Education and Training in Developmental Disabilities, 2008, 43(2), 135-143
© Division on Developmental Disabilities

Further Conceptualization of Treatment Acceptability

Stacy L. Carter
Texas Tech University

Abstract: A review and extension of previous conceptualizations of treatment acceptability is provided in light of progress within the area of behavior treatment development and implementation. Factors including legislation, advances in research, and service delivery models are examined as to their relationship with a comprehensive conceptualization of treatment acceptability. Extensions to previously described conceptualizations of treatment acceptability are presented and a discussion of the potential impact of these extensions on treatment acceptability research is provided.

The current paper attempts to further examine and extend the conceptualization of treatment acceptability outlined by Lennox and Miltenberger (1990). The principle of scientific skepticism promotes the continued examination of scientific findings in an effort to clarify and strengthen the findings. With the increased dissemination of treatments involving less intrusive procedures and changes in educational law, the need to reexamine the concept of treatment acceptability appears warranted. Michaels, Brown, and Mirabella (2005) surveyed experts in positive behavior supports (PBS) and found a possible paradigm shift based upon the ideology of PBS, which involved less acceptance of consequence-based decelerative procedures once used by these experts. Educational legislation such as the No Child Left Behind Act (No Child Left Behind Act of 2001, 20 U.S.C. 70 § 6301 *et seq)* and the Individuals with Disabilities Education Act Amendments (IDEA, 1997, 20 U.S.C. § 1401) have mandated the incorporation of parents, teachers, principals, and others in the development and implementation of treatments for children receiving special education services. Recent changes to IDEA have also promoted the use of empirically based treatments in the least restrictive environment. In light of these recent changes, the concept of treatment acceptability may benefit from further evaluation in terms of relevance to decisions made regarding treatments for individuals with developmental disabilities.

Correspondence concerning this article should be addressed to Stacy L. Carter, 4518 20th St. Lubbock, TX 79407. Email: cart26@hotmail.com

Lennox and Miltenberger (1990) presented a review of factors considered critical to the concept of treatment acceptability. They identified 12 critical factors that they grouped into four different categories. These 12 factors were organized under the following four categories: efficacy considerations, secondary effects, social/legal implications, and practical considerations. The 12 factors included: treatment effectiveness, motivational variables, side effects, abuse potential, treatment restrictiveness/intrusiveness, treatment precedence, social acceptability, regulatory factors, staff competence, staff cooperation, treatment efficiency, and cost effectiveness. Each of the four categories will be reevaluated with respect to all 12 factors. Additional factors considered relevant to the conceptualization of treatment acceptability will also be examined.

The term treatment acceptability was defined by Kazdin (1980) as judgments of treatments by actual or potential consumers of the treatments, such as nonprofessionals, clients, laypersons, and others. Lennox and Miltenberger (1990) conceptualized treatment acceptability as a combination of factors that included but were not limited to social judgments by consumers of treatment. Their conceptualization included factors that would most likely only be available to the practitioner implementing or recommending the treatment. Other conceptualizations of treatment acceptability have primarily focused on

social acceptability. Calvert and Johnston (1990) limited their conceptualization of treatment acceptability to factors influencing the social appropriateness of treatments as evaluated by the consumers of treatment. The difference between these two methods of conceptualizing treatment acceptability is that with Lennox and Miltenberger's conceptualization, factors which may only be clearly distinguishable by a practitioner and not easily distinguishable by a consumer are included in the overall conceptualization of treatment acceptability, thereby making their conceptualization more comprehensive than the work by Calvert and Johnston. The conceptualization developed by Lennox and Miltenberger appears to warrant more ecological validity because in many typical situations, the availability of treatments is limited to or driven by the experience or expertise of the practitioner rather than the consumers of treatment. Many potential treatments may never be presented to consumers for consideration because of factors such as lack of empirical support for a treatment or legislation disapproving of the use of particular treatments. Most research on treatment acceptability has been conducted using analogue situations that forego the potential elimination of possible treatments due to researchers' efforts to evaluate the acceptability of numerous treatments. While this type of research has produced a large amount of information regarding these treatments in a short period of time, the ecological validity of these methods may be lacking. In actual practice, the consumer may be presented with a very limited number of treatment options that may be based upon factors known only to the practitioner or associated with the competency, experience, or bias of the practitioner.

Efficacy Considerations

The first category described by Lennox and Miltenberger (1990) involved efficacy considerations. The two factors included in this category were motivational variables and treatment effectiveness. Motivational variables referred to what has been more frequently described as maintaining variables and refer to the contingencies surrounding problem and adaptive behaviors. The examination of motivational/maintaining variables as related to the concept of treatment acceptability relies upon the potential of these variables to increase the effectiveness of treatments by including functionally equivalent replacement behaviors. Lennox and Miltenberger described several methods for identifying motivational/maintaining variables such as interviews, direct observations, and experimental analyses. The second factor under the category of efficacy was treatment effectiveness, which refers to demonstrating clinically significant change and promoting generalization and maintenance of adaptive behaviors.

While the factor of motivational/maintaining variables and treatment effectiveness appear to be highly relevant, additional focus is warranted under the category of efficacy toward a more comprehensive conceptualization of treatment acceptability. While motivational/maintaining variables are important toward developing functionally equivalent replacement behaviors, some problems with these procedures should be discussed. Although the incorporation of a functional assessment of motivating/maintaining variables has been considered to be a valuable asset toward increasing the efficacy of treatments (Iwata et al., 1994), reviews of the literature on treatment efficacy have revealed a higher prevalence of treatments which did not report the findings of a functional assessment of problem behaviors prior to implementation of an effective treatment (Gresham et al., 2004). While the importance of a functional assessment should not be reduced by these findings, consideration should be given to the time, effort, and cost of conducting a functional assessment when treatments that have been empirically validated are available and have the potential to effectively address a particular problem behavior. The impact that this may have on treatment acceptability may be whether the assessment procedures used to develop or select a procedure are considered as a component of a proposed treatment. Methods of evaluating treatment acceptability can be conducted prior to, during, or after implementation of a treatment as well as multiple evaluations obtained throughout the course of treatment. If during the course of obtaining treatment acceptability ratings, the raters are instructed to focus their ratings only on the treatment that has been applied, then

the time, effort, and expense associated with assessing the problem behavior prior to treatment may or may not be considered in the treatment acceptability ratings. Calvert and Johnson (1990) differentiated between treatment acceptability ratings obtained prior to and after initiation of treatment. They referred to evaluations conducted after the initiation or completion of treatment as ratings of consumer satisfaction and treatment acceptability ratings only referred to pretreatment evaluations.

Hastings and Noone (2005) outlined how in some cases, ethical guidelines require an assessment to determine the function of behavior prior to implementing a treatment. Consumers of treatment may be unaware of these ethical guidelines and may not incorporate the potential benefits of a functional assessment toward developing an intervention when they are rating the acceptability of an intervention. An exception to this could be if the risks and benefits of a functional assessment are described to the consumers and they clearly understand the relevance of such an assessment. Weigle and Scott (2000) found that teachers differentially rated the acceptability of a brief interruption procedure and differential reinforcement when provided with information on the function of problem behavior. Umbreit (1995) found increased acceptability of treatments based on a functional assessment from those not based on a functional assessment. Most likely, a functional assessment may only directly influence the acceptability of the treatment for the practitioner developing the treatment rather than the consumer, by meeting ethical requirements, increasing the potential effectiveness of a treatment, or generating the least restrictive treatment. Using Calvert and Johnston's conceptualization of treatment acceptability, the influence of a functional assessment on consumers' ratings of acceptability would be minimal. In most cases the consumer would not have the expertise to compare the treatment based on a functional assessment to a treatment that was not based on a functional assessment unless they were provided with information in this area. However, Lennox and Miltenberger's (1990) conceptualization of treatment acceptability, which includes factors influencing the practitioners' choice of treatment, would consider a functional assessment a potential component of treatment acceptability by realizing the role that a functional assessment could play in developing a more acceptable treatment.

The value of a successful treatment which reduces problems resulting in lost time, extensive effort, and increased expenses may be considered invaluable and receive high acceptability ratings by those closely associated with the problem regardless of the difficulty associated with assessing the treatment. The conflict that exists is associated with the potential for other treatments that may involve less extensive assessment procedures and produce the same or similar results. A functional assessment can potentially include an extended analog evaluation that repeatedly exposes an individual to reinforcement for inappropriate behavior (Hastings & Noone, 2005). The influence of these assessment factors (extensive vs. less extensive) on the acceptability of treatments is currently unknown. In addition, the impact of a functional assessment on the acceptability of treatments is currently inconclusive (Hastings & Noone).

Lennox and Miltenberger (1990) addressed cost effectiveness as a factor in treatment acceptability under the category of practical considerations. They discussed that from an administrative point of view, the acceptability of treatments may be reduced when they require more time, effort, expense, etc. Witt, Elliott, and Martens (1984) found that increased time requirements for implementing an intervention negatively influenced teacher ratings of treatment acceptability. Although decisions regarding treatment should not be solely based on factors associated with cost, the availability of treatments with potentially comparable effectiveness but differing costs should not be overlooked.

Secondary Factors

Lennox and Miltenberger's (1990) next category was entitled secondary factors and included two factors. This group of factors included factors other than those for which the treatment was targeted and were described as being infrequently monitored and poorly documented. The two factors included in this category were side effects and abuse potential.

Side effects were referred to as being beneficial, such as generalization of appropriate behaviors or detrimental to the intended or primary treatment, as in tardive dyskinesia with neuroleptic medication. Spreat and Walsh (1994) surveyed members of the American Association of Mental Retardation and found that likely side effects associated with treatment for aggression were not significantly related to treatment acceptability but were significantly related to treatment for self-injury. Michaels et al. (2005) found that PBS experts associated secondary effects with ineffectiveness of decelerative consequence-based procedures. The PBS experts stated secondary effects such as dangerous physical interactions, social isolation, long-term change difficulties, etc. made the procedures ineffective. Michaels et al. noted that a research base exists, which supports the effectiveness of decelerative consequence-based procedures with some of the procedures resulting in more immediate results than proactive antecedent approaches. Lennox and Miltenberger referred to this time required to produce results as treatment efficiency. They discussed treatment efficiency as a practical consideration of treatment acceptability that was not well established for many procedures and was difficult to determine from research studies because of the different parameters used within these studies. It is important to note that the presence of side effects associated with a decelerative consequence-based procedure which produces immediate results needs to be evaluated along with any detrimental effects on the person and the environment which may continue for a longer period of time when implementing a proactive antecedent-based approach that produces less immediate results.

Abuse potential as a factor of treatment acceptability was described by Lennox and Miltenberger (1990) as the susceptibility of treatment to misuse by those implementing the procedures. While several treatments have the potential to result in physical abuse through forceful interactions such as physical restraint, some types of overcorrection, and the use of aversive stimuli, there are other types of more subtle abuse which can result with the use of less intrusive procedures. These may occur with lengthy exclusionary time-out procedures or failing to honor the terms of a behavioral contract. Although these types of abuse may not result in long term problems for the individual subjected to these treatments, the potential for abuse with these procedures may be amplified for someone who has been exposed to the abuse of these procedures in the past. Progar et al. (2001) found differentially high rates of aggression in a participant exposed to the same treatment implemented by novel staff and staff with whom the participant had a previous history. Their findings indicated that the participant's history with staff that had previously been associated with frequent demands and possibly aversive situations influenced the participant's current behavior. Individuals, who have a history of being abused with a particular treatment, may have a very different perspective on the acceptability of these procedures than someone who has not been exposed to abuse by these procedures.

Social and Legal Implications

The next category described by Lennox and Miltenberger (1990) focused on social and legal implications. This category included treatment restrictiveness/intrusiveness, treatment precedence, social acceptability, and regulatory factors. Lennox and Miltenberger describe treatment restrictiveness/intrusiveness as a well known concept in the field of mental retardation that attempts to measure the amount of physical or psychological stress placed upon the individual receiving the treatment. The typical progression of treatment restrictiveness/intrusiveness involves beginning with the least restrictive/intrusive treatment that is considered to potentially be effective and if the treatment is deemed ineffective, attempting a more intrusive treatment which is considered to be potentially effective.

Treatment precedence. Treatment precedence referred to previous effectiveness of a treatment with a specific class of behavior. Lennox and Miltenberger (1990) described both a local and national precedence of treatments. Local precedence of treatments could be determined from use of the treatment within an immediate social or professional community, while national precedence could be determined from reviews of literature. Len-

nox and Miltenberger cautioned that precedence should be considered as a factor in treatment acceptability only when it is accompanied by evidence for the effectiveness of the treatment since ineffective treatments may be used frequently. Treatment precedence as described by Lennox and Miltenberger appears different from treatment history associated with a specific individual. Treatment history refers to an individual's past experience with a specific treatment. The difficulty in considering treatment precedence as a factor in treatment acceptability is in how the specific classes of behavior are derived. Behaviors may be classified by the topography of the behavior or by the function of the behavior. The precedence of effective treatments could vary depending on whether the treatment is applied to topographically defined class of behaviors such as aggression or to a functionally defined class of behaviors such as escape maintained behavior.

Social acceptability. Lennox and Miltenberger (1990) used definitions described by Kazdin (1980) and Wolf (1978) in their discussion of social acceptability, which involved asking consumers to evaluate the acceptability of services. Several factors have been found to influence the social acceptability of treatment (see Reimers, Wacker, & Koepple, 1987 and Miltenberger, 1990 for reviews). Most research examining the social acceptability of treatments has been conducted using Likert-type rating scales with actual or potential consumers of treatments. Hanley, Piazza, Fisher, and Maglieri (2005) recently indicated that for individuals with severe disabilities, the use of rating scales may be inappropriate and most of the acceptability information on treatments for these individuals has come from significant others. Their research demonstrated that individuals with severe behavior problems could indicate preference for a specific treatment when the treatments were presented in a concurrent-chains arrangement. Two children in their study were allowed to select from among a functional communication training procedure (FCT), a FCT with punishment procedure, and a punishment procedure, which were concurrently available. They determined that the FCT with punishment procedure was selected most frequently by both children and therefore considered to be the treatment preferred by the children. Their research is unique in that it obtained social preference for treatment from a population that is frequently exposed to treatments but typically excluded from providing direct input into the acceptability of the treatment. In addition, their research demonstrated that the children preferred a treatment that included a punishment procedure that has typically been considered less acceptable than treatments that do not include punishment components.

Regulatory factors. Federal, state, and local legislation are some of the regulatory factors explained by Lennox and Miltenberger (1990) along with agency regulations, committee guidelines, and policies set forth by professional associations. They described knowledge and understanding of the implications of these regulatory factors as a component in the conceptualization of treatment acceptability. Since their evaluation of relevant regulatory factors, several updates to legislation and policy have either directly or indirectly impacted the conceptualization of treatment acceptability. Alberto and Troutman (1999) describe a hierarchy for behavior intervention procedures. This hierarchy begins with Level I procedures and is considered to be the most socially acceptable and the least intrusive to the targeted individual. The hierarchy progresses to Level IV procedures, which are attributed with the least social acceptance, and considered to be the most intrusive. Interventions included in Level I are reinforcement procedures such as differential reinforcement of alternative behaviors, differential reinforcement of other behaviors, differential reinforcement of low rates of behavior, and differential reinforcement of incompatible behaviors. Level II interventions include extinction procedures, which involve terminating and/or withholding reinforcement that has previously been available. Level III interventions include response-cost procedures (removing specific amounts of reinforcement contingent on problem behavior) and time-out procedures (denying the opportunity to receive reinforcement for a fixed period of time). Level IV interventions are the most intrusive and include unusual aversive stimuli (i.e., presentation of stimuli which causes pain such as paddling or electric shock

upon the occurrence of a problem behavior), common aversive stimuli (i.e., presentation of stimuli such as verbal warnings, or yelling, that have been previously associated with pain following the occurrence of a problem behavior), and overcorrection procedures (i.e., exaggerated or extended practice of an appropriate behavior following occurrence of a problem behavior).

Legislation such as the No Child Left Behind Act (No Child Left Behind Act of 2001, 20 U.S.C. 70 § 6301 *et seq)* and the Individuals with Disabilities Education Act Amendments (IDEA, 1997, 20 U.S.C. § 1401) have mandated that interventions be empirically validated to demonstrate the effectiveness of the interventions. These mandates appear to increase the relevance of treatment acceptability research due to the disparity between empirically validated treatments and their acceptability (Lerman & Vorndran, 2002). Many treatments with demonstrated effectiveness may not have high treatment acceptability in comparison to treatments without empirical validation.

Practical Considerations

Lennox and Miltenberger (1990) described several practical aspects associated with treatment acceptability such as staff cooperation and competence, treatment efficacy, and cost effectiveness. Some of these considerations such as treatment efficacy and cost effectiveness were previously discussed. The aspects of staff cooperation and competence appear to be highly relevant to treatment acceptability in that the treatments may not or could not be implemented without having each of these components in place. Both the aspect of staff cooperation and the aspect of staff competence appear to be issues of treatment integrity. Treatment integrity can be defined as the degree to which a treatment procedure is implemented as it is intended (Gresham, Gansle, & Noell, 1993; Peterson, Homer, & Wonderlich, 1982). Lennox and Miltenberger do not directly address the issue of treatment integrity but rather discuss staff cooperation and competence as factors related to treatment acceptability and which appear to be necessary components of treatment integrity. Watson, Sterling, and McDade (1997) referred to the relationship between treatment acceptability and treatment integrity as a myth. They noted that no empirical evidence exists to support a potential increase in treatment integrity for treatments receiving higher treatment acceptability ratings. In addition, Sterling-Turner, Watson, Wildmon, Watkins, and Little (1997) found within an analogue setting that treatment integrity was unrelated to pretreatment acceptability, but was related to the type of training a consultee received (modeling or rehearsal with feedback vs. didactic). Their findings provide evidence for the nonexistence of a relationship between treatment acceptability and treatment integrity when using the conceptualization of treatment acceptability described by Calvert and Johnson (1990). Their findings do not necessarily reject a possible relationship between treatment acceptability and treatment integrity when used within the broader conceptualization described by Lennox and Miltenberger. Using the broader conceptualization of treatment acceptability which incorporates the influences on the consultant, a consultant may consider a treatment more or less acceptable because of past issues with treatment integrity and may therefore recommend one treatment rather than another because of these past issues. In actual practice a consultant will screen potential treatments based on legal, ethical, experiential, or other factors prior to presenting a limited selection of treatment options to a consumer. These factors appear to be a direct influence on the consultant and only a secondary influence on the consumer. Analogue research conditions may not capture the filtration of potential treatments by the practitioner, as may be done in actual practice situations prior to presenting the treatment to the consumer who may then evaluate the acceptability of the treatment. Based upon the paradigm shift toward less consequence-based decelerative procedures among experts in PBS described by Michaels et al. (2005), practitioners may be presenting fewer options to consumers. This practice appears to be in opposition to recommendations made by Schwartz (1991) and Schwartz and Baer (1991), which suggest educating consumers on alternatives that are available, and how to gain access to them. This type of consumer education was predicted to improve the

social validity and viability of interventions and decrease misconceptions about interventions among consumers. By providing education to consumers on a limited number of treatment options, practitioners may be increasing the acceptability and decreasing misconceptions associated with only a limited number of interventions. Other possible interventions that practitioners choose not to present to consumers may be declining in comparison to the interventions that are presented with regard to acceptability and associated misconceptions.

Additional Factors Related to the Conceptualization of Treatment Acceptability

Michaels et al. (2005) determined a shift in treatment acceptability across time among experts in PBS. These experts were surveyed and the results determined a decrease in the use of decelerative consequence-based procedures among these experts. The reasoning provided by the experts for decreasing their use of these procedures was primarily ethical reasons followed by statements that they considered the procedures ineffective and that they used more effective positive alternative procedures. Their findings are significant to the further conceptualization of treatment acceptability in at least two ways. First, they determined that treatment acceptability can change over time. Their findings indicated that these changes, as determined by their prevalence as a useful strategy, occurred between the 1980's and the 1990's. While this finding may appear trivial, as the development of more efficient and effective procedures are constantly being developed, the documentation and understanding of this type of shift in treatment acceptability does appear significant. Finney (1991) indicated that measures of social validity were often one time measures that were considered static. He pointed out that highly effective interventions were developed through a dynamic model in which researchers and consumers continually influenced each other. Finney recommended that researchers keep asking consumers in order to reveal new trends in social acceptability of interventions.

The second finding that is relevant to the further conceptualization of treatment acceptability is the ethical reasoning ascribed to changes in PBS experts shift in treatment acceptability. Lennox and Miltenberger (1990) stated that the concept of treatment acceptability was becoming more comprehensive because of the advocacy from various groups of families, individuals receiving services, and professionals. They posed that issues once considered to be only peripheral in the decision to use a specific treatment were becoming more relevant because of this type of advocacy. Certain differences in practice may be a form of advocacy among those adhering to a PBS paradigm versus those following an applied behavior analysis approach. If as indicated by Michaels et al. (2005), experts in PBS are recommending fewer options to consumers, then they are not improving the social validity or decreasing the misconceptions about a wide range of treatment options. In contrast, if those espousing a behavior analytic approach are attempting to educate consumers on alternative treatments and how to gain access to those treatments (Schwartz; 1991; Schwartz & Baer, 1991), then they are potentially increasing the social validity and reducing the misconceptions about those treatments.

Summary and Recommendations for Future Research

The concept of treatment acceptability has and will continue to be an important component of the development and implementation of treatments for individuals with developmental disabilities. While this concept has been well developed and researched, the continued need for further research and conceptualization appears evident with changing paradigms such as the PBS movement, newly introduced legislation, and the development of new treatments. It appears that to further develop the concept of treatment acceptability certain additional areas of concern need to be incorporated or addressed. There are at least five considerations that may further develop the conceptualization of treatment acceptability. The first consideration is the incorporation of assessment procedures into the evaluation of treatment acceptability. This may involve educating consumers on the procedural methodology and potential value of such assessments toward the development of a

treatment. In addition, it might incorporate educating consumers on the relative extensiveness of such assessments and how more or less extensive assessments may relate to the potential effectiveness of treatments. The extent to which an extended versus a brief assessment may enhance the development of treatment for various problem behaviors is still unknown and the influence on treatment acceptability is also unknown.

The second consideration may involve the immediacy of treatment effects. Although PBS experts acknowledged that some decelerative consequence-based treatments produced more immediate treatment effects than reinforcement based approaches (Michaels et al., 2005), they considered the latter to be more acceptable because of the potential for side effects and abuse associated with the former. These rational need to be examined with respect to the harmful effects of allowing the problematic behavior to continue for an extended period of time necessary for reinforcement based procedures to have an effect.

The third consideration that should be incorporated into the conceptualization of treatment acceptability is a refined view of treatment precedence. Treatment precedence, as stated by Lennox and Miltenberger (1990), should always be accompanied by evidence of treatment effectiveness. But in order to make this information more useful, treatment precedence should also be associated with the topography of the behavior, the function of the behavior or both. By providing this additional information a practitioner can acquire a better understanding of prevalence these treatments as used with both descriptive and functional classes of behavior.

The fourth consideration is the potential tendency for specific consumers to reveal preferences for treatments that do not fall along the usual continuum of what is considered least to most restrictive. Hanley et al. (2005) demonstrated how individuals with severe disabilities chose more restrictive treatments when provided with a choice. This type of methodology seems of particular importance to individuals with severe developmental disabilities who may have difficulty providing feedback regarding their acceptance of treatments. The feedback from these individuals could indicate preferences for treatments that may otherwise be considered unacceptable.

A final consideration toward furthering the concept of treatment acceptability may entail considering the influence that the practitioner may have on the consumer. Finney (1991) described this as a potentially interactive relationship with both parties influencing the treatment acceptability of the other. Legislation, reviews of treatment, and personal biases may influence the practitioner to limit or expand upon the information provided to the consumer. This may in turn influence the consumers' acceptance or rejection of various treatments thus reinforcing the activities of the practitioner. This type of influence on treatment acceptability may be seen most predominantly through the interpretation of legislation or through movements such PBS. While treatment acceptability may be shaped through such interpretation or through various movements, practitioners should be aware of and avoid using the information as propaganda to influence consumers' acceptance of treatments (Schwartz & Baer, 1991). More importantly as noted by Michaels et al. (2005) and by Finney, treatment acceptability is not a static phenomenon and needs to be continually studied in order to maintain an understanding of its importance at any particular point in time.

References

Alberto, P. A., & Troutman, A. C. (1999). *Applied behavior analysis for teachers* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Calvert, S. C., & Johnston, C. (1990). Acceptability of treatments for child behavior problems: Issues and implications for future research. *Journal of Clinical Psychology, 19,* 61–74.

Finney, J. W. (1991). On further development of the concept of social validity. *Journal of Applied Behavior Analysis, 24,* 245–249.

Gresham, F. M., Gansle, K. A., & Noell, G. H. (1993). Treatment integrity in applied behavior analysis with children. *Journal of Applied Behavior Analysis, 26,* 257–263.

Gresham, F. M., McIntyre, L. L., Olson-Tinker, H., Dolstra, L., McLaughlin, V., & Van, M. (2004). Relevance of functional behavioral assessment research for school-based interventions and positive behavioral support. *Research in Developmental Disabilities, 25,* 19–37.

Hanley, G. P., Piazza, C. C., Fisher, W. W., & Maglieri, K. A. (2005). On the effectiveness of and preference for punishment and extinction components of function-based interventions. *Journal of Applied Behavior Analysis, 38,* 51–65.

Hastings, R. P., & Noone, S. J. (2005). Self-injurious behavior and functional analysis: Ethics and evidence. *Education and Training in Developmental Disabilities, 40,* 335–342.

Individuals with Disabilities Education Act Amendments of 1997, 20 U.S.C. § 1401 (26).

Iwata, B., Pace, G., Dorsey, M., Zarcone, J., Vollmer, T., Smith, T., et al. (1994). The functions of self-injurious behavior: An experimental epidemiological analysis. *Journal of Applied Behavior Analysis, 27,* 215–240.

Kazdin, A. E. (1980). Acceptability of alternative treatments for deviant child behavior. *Journal of Applied Behavior Analysis, 132,* 259–273.

Lennox, D. B., & Miltenberger, R. G. (1990). On the conceptualization of treatment acceptability. *Education and Training in Mental Retardation, 25,* 211–224.

Lerman, D. C., & Vorndran, C. M. (2002). On the status of knowledge for using punishment: Implications for treating behavior disorders. *Journal of Applied Behavior Analysis, 35,* 431–464.

Michaels, C. A., Brown, F., & Mirabella, N. (2005). Personal paradigm shifts in PBS experts: Perceptions of treatment acceptability in decelerative consequence-based behavioral procedures. *Journal of Positive Behavior Interventions, 7,* 93–108.

Miltenberger, R. G. (1990). Assessment of treatment acceptability: A review of the literature. *Topics in Early Childhood Special Education, 10*(3), 24–38.

No Child Left Behind Act of 2001, 20 U.S.C. 70 § 6301 *et seq.*

Peterson, L., Homer, A., & Wonderlich, S. (1982). The integrity of independent variables in behavior analysis. *Journal of Applied Behavior Analysis, 15,* 477–492.

Progar, P. R., North, S. T., Bruce, S. S., DiNovi, B. J., Nau, P. A., Eberman, E. M., et al. (2001). Putative behavioral history effects and aggression maintained by escape from therapists. *Journal of Applied Behavior Analysis, 34,* 69–72.

Reimers, T. M., Wacker, D., & Koepple, G. (1987). Acceptability of behavioral interventions: A review of the literature. *School Psychology Review, 16,* 212–227.

Schwartz, I. S. (1991). The study of consumer behavior and social validity: An essential partnership for applied behavior analysis. *Journal of Applied Behavior Analysis, 24,* 241–244.

Schwartz, I. S., & Baer, D. M. (1991). Social validity assessments: Is current practice state of the art? *Journal of Applied Behavior Analysis, 24,* 189–204.

Spreat, S., & Walsh, D. E. (1994). Impact of treatment efficiency and professional affiliation on ratings of treatment acceptability. *Mental Retardation, 32,* 227–233.

Sterling-Turner, H. E., Watson, T. S., Wildmon, M., Watkins, C., & Little, E. (2001). Investigating the relationship between training type and treatment integrity. *School Psychology Quarterly, 16,* 56–67.

Umbreit, J. (1995). Functional analysis of disruptive behavior in an inclusive classroom. *Journal of Early Intervention, 20,* 18–29.

Watson, T. S., Sterling, H. E., & McDade, A. (1997). Demythifying behavioral consultation. *School Psychology Review, 26,* 467–474.

Weigle, K. L., & Scott, J. R. (2000). Effects of functional analysis information on ratings of intervention effectiveness and acceptability. *Journal of the Association for Persons with Severe Handicaps, 25,* 217–228.

Witt, J. C., Elliot, S. N., & Martens, B. K. (1984). Acceptability of behavioral interventions used in classrooms: The influence of amount of teacher time, severity of behavior problem, and type of intervention. *Behavioral Disorders, 9,* 95–104.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11,* 203–214.

Received: 21 September 2006
Initial Acceptance: 30 November 2006
Final Acceptance: 10 March 2007