

RESEARCH ARTICLE

A Longitudinal Study of Behavioral Consultation in Inclusive Preschool Classrooms

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Teachers in early childhood classrooms face a diverse child population, including children with developmental delays and differences (DD), requiring teachers to exhibit professional skills to address a broad spectrum of developmental needs. At times, early learners with and without DD exhibit challenging behaviors (e.g., aggression, tantrums). Nevertheless, teachers find themselves ill-prepared to manage such behavior and teach under these circumstances due to limited training in classroom behavior management. Applied Behavior Analysis (ABA) is an effective treatment for children with various developmental differences and has proven successful in classroom settings when applied. This report describes a behavior consultation model used in a four-year project in 44 early childhood classrooms with 196 teachers and 97 children identified as having developmental delays and challenging behavior. Recommendations for choosing a behavior consultant for similar settings and a discussion of recurring behavior strategies recommended are presented.

Keywords: behavioral consultation, inclusion, early childhood education, developmental delays, applied behavior analysis

INTRODUCTION

The Education of the Handicapped Act Amendment of 1990

The 1990 Amendment (Public Law 101-476) to the Individuals with Disabilities Act of 1976 mandates that children be placed in the least restrictive classroom environment. The law supports an inclusive early childhood education (ECE), where children with and without disabilities are taught together in the same classroom environment, which for many children, is considered best practice (Odom, 2000). For teachers to successfully meet the needs of children with diverse development in a single classroom environment, they must have the combined knowledge of

evidence-based practices of ECE and early childhood special education (ECSE). Teachers need knowledge of each child's developmental, behavioral, and pre-academic skills and the competency to teach to these unique needs.

Teacher Preparation in ECE and ECSE

Inclusive education seeks to teach children at varying developmental stages and ability levels in a shared environment. However, many teacher preparation programs remain isolated in their training, focusing on general or special education. As a result of narrowly focused training programs (i.e., either ECE or ECSE with little to no cross-training), graduates are only partially prepared, without the knowledge or competency to meet the broader needs of developmentally diverse learners. Segregated teacher preparation is not a new concern in early education. Historically, significant emphasis has been placed on the importance of collaborative and comprehensive teacher preparation to succeed in inclusive practices (Bergen, 1997). In 1994, Kemple argued that educators trained to meet all children's needs are what allow successful inclusion in early childhood programs (Kemple, 1994). Additionally, comprehensive training in ECE and ECSE heightens the possibility for children in inclusive settings to receive the highest quality education possible (Bruder, 1998). Decades later, this problem remains a focal point in teacher preparation research (see Guralnick & Bruder, 2016; D'Agostino & Douglas, 2021a) and headline practice guidelines (see Bruder et al., 2021) for ECE and ECSE.

Challenging Behavior in Early Childhood Spaces

A particular area of concern for young children with disabilities is the impact of challenging behavior on social-emotional development. Challenging behavior is defined as disruptive behaviors which negatively impact learning and social engagement opportunities, decreasing the child's opportunity for developmental progress (Dunlap et al., 2006). Challenging behaviors can disrupt the learning environment and may escalate to more injurious actions, potentially beginning with tantrums and increasing the harm to self and others (e.g., head banging, biting, and property destruction; Erturk et al., 2017). In ECE/ECSE classrooms, these behaviors often manifest as aggression toward peers, elopement, and tantrums requiring teachers to be trained to prevent and respond to these behaviors effectively. While many early education teacher preparation programs require classroom management and guidance coursework, specific training on strategies to prevent challenging behavior and teach replacement skills is less common (D'Agostino & Douglas, 2021b). In a survey of teachers in the state of Virginia (Granja et al., 2018), participants (N=918) described challenging behaviors (e.g., impulsivity, over-active, refusal, limited ability to follow directions, aggression) to occur daily and interfere with their care of other children and interfere with peer learning overall. Over 50% of the teachers in this survey reported that teacher training and access to specialists would decrease challenging behavior and better support classroom teachers (Granja et al., 2018).

Behavioral Consultation

One solution is to continue teacher education through behavioral consultation. Consultation is defined as an expert passing their knowledge and skills to a mentee, who, in turn, can implement this newly learned approach (Kunze & Machalicek, 2021). More specifically, behavioral consultation includes a behavior expert mentoring a classroom teacher on strategies to decrease challenging child behavior.

Behavioral consultation can provide training in various situations. For the early childhood educator, this type of consultation may provide specific guidance on setting up classroom environments, allowing for increased learning and communicating expectations for children to succeed. Additionally, the behavioral consultant may observe during active classroom times, allowing for feedback on supporting play between peers. The behavioral consultant may model behavioral strategies during role-play scenarios before asking the teacher to implement the strategy directly with a child. Praise and corrective feedback can be provided to the teacher when demonstrated in the classroom. Teacher progress and areas of focus for practical improvement can be tracked independently. Such self-evaluation data allows the behavior consultant to recognize skill deficits in teaching strategy implementation and adjust the appropriateness of these strategies to best meet the child's needs. Behavior consultants guide educators in using this data to make data-based decisions in the classroom. This example, behavioral skills training, is often utilized in behavioral consultation (see Kirkpatrick et al., 2019).

The Present Study

In a 4-year project implemented by the authors, behavior consultants provided recommendations to ECE/ECSE teachers in inclusive classrooms. Overall, 44 early childhood classrooms were visited, with 196 teachers and 97 children. Using the data from this 4-year project, the present study will:

1. describe an effective behavior consultation model,
2. emphasize critical factors to consider in choosing a behavior consultant, and
3. highlight recurring behavior recommendations, including two case samples.

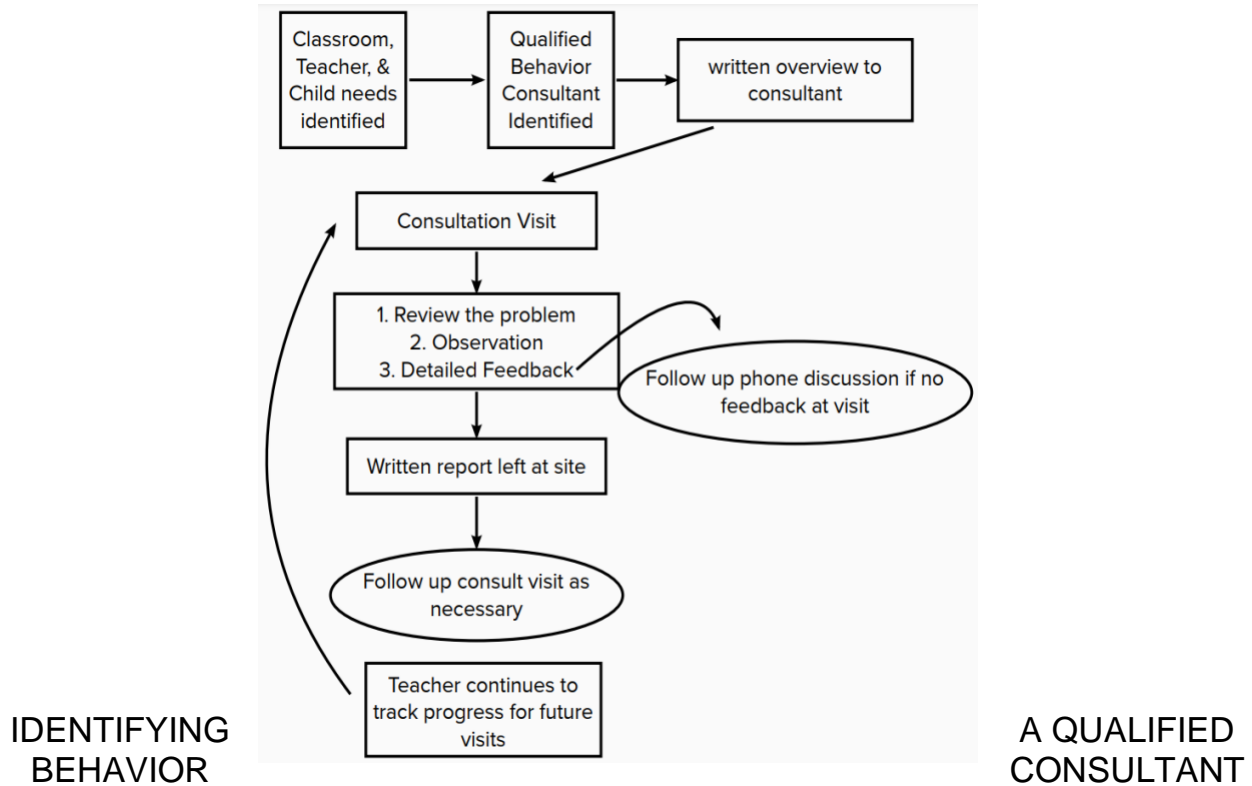
A BEHAVIOR CONSULTATION MODEL

Behavior consultants were employed by a non-profit agency focusing on children and families with DD. This agency partnered with a school district in a southern US state to provide behavioral consultation to preschool programs in the public school district. The behavior consultants were Master degreed Board-Certified Behavior Analysts (BCBA) or doctoral level BCBA's with a minimum of five years of experience (range of 5-12 years). Childs were identified by the school or center supervisor as exhibiting challenging behavior which warranted outside assistance. Each classroom teacher agreed that a behavior consultant would assist in training them to respond better and prevent challenging behaviors in their inclusive learning environment.

Between two and six consult visits at various time points throughout the school year (i.e., August to May) were provided to each site. Visits were 60 to 90 minutes in duration and occurred most often in a classroom, cafeteria, or playground setting. Before the consultation visit, a written overview was provided to the consultant describing the classroom, staff, and focus child.

Consultation visits included a review of the problem, an observation, and detailed feedback. The review of the problem was a brief discussion between the consultant and the classroom teacher. This meeting was an opportunity for the teacher to describe the challenging behavior further and include what supports were currently in place. This review also included a brief history of the child. In some cases, the consultant reviewed the child's individualized education plan (IEP) to identify some developmental skills. Following the review, the consultant completed their observation in the chosen setting. The consultant looked for the child's expressive and receptive language, interactions with materials, and social interactions with peers. The consultant also took note of the teacher-child interactions, classroom management and routines, and adult behavior in the room. Because the consultant did not intervene, work with, or model behavioral strategies directly with the child, detailed feedback was necessary to provide a clear suggestion. Following the observation, the consultant created a written report of their observations, including strengths and suggestions. This report provides documentation to the classroom teachers, paraprofessionals, and center director for future reference. When specific strategies needed to be demonstrated for clarity to a classroom teacher, the director arranged for the teacher to leave the classroom to meet with the consultant or schedule a visit within a few days. Ideally, the behavioral consultant presented and discussed recommendations with the teacher and director before leaving the site. However, this was not always possible. Follow-up phone discussions occurred with the supervisory team on an as-needed basis between consult visits when an in-person meeting did not occur. Individualized return visits were unique to each site and situation. Figure 1 provides an overview of the consultation model.

FIGURE 1. Behavioral Consult Model



Several considerations should be taken when selecting a behavioral consultant. The first consideration is the experiences and expertise of the potential consultant. Consultation requires expert knowledge and is difficult to define by time rather than the experiences of a position (Kunze & Machalicek, 2020). Behavior consultants should consider themselves an expert in ECE/ECSE and be able to partner with other professionals when necessary to broaden their knowledge in practice (Nancarrow et al., 2013). The behavioral consultant should have experience working with young children of various levels of development and abilities in a classroom environment. It is expected that early in their career, the potential consultant has extensive mentorship, which guides their practice toward expertise. For example, as described in the Behavior Analysis Certification Board (BACB) ethics code, new BCBA should work under the guidance of an experienced BCBA for 12 months following certification when they are providing supervision to those accruing fieldwork experience towards certification (BACB, 2021). Further, less experienced BCBA should seek guidance until they are confident in their practice and fluent enough to teach others as required when in a behavior consultant role.

Selecting a behavioral consultant with experience in working with culturally diverse children and teachers is advisable to understand the importance of cultural practices within a classroom tailored to a particular population. Such considerations include languages spoken in the classroom, languages spoken in the home, and knowledge of cultural considerations demonstrated in communication and activities (Cycyk & Duran, 2020). Experience with culturally diverse children is recommended as a secondary consideration. Similarly, the consultant should have experience working with professionals from various cultures. Such experiences will increase the opportunity for open communication and recognition of bias during such interactions.

Third, the variation of child ability and developmental needs of each child should be matched with the experience and knowledge of the behavior consultant. For example, a child who falls asleep regularly during active classroom times may have a poor sleep schedule at home. Following the principle of parsimony (i.e., identifying the most straightforward and accurate explanation for behavior first), consultants should recognize the need to conduct a medical rule out prior to suggesting classroom strategies (Cooper et al., 2020).

While it may seem redundant to highlight the knowledge of behavior as a consideration for a behavior consultant, we feel compelled to add it to the list of considerations. The consultant needs to have experience with various behaviors. Despite certification, training, and experience, one consultant cannot have experience in every challenging behavior. For example, suppose a child engages in severe challenging behavior such as self-injurious behavior. In that case, it is recommended that the behavioral consultant have experience in self-injury prevention and de-escalation techniques. Thus, knowledge and practical experience in the challenging behavior in the classroom environment targeted for consultation is an important consideration when choosing a professional to train a teacher.

Additionally, the teacher's experience level should be considered when pairing them with a behavioral consultant is a fifth consideration. For example, the support necessary to guide a new teacher with less experience is more intense and may include comprehensive classroom management and environmental arrangement suggestions. A more seasoned teacher seeking support for one particular child may require a behavior consultant who is exceptionally competent in working with specific populations of children.

Lastly, we recommend that the behavioral consultant be a BCBA, as BCBA's have specialized training to provide behavioral consultation (BACB, 2021). It is important to note that not all behavior analysts have experience in ECE settings. In this case, we recommend prioritizing experience over credentials. If the behavioral consultant lacks the experience mentioned above, the behavioral consultant should have a mentor they can consult with who has this experience. This mentor can be a supervisor or colleague. This information is often lacking from a resume or curriculum vitae. As such, engaging in conversation about this topic may be necessary to determine the behavioral consultant's experience. Table 1 provides a list of the considerations discussed here.

TABLE 1. Considerations for Choosing a Behavior Consultant

Characteristic	Example in Practice
Experience	\geq three years of experience in ECE/ECSE Practice with young children in classroom settings Considers themselves an expert in some behavior and consulting topics
Cultural Diversity	Explores personal bias to decrease its influence on work Recognizes the importance of cultural and linguistic differences

Knowledge of Developmental Differences	Experience with a broad range of disabilities and disorders Signs and symptoms of some disorders
Knowledge of behavior	Classroom management skills Self-injurious behavior experience
Varied Practice	Work with new teachers Work with experienced teachers
Board Certification as a Behavior Analyst	Adheres to ethics code to seek assistance when work is outside the scope of experience

EFFECTIVE BEHAVIORAL STRATEGIES

Trends in behavioral strategies recommended to classroom teachers over the four-year projects emerged. Table 2 lists the ten most frequent recommendations with corresponding examples of classroom concerns. As not all recommendations were ranked as top occurrences for all four years, the table also shows how many years that recommendation occurred in the top ten. Table 2 also shows detailed data on the top 5 strategies most often recommended in year 4 of the project. The number of children for which a particular recommendation matched their challenging behavior. For example, the recommendation of teaching a child to follow directions was in response to 30 of the 38 children involved in the consulting sample. Thus 79% of children observed were thought to benefit from their teacher focusing on teaching the child to follow directions by creating clear transitions and consistent routines and individually explaining these expectations.

TABLE 2. Top Recommendations During Behavior Consultations

Top 10 Recommendations	Sample classroom concerns to change through consultation	Years Occurred	Year 4** (N=38)
Teach a child to follow directions by clearly communicating expectations*	Chaotic transitions Unestablished routines	1,2,3,4	30 (79%)
Teaching child to request	Child difficulty requesting help Limited vocabulary	1,2,3	
Encouraging/supporting peer interactions and play skills*	Aggression during play and group time Wandering	1,2,3,4	19 (50%)
Use reinforcement effectively	Disruptive behavior to seek attention Attention given to unwanted behavior	1,2,3,4	14 (37%)
Individual expectations with consideration for classroom community	Elopement due to different expectations Imitation of disruptive behavior as an escape	2,3,4	17 (45%)
Communication system	Tantrums Limited receptive or expressive language	1,2,3	

Supporting self-help skills	Child inability to complete the task Learned helplessness with high teacher attention	1,2,3	
Using visual supports	Unclear classroom schedule and expectations Unsure of appropriate behavior	1,2	
Prevent disruptive behaviors, identify the function and teach replacement*	Time out or child sent home Teacher responding incorrectly to child's needs	2,4	22 (58%)
Meet sensory needs	High classroom noise level Chaotic activity level	2,3	

Note. *Case examples are presented for these recommendations; ** this column represents the number of children that benefitted from this recommendation. These numbers are provided for the top five most frequently used recommendations in year 4.

Case Examples

To further clarify the relationship between consult recommendations and classroom concerns, the two case examples below highlight teaching children to follow directions through clear expectations. While the names of the children and teachers have been changed, the description, recommendations, and data are actual.

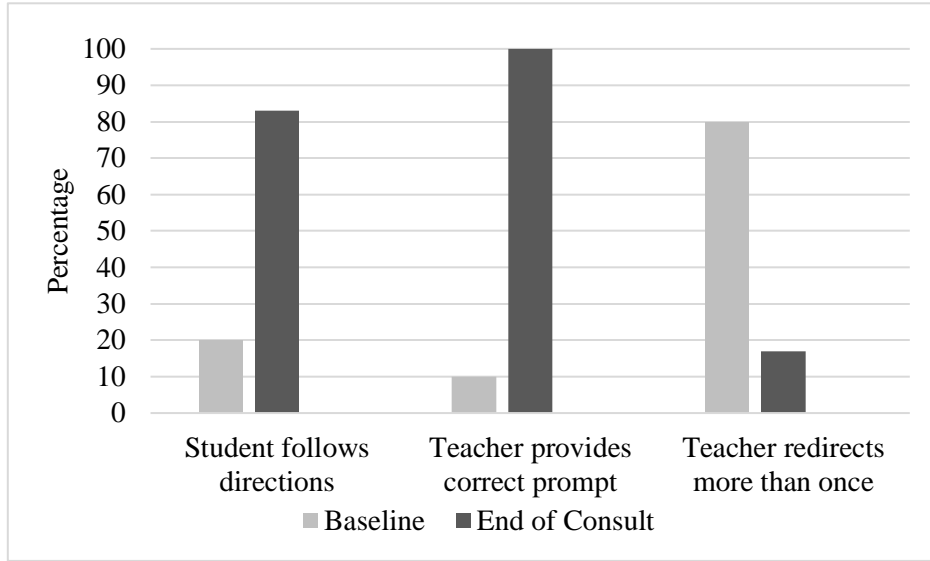
Case Example 1: Teaching a Child to Follow Directions. Teachers were taught to work towards the child's success in independently following directions by gradually decreasing the level of assistance provided. This strategy was recommended when teachers gave directions (whole group or to a specific child), and one or more children did not follow the directions independently or with support. Therefore, the teacher presented the request so a child could follow a directive; if they did not, teachers were taught to provide a child with increasing levels of assistance to encourage child success. In behavior analytic terms, helping a child respond correctly is called prompting, and gradually decreasing assistance is known as fading.

Ms. Acosta was a new teacher who reported that a 4-year-old child in her classroom, Iris, did not follow directions most of the time. When the behavioral consultant observed, she noted that Iris independently followed classroom directions during Circle time 20% of the time. The behavioral consultant also noted that Ms. Acosta provided clear directions 50% of the time. In addition, the behavioral consultant noted that 20% of the time, other children prohibited Iris from following directions (e.g., distracted Iris, unintentionally blocked pathway). Iris did not say or do anything when this occurred. The consultant made the following recommendations:

1. Continue expecting Iris to follow through with the teacher's request, even when the child engages in inappropriate behaviors (i.e., crying, screaming, stomping, tantrums).
2. Be firm, clear, and immediate with choices (e.g., First, throw away snack trash, then play).
3. Teach Iris words and gestures to communicate with peers and adults.
4. If bullying behavior is observed, intervene, and teach Iris how to respond.

Ms. Acosta received feedback and coaching regarding implementing the abovementioned recommendations six times throughout the school year. By the end of the school year, Ms. Acosta provided clear directions 100% of the time and Iris independently followed directions 83% of the time. See Figure 2 (on next page) for additional outcome data.

FIGURE 2. Following Directions in Class



Case Example 2: Prevent Disruptive Behaviors, Identifying the Function, and Teach Replacement. This strategy was recommended when the child is engaged in disruptive school behavior. Disruptive behavior included leaving an area without permission, biting, spitting, pinching, hitting, throwing toys and furniture, and screaming. These behaviors occurred when the child was asked to begin or end an activity, get or give up the item, and when the child was given attention or, in contrast, was not given attention.

Table 3 shows common reasons children engage in disruptive behaviors in ECSE classrooms along with recommended strategies to prevent disruptive behavior, responses, and replacement behaviors.

TABLE 3. Common Disruptive Behaviors Observed in ECSE Classrooms

Child Reason for Challenging Behavior	Prevention Strategies Taught to Teacher in Consultation	Behavior Taught to Child by Teacher (Replacement Skills)
Obtain Attention	<ol style="list-style-type: none"> 1. Provide frequent attention and reinforcement 2. Schedule time with adult or peer 3. Engage in activity with the child 4. Give choice of partner 	<p>Raise hand</p> <p>Say “help” or “person’s name”</p>
Obtain Tangible	<ol style="list-style-type: none"> 1. Give choices of items/materials 2. Prompt appropriate request for items 3. Scheduled access to desired object 	Teach appropriate request for items

		(later teach waiting and accepting no)
Obtain Activity	1. Give choices of activities 2. Prompt appropriate request for activities 3. Use activity schedules 4. Provide something the child likes for completion of activity 5. Scheduled access to desired activity	Teach appropriate request for activities (later teach waiting and accepting no)
Escape Attention	1. Scheduled breaks 2. Modify seating arrangements	Appropriate request for time alone
Escape Tangible	1. Prompt appropriate refusal of items	Teach appropriate refusal of items (e.g., no thank you, I don't want any)
		Teach to tolerate activity
Escape Activity	1. Teach appropriate refusal of activities 2. Add fun materials 3. Modify task length, expectations, materials, instructions, response mode, and seating arrangement 4. Break task down to make it easier 5. Reduce distractions 6. Provide peer supports	Teach appropriate refusal of activities (e.g., no thank you, I don't want to do that) Teach following directions Teach to request help

Case Example 3: Needs Description. In September, the behavioral consultant observed Carlo in Ms. Bridget's classroom. On the behavioral consultant's first visit in September, she noted that Carlo engaged in challenging behavior for 8 minutes during a 10-minute segment of time. His teacher directed Carlo to join circle time 20 times before responding. He responded with verbal refusal (e.g., "I don't want to!"), property destruction (e.g., throwing items within reach), and elopement (e.g., attempting to leave the classroom with the item he was asked to give up). When he eventually went to circle, he stayed with the group for 2 of the 10 minutes. Although Ms. Bridget constantly told Carlo to do something, she only provided clear directions (i.e., made eye contact, stood at child level, ensured she had Carlo's attention) 50% of the time.

Because Carlo was engaging in the typical disruptive behavior called escape activity (see Table 3), Ms. Chavez was asked to respond to disruptive behavior by adhering to the following recommendations:

1. Add fun materials to circle time activities.
2. Modify expectations and instructions to be sure Carlo hears the instruction.
3. Reduce distractions by moving Carlo's seat away from the classroom door.
4. Be clear and consistent with directions (e.g., make eye contact, get down on the child's level, and ensure you have his attention before providing a direction).

After four behavioral consults, Carlos went to circle time after the teacher gave two verbal reminders. He followed directions for all 10 minutes of circle time. Additionally, Ms. Chavez was observed to give clear directions 90% of the time.

CONCLUSION

Administrators can suggest behavioral consultation to train teachers in ECE/ECSE classrooms to meet the needs of a diverse population, including children with developmental delays and differences. A qualified behavior consultant can decrease challenging child behavior and increase developmentally appropriate teaching strategies. The behavior consultation model described here is just one example of consultation options for early educators. While it is recommended that schools seek outside support to address challenging behavior, administrators should review the behavioral consultant's qualifications for the best fit. The strategies presented in this report are some strategies a behavior consultant should have expertise in implementing in an ECE setting. While behavioral consultation can provide training in various situations, the outcome is for teachers to receive the necessary training from an expert, so they can, in turn, become experts themselves in decreasing challenging behaviors in their classroom environments.

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