Treatment integrity, a measure of how accurately a treatment is carried out, is integral to the concept of effective behavioral analysis and intervention. This study sought to correlate teachers' perceptions of the functional behavior assessment and behavior intervention process (FBA/BIP) with their confidence that the process is an effective and efficient one. Eleven currently employed regular education teachers attending classes at a southeastern university were asked to complete a questionnaire regarding their perceptions of the effectiveness of the FBA/BIP process and their confidence in carrying out behavioral interventions. Correlations were made to: (1) the amount of training (college, inservice, and professional conference sessions) each teacher had received; (2) the amount of support and feedback from special education personnel, administrative personnel, and other teachers they had received; and (3) the amount of input each teacher felt he or she had made to the functional assessment results and to the behavior intervention plan. Of these teachers, 62% had never participated in the FBA/BIP process even though they had an average of four "at risk" students in their classes, suggesting that teachers might be aware that the FBA/BIP process can be used for students not receiving special education services. Teachers had received minimal training in behavior modification procedures and seemed to lack confidence in carrying out complicated behavior intervention plans, calling into question the treatment integrity of FBA/BIP in this situation. (Contains 25 references.) (Author/SLD)
Implications for Treatment Integrity of FBA/BIP

Factors in Teacher Adherence to Treatment

Louann Gum
Tennessee Technological University
Cookeville, Tennessee

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Abstract

Treatment integrity, a measurement of how accurately a treatment is carried out, is integral to the concept of effective behavioral analysis and intervention. This study sought to correlate teachers' perceptions of the functional behavior assessment and behavior intervention process (FBA/BIP) with their confidence that the process is an effective and efficient one.

Eleven currently employed regular education teachers attending classes in a southeastern university were asked to complete a questionnaire regarding their perceptions of the effectiveness of the FBA/BIP process and their confidence in carrying out behavioral interventions. Correlations were made to (a) the amount of training (college, in-service, and professional conference sessions) each teacher had received; (b) the amount of support and feedback from special education personnel, administrative personnel, and other teachers they had received; and (c) the amount of input each teacher felt he or she had made to the functional assessment results and to the behavior intervention plan.
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Factors in Teacher Adherence to Treatment

Increasing numbers of children are entering or attending school with serious behavioral problems (Walker, Colvin, & Ramsey, 1995). By some estimates, up to 20% of children without identified disabilities and up to 30% of children identified with one or more disabilities will evidence behavioral difficulties putting them or their peers at-risk for “academic failure, alienation from peers and adults, subsequent special education placement, and in the longer term, risk of incarceration, substance abuse difficulties, and diminished functioning in vocational, social, and personal realms” (McDougal & Hiralall, 1998, p. 2).

In an effort to address this growing concern, legislation was passed in 1997 amending the Individuals with Disabilities Education Act (IDEA) to include mandates for assessment and intervention of behaviors that might distract a teacher from teaching or students from learning, including behaviors such as noncompliance, verbal and physical abuse, property destruction, and aggression toward self or others (Drasgow & Yell, 2001). Current policy and best-practice research points to the assessment of such behaviors from a functional point of view. That is, the assessment will determine the function of the inappropriate behavior. These assessments draw on a variety of information sources about the
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antecedents, consequences, and setting events that maintain a behavior from observations, interviews, reviews of anecdotal records, and medical histories, where available.

In the educational system, persons involved in this process of information gathering may include parents, teachers, administration, counselors, doctors, and support staff including the school psychologist. From this information, the school support team may formulate an hypothesis regarding the function of the behavior and devise an intervention plan including positive behavioral supports and strategies to replace the negative behavior with one which meets the same functional need, yet is acceptable within the child’s environment. The efficacy of this proposed action plan may be tested through the continuing process of functional analysis to verify the hypothesis concerning the function of the negative behavior.

The outcomes of such assessments and interventions have profound effects for the children exhibiting the negative behaviors. Research suggests that such a process is an effective and efficient one (Watson, Ray, Sterling-Turner, & Logan, 1999; Gresham, Watson, & Skinner, 2001). There are, unfortunately, indications that this process is not being followed completely, as a review of recent court cases suggests (Drasgow & Yell, 2001). In many instances in that review, cases
were being found wholly or in part for the parents in due process court cases due to inadequate or inappropriate assessments regarding the function of a student’s behavior.

One recent review of literature (Ervin, Radford, et al., 2001) found that in the great majority (89%) of research in the field of functional assessment, functional analysis and behavior interventions have been conducted on children with one or more identified disabilities and that by-and-large those disabilities were considered “low-incidence” developmental disabilities, such as severe/profound mental retardation or autism. Some 88% of the research articles addressed behaviors commonly associated with those low-incidence disabilities, such as self-injurious behaviors, aggression, and disruption. High-incidence disabilities (e.g., learning disabilities) were addressed in only 4% of the reported research results. Only 7% of all the studies addressed academic problems and only 12% of all the studies were conducted in the general education setting.

Certainly, it is important to address the self-injurious behaviors exhibited by some students. It is equally important, however, that behaviors exhibited in high-incidence populations and within the general education setting need to be addressed. Legal mandates suggest that the general education classroom is the “least restrictive environment” in which to begin modifications and adaptations.
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for children with special needs. Teachers apparently feel comfortable adapting
their instruction in the regular classroom to meet the mandates for least restrictive
environment in most cases (McLean, 2000).

The one exception to this comfort level, according to McLean, is in the
area of behavior modification. It is, therefore, entirely possible that impediments
to the implementation of positive behavior supports occur in the general education
classroom, whether or not those behavioral difficulties are adequately addressed
through the functional assessment or the resulting behavioral intervention plan.
This paper seeks to identify the reasons why teachers might experience unease in
implementing behavior intervention plans in the regular education classroom.

Treatment integrity (or procedural integrity) is one concern in the
implementation of behavior intervention plans. Treatment integrity is a measure
of the accuracy of implementation of the strategies called for in the behavior
intervention plan. Information supplied by Wickstrom, Jones, LaFleur, & Witt
(1998) suggests that the accuracy of such treatment integrity data decreases as the
level of methodological rigor increases. When only a teacher-completed checklist
measured treatment integrity, the treatment integrity measurement was much
higher than when confirmed through observation by the researcher. Since it
appears obvious that there is a relationship to be assumed between the integrity of
the treatment and the outcomes of the intervention, such measurements become quite important. "If treatment integrity is not assessed and treatment outcomes are positive, it is difficult to determine if effects are because of the effectiveness of the intervention or to other, extraneous factors. (Sterling-Turner, Watson, Wildmon, Watkins, & Little, 2001, p. 57)."

Teacher Input into the FBA/BIP process

Ervin, Kern, et al. (2000) suggest that teacher input in the development of the hypothesis concerning the function of the negative behavior likely increases treatment integrity. In their report of three case studies, teacher participation in the development of hypotheses for treatment resulted in high procedural integrity in all but one instance. Teachers did report that task requirements and manipulation of the environment were easier to implement than contingent delivery of teacher attention.

Unfortunately, collecting teacher input is not often the case. In the literature review of Ervin, Radford, et al. (2001), only 44% of the reported functional assessments reported involving school personnel in the information-gathering stages of assessment. In only 35% of the cases were school personnel involved in testing the hypotheses formulated (functional analysis), and in only 23% of the studies were the school personnel the primary providers of the
intervention. Stimson & Appelbaum (1988) report that teachers often complain that they are told who, what, and when to teach, without input into the decision-making process. This educational “taxation without representation” can result in long-lasting and negative feelings towards the person perceived to be in power as well as toward the student for whom the intervention was designed (Stanviloff, 1996).

**Effects of training**

Sterling-Turner, et al. (2001) believe that teachers and parents are often undertrained to participate in the assessment and intervention of problem behaviors. In their study, care givers were trained in the implementation of interventions using didactic, modeling, or rehearsal/feedback methods. Their results suggest that direct training (modeling or rehearsal/feedback) led to higher treatment integrity than simple didactic training, and that the less direct the training (modeling), the lower the integrity to treatment. These researchers assert “many consultants verbally outline (and perhaps write) a treatment plan for a teacher or parent and then expect the consultee to have the knowledge and understanding of the plan to perform it effectively. Most consultants do not know upon entering the consultation relationship if consultees have the requisite skills
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and knowledge regarding the behavioral treatments to implement the protocol effectively” (p. 63).

Effects of feedback for performance

Witt, Noell, LaFleur, & Mortenson (1997) found that teachers followed recommended treatment protocols for only a few days, even following an initial and intensive training program. Giving performance feedback to the teachers concerning their integrity to treatments and their strategies addressing student behaviors raised the amount of treatment integrity by significant amounts. Treatment integrity results were maintained after performance feedback reviews were terminated for only three of the four teachers involved, however.

In a follow-up to that study (Noell, Witt, Gilbertson, Ranier, & Freeland, 1997), teachers referred children for academic performance difficulties. After an assessment of the child and review of that assessment with the teacher, an intervention was designed and teachers were given brief (consultative) instructions in the intervention plan. Each intervention was designed with a series of steps. Each step resulted in a permanent product documenting integrity of the implementation of that step. Measurements were taken of teacher compliance with the suggested intervention. Then, performance feedback was provided to the teachers concerning their integrity to recommended interventions. Results again
demonstrated that teacher compliance with intervention integrity increased when performance feedback was provided. Additionally, student performance increased and was maintained better as intervention integrity increased.

**Support for regular classroom teachers**

Stoler (1992) studied responses from 182 teachers in six school districts regarding their perceptions towards the inclusion of students with special needs in the regular classroom. Stoler reports that teachers often feel frustrated by a lack of resources and support to properly teach mainstreamed students with special needs. The teachers went on to indicate that they felt a general feeling of helplessness after being left out of decision-making processes. The teachers were concerned about their lack of training in special needs, especially medical needs, of the children being mainstreamed into their classrooms. Interestingly enough, teachers with the most years of experience were least likely to have positive attitudes toward the inclusion of special needs children into their classes.

Clearly, there is a call to move from experimental situations, conducted by researchers, to the real-world environment of the classroom. Additionally, to meet the needs of children as mandated by IDEA '97, assessments and interventions for children with high-incidence disabilities and behavioral difficulties must be addressed with some confidence that such interventions are
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effective. Since school personnel in general, and teachers and administrators in particular, are on the "front-line" in this need for the provision of services, it is logical to begin a training program for those individuals. Stoler (1992) states it succinctly, "In-service training cannot be accomplished in one day workshops. This training must be comprehensive and complete before the inclusion process takes place" (p. 62). To assure treatment integrity, treatment acceptability must become a major component. Persons without training in the behavioral fields must understand the foundational assumptions of such treatments to engage in them with a feeling of confidence in the results. It appears from this review of literature that they also need consultative services and performance feedback to remain true to the intent of the intervention.

To date, there appears to be limited data indicating the degree of acceptability of functional assessment and recommended interventions that teachers in the regular education classroom and other "front-line" personnel must be willing and competent to implement, especially for children with high-incidence disabilities (or no diagnosed disabilities at all). Even though mandated by law, the treatment integrity to such interventions would appear to be affected by teacher training and consultation/performance feedback from trained personnel regarding those interventions. Are teachers comfortable with the concept of
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functional behavioral assessment and confident of the results suggested by those assessments? Are they adequately trained to engage in these interventions with confidence? Are they supported to an adequate degree by consultation with or performance feedback from trained personnel? Are they provided with sufficient manpower and materials to carry out recommended interventions? This survey design and analysis seeks to address the deficit in the literature concerning teacher acceptability of the functional behavior assessment/behavior intervention plan processes as mandated by IDEA '97.

Method

Participants

The resulting survey was administered to a convenience sample of currently practicing, regular education teachers attending classes at one of two Southeastern universities. Before administration of the questionnaire, participants were asked to verify that they had taught in a regular education classroom for at least one year. A statement of informed consent was issued with each questionnaire giving the reasons for the study and the availability of results, should they be requested. Participants were informed that (a) their participation was entirely voluntary, confidential, and anonymous; (b) that they had the right to withdraw from the study at any time without penalty; and (c) that completion of
the questionnaire was construed as permission to use the answers in group-wise analysis.

Participants (n = 39) represented all teaching grade levels of experience from preschool (6%) through elementary (24%), middle school (29%) to high school (41%). Respondents had an average of 7.4 years of experience, with a range of 1 to 30 years. The majority of the teachers (79%) reported that their employing school district would be considered rural, while 15% felt they worked in an urban setting and 6% felt they worked in a suburban setting.

**Instrumentation**

A survey design was used to explore the factors determining teachers' willingness to have input into the functional assessment and their willingness to comply with behavioral interventions following that assessment. A 53-item questionnaire was prepared that was intended to explore the teacher's knowledge of the functional behavioral assessment and behavioral intervention process, the amount of input the teacher has had in either the functional behavior assessment or the behavior intervention plan, the amount of behavioral training the teacher had received in either formal or informal situations, the level of confidence that the teacher feels in the implementation of a behavior intervention plan, and the
amount of support provided by special educators in meeting the behavior intervention plan.

Procedure

The questionnaires and informed consents were presented to participants during class periods. Respondents were told the purpose of the study, how the results were to be analyzed, and how confidentiality of the materials was to be maintained. Participants were asked to verify that they were regular education teachers with at least one year’s experience. They were then instructed to read the letter of informed consent, and if they wished to continue, to respond to a questionnaire. Pencils were available to the respondents, if needed. Administration of the questionnaire took approximately 15 minutes for each participant.

Results

The results were analyzed with regard to the hypothesized correlates to teacher adherence to treatment, namely perceived support from special education personnel, administration, and other teachers; perceptions of efficacy of the functional behavior assessment/behavior intervention planning process; amount of training received in formal settings as well as through in-service opportunities;
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and degree of involvement in the functional behavior assessment/behavior intervention planning process.

Sixty-two percent of the respondents indicated that they had never been involved in either a functional behavior assessment or a behavior intervention planning/implementation. They reported a mean of 5 students identified as eligible for special education services in their classes, and an additional 4 children “at-risk” of educational failure because of behavioral problems. Forty-six percent of the respondents having been involved in the process did not feel that the assessment process gave them enough information to correctly identify the function of the behavior-of-concern, yet 73% made recommendations for the behavior intervention plan.

Forty-four percent of the respondents kept behavioral records on a weekly basis, while 16% did not attempt any documentation. Forty percent reported that no one ever reviewed their documentation. The strongest support system appears to have been from administrators (50%), while “some support” was received from special education personnel (45%) and from other teachers (36%).

Respondents had received an average of 2 college courses that addressed behavior modification, but less than half of that amount of time was spent discussing implementation of behavioral interventions. Respondents indicated an
average of 1.9 in-service opportunities within the last 5 years addressing behavior modification. Eighty-nine percent had not attended any professional teaching conference sessions relating to the functional behavior assessment/behavior intervention planning process within the last year.

Only 11% of the respondents felt “very confident” that they could carry out a behavior intervention plan. Thirty-four percent felt “confident” while 46% were only “somewhat confident” that they could carry out a behavior intervention plan. Nine percent were not confident at all of their ability to carry out a behavior intervention plan.

Forty-nine percent of the respondents felt that functional behavior assessment/behavior intervention plan process was an effective way to deal with children with behavior problems. Eleven percent felt it was not and 40% didn’t know if the process was effective or not.

Discussion

Teachers were asked to respond to several questions relating to each of the following constructs: training in the functional behavior/behavior intervention process (through college coursework, in-service opportunities, and professional conference presentations), amount of support received from others (including special education personnel, administration personnel, and other teachers), and the
input each teacher perceived they had in the assessment and the design of the intervention. Results of the survey were analyzed to address each of these areas.

Of interest is the fact that while 62% of the respondents had never participated in the process, they had an average of 4 children “at-risk” of failure because of behavioral concerns in addition to the average of 5 children already identified as eligible for special education services. This could be interpreted as being unaware that the functional behavior assessment/behavior intervention planning process can be used for children who are not receiving special education services.

Teachers have received minimal training in behavior modification procedures and seem to lack confidence in carrying out complicated behavior intervention plans. This appears to have an effect on their perceived efficacy of the functional behavior assessment/behavior intervention planning process.

The constructs addressed in the questionnaire used for this study would appear from the review of literature to be valid elements in teacher integrity to treatment. It is proposed that another area of needed research would correlate data from the number of behavioral assessments actually conducted in a given school system with the numbers of teachers who say that they have participated in the process.
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References


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Signature: Louann Gum

Printed Name/Position/Title: Louann Gum

Organization/Address: 1525 Hillsdale Dr

Telephone: 931-528-8006

Date: 7 Nov 2002

E-Mail Address: lg@charter.net
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