus to be resocialized
away from the contingencies of their natural environments to those of the program, a level system may have been a defensible approach to care. Yet, even in those days programming was criticized when the child regressed upon returning to his home (Peniston, 1988).

With markedly truncated programs and dramatically reduced lengths of stay, it makes far more sense to conduct assessments that center on where the youngster lives—in homes and communities. It also makes sense to include parents and other natural helpers from the child’s community in the assessment and treatment. This way, the child’s program of care can be continuous and uninterrupted by the turbulence that might arise from changes between different systems of care.

Finally, although systematic empiricism (Stanovich, 2001) has been the goal of the behavioral sciences, too often practice interventions such as level system programming have been based in what Dawes (1994) characterizes as the “myth of expertise” and practice by consensus. Historically, such foundations for clinical practice have resulted in several categories of unvalidated therapies and practices. Professionals are called on to take strong positions against outdated and unvalidated therapies. Level systems are but one example of these. In the current fiscally conservative payer environment, managed-care organizations have shown keen interest in treatment that is safe, effective, and efficient. Simple economics and business acumen would predict that professionals and practitioners who fail to demonstrate that their therapeutic interventions are efficacious would be victims of an eventual shakeout from that environment.

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