

Behavior Intervention Flow Chart: A Strategic Tool for Managing Challenging Behaviors

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Abstract

Research has determined that behavioral intervention plans (BIP) based on functional behavioral assessments (FBA) are the most effective interventions for problem behavior in K-12 classrooms. Special education teachers generally learn the FBA/BIP process in preservice behavior management courses. However, most general education teachers take more generic classroom management classes. General education teachers are not typically required to take courses focused on managing challenging behavior and often do not receive preservice or inservice training in behavioral supports. This article will review the use of the Behavior Intervention Flow Chart (BIFC), initially developed as a tool to be used to teach behavioral decision-making skills to preservice teachers in a university class.

Keywords

Challenging Behaviors, Behavior Intervention Planning, Professional Development

1. Introduction

Research has determined that behavioral intervention plans (BIP) based on functional behavioral assessments (FBA) are the most effective interventions for changing problem behavior in K-12 classrooms (Blood & Neel, 2007; Ingram, Lewis-Palmer, & Sugai, 2005). However, a US nationwide study of teachers found that even after in-service trainings in behavior assessments were conducted, a majority of teachers were not familiar with the term “functional behavioral assessment.” (Schiller et al., 2003). Scott, Anderson, & Spaulding (2008) determined that even after training, teachers tended to fall back on the use of punitive interventions, become more reactive, and provide negative consequences for student misbehavior. Another 2005 study found that in a content analysis of developed behavior intervention plans, 79% of the plans included provisions

for punishment and 46% of the plans included ONLY aversive consequences (Van Acker, Boreson, Gable, & Potterton, 2005).

Special education teachers generally learn to conduct a functional behavioral assessment (FBA) and then develop a corresponding behavior intervention plan (BIP) in pre-service behavior management courses. However, most general education teachers are not required to take such courses and do not receive training in the development and use of behavioral supports, specifically the FBA and BIP (Crimmins & Farrell, 2006). This gap in preservice preparation leaves educators under-skilled for teaching students with significant behavior challenges and keeps punishment and aversive consequences as the primary tools teachers use to manage challenging behaviors in classrooms.

2. Functional Behavioral Assessments (FBAs) and Behavior Intervention Plans (BIPs) in Practical Terms

In order to have a greater likelihood of developing a successful behavior intervention plan (BIP), there should first be a clear hypothesis, or the determination of a likely function of the problem behavior, therefore, the functional behavioral assessment (FBA) is critical to the development of a student appropriate BIP. An FBA includes a clear hypothesis statement which typically identifies at least three important parts—an antecedent, the behavior, and the function of the behavior. From this hypothesis, a plan is developed. These hypotheses are important components of an effective plan. Using the wrong behavioral intervention for a behavior may not only yield little to no improvement in a behavior, it can worsen a behavior. For example:

Kristen teaches 8th grade language arts. In her 4th period class, she has one student, James, who continually whispers profanity when she walks past or mutters it in response when she gives class directions. She has decided that rather than call attention to his misbehavior, she should use an intervention she read about in a classroom management book—planned ignoring. However, the longer she ignores his profanity, it only seems to increase and other students are now openly giggling and egging him on. Why isn't the suggested management strategy working?

Too often, teachers select an intervention hoping to put a quick stop to a disruptive behavior. Teachers may select interventions they have tried on other students, or those their colleagues suggest. To reinforce this behavior, teachers have even been provided checklist-type books on behavior (Wunderlich, 1988), outlining specific interventions to use when a specific behavior occurs. While that may work in the short term, it does nothing to teach a lasting appropriate behavior. Additionally, the list of interventions can be quite extensive. For example, in Wunderlich's 1988 book, looking up the student behavior "Does not remain on task," (p. 67) yields 37 different suggested interventions. However, none of the interventions are connected to a specific function, and there is no suggestion that there could be multiple reasons why a student does not remain on task. In the above example, our teacher Kristen tried a strategy that is often suggested to beginning teachers. However, that strategy would only work if the student was attempting to gain Kristen's attention, and from the continued and increased behavior, it appears

that James' goal is to gain his peers' attention, not Kristen's. Making this kind of error is the risk teachers take when choosing interventions at random, rather than in a function-based manner.

Attempting to address behavior problems in such a cookbook fashion can be time-consuming and ultimately not effective. A better approach would be to attempt a quick analysis of the student and the problem behavior. A teacher's first step should be to step back and objectively assess a problem student's behavior and why he/she does it. Teachers often don't take this step because they want to stop the problem behavior immediately, an understandable response. Second, teachers often utilize only aversive consequences as a response to his behavior, such as being sent to the office or sitting out recess time. Finally, and likely most problematic for teachers, with no hypothesized function, it is possible that rather than being aversive (as teachers often think), their "punishments" are actually viewed as positive by students, thus providing positive reinforcement to students for misbehavior and strengthening it.

3. Behavior Intervention Flow Chart

Understanding the principles of behavior management and then designing interventions does not have to be as complex as many teachers view them. That said, some attempts to simplify the process may not lead to consequential results for children. For example, some school districts use forms or checklists; however, this doesn't always yield meaningful conversation about useful and personally appropriate interventions for students during team meetings. Also, special education teachers or behavior specialists may use terminology or jargon that is new to a general education teacher creating miscommunication even when the interventions are ones the general education teacher could easily carry out. Shortcuts to improve problem behaviors in students are rarely effective or long lasting. The fidelity of an evidence-based practice, in this case FBA and BIP, have the greatest likelihood of success.

There are many components to developing FBAs and BIPs and all must be included in order for interventions to have the greatest chance of effectiveness (Taylor, 2011). Making these components and decision rules accessible to all teachers in an efficient and effective tool may be more impactful, purposeful and scientifically-based than random checklists and personal experiences.

The Behavior Intervention Flow Chart (IFC) was initially developed as a tool to be used to teach behavioral decision-making skills to preservice teachers in a university class titled, "Teaching Students with Disabilities in General Education Classrooms." The class was comprised of students preparing for careers in elementary education and secondary education. Because the course followed a basic survey course format, only one three-hour lecture class was dedicated to teaching behavior management skills. This article will describe the development of the BIFC, the implementation of the BIFC in two sections of the course, compared to one section without it, and suggest ways the BIFC could be used in all K-12 educational settings.

The Behavior Intervention Flow Chart (BIFC) in **Figure 1** provides a visual prompt

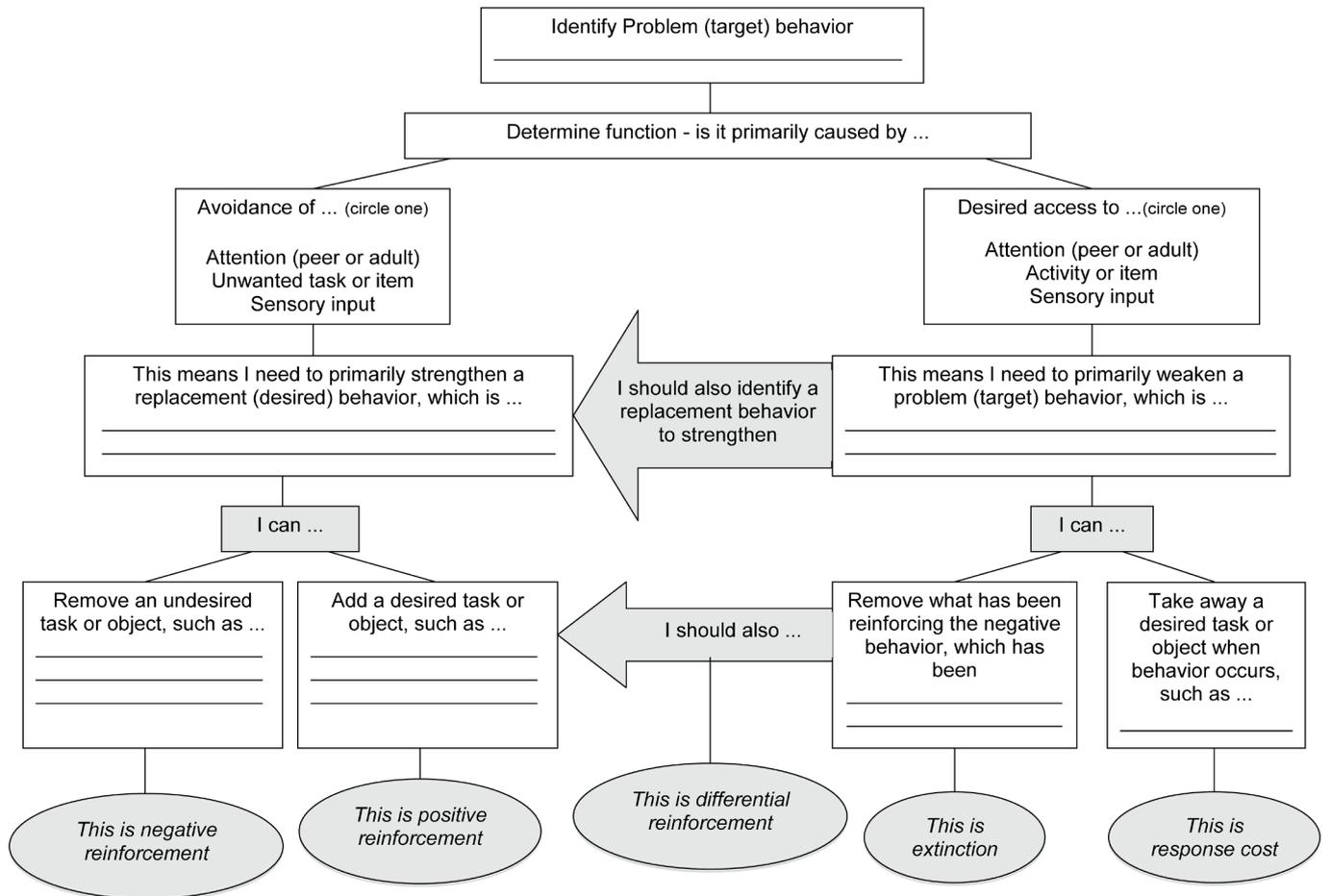


Figure 1. Intervention flow chart.

to ensure all components in the intervention process are completed. Further, it serves as a guideline during team meetings to determine the student-based interventions to be implemented, and is written and presented in such a way that it is understandable to all educators, regardless of their preservice training.

4. Development of the BIFC

The BIFC was developed as result of faculty struggling to effectively communicate how to determine the functions of behavior and identify effective interventions to elementary and secondary preservice teachers in an introduction to special education course. Because the course followed a basic survey course format, only one three-hour lecture class was dedicated to teaching behavior management skills. Students/preservice teachers received lecture material emphasizing the importance of determining the function of a behavior prior to developing implementation, then watched a video on the “FAST system” (IRIS Media, 2004) which also focuses on identifying functions of behaviors. Next, students/preservice teachers worked in pairs or small groups to complete a case study of a student with a behavior problem.

Impact of instruction. Students were asked the following question on the final exam, “You have a student in your class who is displaying a problem behavior. Completely describe the steps you would take to try and change the student’s behavior.” After summarizing the results, 10 out of 23 students (43%) did not indicate they would determine the function of the behavior and instead began stating possible interventions they would try. More concerning, five students (21%) indicated the first step they would take would be some type of punishment procedure. These responses suggested that the content and principles of behavior were not clear to students.

The BIFC was designed in response to the students’ responses on the course final exam. The purpose of the BIFC is to guide educators (elementary, secondary and special education) through a decision-making process to determine the functions of behavior and then determine appropriate interventions. Students made it clear in their test scores that it was easy to avoid components of behavior management and to guess at interventions. The BIFC was designed as a tool to demonstrate the connections between a hypothesized function of behavior to determining appropriate interventions, as well as leading intervention decision-making teams to first look at positive behavior supports rather than the less-effective punishment procedures.

The course was taught two additional times. Each time the same class materials were used, but an explanation of the BIFC was added. Students used the BIFC while making their decisions for their case study practice. Students were also given the same question about behavior on the final exam. In the first BIFC group, 15 out of 25 students (60%) indicated the need to determine function first, with only six out of 25 (24%) immediately implementing intervention. Even better, of those, only two (8% of whole class) indicated they would immediately use a punishment procedure, a noticeable improvement from the previous group. The second group that also used the BIFC had similar responses, despite being a larger group. Of 37 students, 23 (62%) indicated the need to determine function before designing intervention, and only six students (16% of whole group) indicated their first step would be to use punishment (see **Table 1**).

The results from preservice teachers test responses were positive, especially in light of the previous research conducted by [Van Acker, Boreson, Gable, & Potterton \(2005\)](#) demonstrating that in the developed BIPs they reviewed, 79% of the plans included plans for aversive consequences (i.e., punishment) and 46% of the plans included ONLY aversive consequences. Clearly, in-service teachers make many of the same er-

Table 1. Student exam responses before and after implementation of BIFC in course instruction.

Response type	Before BIFC ^a (%)	After BIFC Sem. 1 ^b (%)	After BIFC Sem. 2 ^c (%)
Determine function	10 (43)	15 (60)	23 (62)
Immediately implement intervention	8 (35)	6 (24)	12 (32)
Immediately implement punishment procedure	5 (21)	2 (8)	6 (16)

Note: response types do not equal total possible n as students may have not responded or gave responses unrelated to function or intervention. ^an = 23; ^bn = 25; ^cn = 37.

rors the preservice teachers made in their coursework. Considering that after utilizing the BIFC only once, only 8% of students in one group and 16% in the second group decided to focus on punishment procedures, it is possible that large-scale usage of the BIFC could help inservice teachers to develop BIPs that are focused on connecting interventions to functions of the problem behavior and teaching appropriate replacement behaviors, with less emphasis on punitive punishment procedures that have been demonstrated to be less effective.

5. Reasons to Use the BIFC in a Team-Based Decision Making Process in Schools

Scott, Liaupson, Nelson, and McIntyre (2005) studied the team-based FBA process and found several flaws, including the lack of consideration of behavior function when choosing interventions, and choosing interventions simply because that was the typical intervention in the school or “teacher has always used punishment and feels it is the only effective intervention” (p. 65). In her 2007 article, Park reviews a mnemonic device teams could use in making functional behavioral decisions; however, this methodology does not clearly connect specific interventions to common functions, leaving the special education professional in the position of educating the other professionals on the team as to the appropriateness of an intervention. This is problematic as past research has shown that team-based decision making for behavioral interventions is most successful when no one professional group (such as school psychologists or special education teachers) takes on sole ownership of the process; it must truly be a shared decision-making process (Gresham, Watson, & Skinner, 2001). Because lack of connection between behavior function and intervention is documented in past research, the BIFC was designed so that function must be considered, and teams will be prompted to utilize the most effective evidence-based practices to address behavior based on specific commonly occurring functions. For example, if the team identifies a replacement behavior or a positive behavior the student needs to increase, by using the BIFC they can clearly see that punishment strategies are not the appropriate evidence based practice to utilize. For example:

Oak Middle School's Intervention Team has started using the BIFC when planning Tier 2 services for students. Janice is a 6th grade student who often gets angry and argumentative with other students or classroom staff at the beginning of math class, usually resulting in her being sent to the office. The dean's initial response to Janice's behavior was to punish her by assigning her detention or additional loss of privileges. However, in examining the likely function of her behavior, the team determines Janice is probably trying to avoid math class and that they need to identify a desired replacement behavior—completing a modified assignment—and reinforce immediately and often. If she completes that assignment, they also reduce her homework requirement – removing something Janice views as negative—thus also utilizing negative reinforcement, using both types of reinforcement shown to be the appropriate practices for the likely function of Janice's behavior.

Another benefit of the BIFC is that while presenting the information without “jargon”, it does include technical terms so that knowledge of these terms will be reinforced for teachers using the BIFC. By using the BIFC during team decision-making, teachers can also learn skills they may be able to use with other students in the future (Gresham, 2004). There are four key steps in using the BIFC which are described below.

How to use the BIFC. First, team members identify a problem behavior (which in behavioral terms is called the target behavior). They need to make sure that the behavior they identify is one that is clearly observable and can be measured in some way. Terms like “aggression” are what Mager (1972) has called “fuzzy” because they can be interpreted in many different ways by different people. Instead, more specific target behaviors like, “using profanity towards teacher,” or “unwanted physical contact towards peers” are more specific and can be measured.

Once team members have their target behavior defined, the second step is to do some initial observation of the behavior or have someone else do the observation. Too often, teachers go with their instincts regarding the cause (or function) of a behavior. However, a brief objective observation and analysis of the behavior can sometimes provide us with a clearer picture of what is actually currently reinforcing that behavior. Generally, behavior can often be broken down into either avoidance of or desired access to one of three things: 1) attention (from peer or adult), 2) task, activity, or item, or 3) sensory input. The BIFC outlines these options. Teachers need to identify the possible function (creating a hypothesis) before moving on to developing interventions.

Once a function is hypothesized, team members can move to the third step in the BIFC. If the student is trying to avoid one of the three things above, the team needs to decide on a replacement behavior (what they would rather see the student do, instead of the target behavior), and develop a plan to teach or strengthen that behavior. If the student is trying to gain access to one of the three things, the team needs to plan to weaken that behavior. At the same time they do that, they also want to identify a replacement behavior to strengthen in its place. For example:

Kristen’s school has started using the BIFC and she brings her problem with James to the Intervention Team. They determine that his target behavior is using profanity in the classroom and the likely function is desired access to peer attention. That means they need to weaken his attention seeking through the use of profanity. Two of the options for weakening that behavior would be to 1) remove what has been reinforcing the behavior but since it would be difficult to completely control his peers’ reaction, that would be difficult, or 2) take away a desired task or object when the behavior occurs, which is possible, but utilizing only punitive measures will likely only yield a more negative environment. So the team knows they need to identify a replacement behavior, which in James’ case would be gain peer attention through positive actions. Kristen will meet with James outside of class time to determine what kind of class activities he finds acceptable to lead and give him the opportunity to do that, given that he refrains from using profanity. This gives him the opportunity to gain peer attention. She can also utilize student “allies” who will encourage and give him the attention he seeks.

The fourth step is determining how to strengthen a replacement behavior or weaken that target behavior. In strengthening a behavior, the team will use one of two reinforcement techniques. Positive reinforcement is the adding of a desired task, object, or item when the replacement behavior is exhibited. Negative reinforcement is the removal of an unwanted task, object, or item when the replacement behavior is exhibited. To weaken a problem behavior, punishment strategies are used. A student can be removed from a reinforcing situation (time-out) or the teacher can take away something the student already has and views as desirable (response cost). The teacher can also remove whatever she believes has previously reinforced the problem behavior (extinction). Introducing something the student views as negative into the environment is classic punishment.

Past research has indicated that the benefits of classic punishment are few and far between [see [Lerman and Vorndran \(2002\)](#) for a complete discussion on the factors influencing the effectiveness of punishment]. Because past research has shown that teachers may have a reliance on punishment procedures rather than the more effective reinforcement procedures and that these procedures are often used disproportionately with students of color ([Skiba & Peterson, 2000](#)), classic punishment is not one of the considerations on the BIFC in [Figure 1](#).

Response cost and extinction are included as possible methods for reducing problem behaviors, but if extinction is chosen, the team is prompted to also identify the replacement behavior to strengthen. Some forms of combining extinction with reinforcement are called differential reinforcement. Combining reinforcement of desired behaviors along with extinction of target behaviors makes it much more likely that the extinction process will be successful ([Martin & Pear, 2007](#)).

6. Conclusion

Many teachers learn classroom management skills in their preservice training. They learn to manage students during transitions, use proximity to control less intensive surface behaviors and ignore minor disruptive behaviors. With experience, general education teachers thrive at orchestrating the routines and behavioral expectations of their classrooms. However, many teachers struggle when problem behaviors intensify. Too often teachers become reactive and promptly resort to punishment or ineffective management strategies. To complicate the situation, general education and special education teachers often talk about behavior with a different vocabulary and struggle to communicate effectively about problem behaviors even before management strategies can be identified. The purpose of this project was to describe the development and use of the BIFC, a tool designed to assist teachers in identifying strategies for managing challenging student behaviors.

The BIFC will not be sufficient for solving all student problem behaviors. There will always be the small percentage of students who will need more intensive behavioral services. However, by utilizing the BIFC in schools, teachers can make sure they implement evidence-based practices and gather information that may be helpful should

the student need to be recommended for more intensive services. By providing a concrete tool for team-based decision making, all teachers can understand the principles of developing behavioral interventions based on function and all members can play an important role, regardless of their position in the school.

The BIFC provides all teachers with a decision-based tool for improving their knowledge about challenging behaviors and therefore changing student behavior in their classrooms. The goal is to control challenging behaviors with knowledge, skill and confidence. This will allow teachers to focus more attention on improving the instructional outcomes for all students. In summary, the BIFC can be used in preservice and inservice teacher education to prepare all teachers to play a meaningful and knowledgeable role in the behavioral decision-making process.

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