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To cite this article:

Ostryn, C., Wolfe, P. S., & Wertalik, J. L. (2023). Implementation of functional behavior assessments for individuals with developmental disabilities exhibiting sexually inappropriate behaviors. *International Journal on Social and Education Sciences (IJonSES)*, *5*(3), 435-451. https://doi.org/10.46328/ijonses.559

International Journal on Social and Education Sciences
2023, Vol. 5, No. 3, 435-451 https://doi.org/10.46328/ijonses.559

Implementation of Functional Behavior Assessments for Individuals with Developmental Disabilities Exhibiting Sexually Inappropriate Behaviors

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Article Info

Article History

Received:
29 March 2023
Accepted:
14 June 2023

Keywords

Functional behavior assessment
Functional analysis
Developmental disabilities
Sexual behaviors

Abstract

A functional behavior assessment is an evidence-based process that identifies the function of challenging behaviors in order for educators to develop behavior intervention plans for students with disabilities. All behaviors are under stimulus control and research indicates that behaviors typically serve four functions: tangible, escape, attention, and automatic. However, when individuals with developmental disabilities engage in inappropriate sexual behaviors such as exposing their genitalia in public places or groping a stranger, it is not typical for practitioners to implement this functional behavior assessment process as these sexual behaviors are often viewed as different from non-sexual inappropriate behaviors like screaming in class or throwing school materials. This article presents information of how to complete a comprehensive functional behavior assessment for three students with developmental disabilities who exhibit sexually inappropriate behaviors in school settings to highlight the usefulness of the functional behavior assessment process for developing behavior intervention plans for long lasting behavior change.

Introduction

Individuals with developmental disabilities may display inappropriate sexual behaviors such exposing their genitalia in public places or touching another person's body parts without consent. While educators may view these sexual behaviors as different or deviant from other inappropriate behaviors such as aggression or failure to remain on-task, they are under environmental stimulus control, irrelevant of their topography. For instance, one student may exhibit escape behavior by throwing a book across the class when given a difficult task she cannot complete, whereas another student may pull down his pants and expose his genitalia to escape a difficult task that he is unable to finish. The reasons for these behaviors are the same, even though one behavior was destruction of property, and the other behavior was inappropriate sexual behavior. Therefore, inappropriate sexual behaviors are also subject to the same assessment methods and interventions as non-sexual inappropriate behaviors as the reasons for occurrence of all behaviors are similar.

Behavior has been scientifically demonstrated to have a reason, a purpose to occur, a function (Cooper et al., 2019). Research indicates that behaviors typically serve four functions: tangible, escape, attention, and automatic (Hanley et al., 2003; Iwata et al., 1990). An individual may engage in a behavior to obtain a preferred item, such

as food or an activity such as access to a toy or phone. The escape function involves engaging in a behavior that removes a stimulus from the environment, such as opening an umbrella in the rain to escape getting wet, or an adult giving a tablet to a crying toddler to stop the noise.

Common behaviors to obtain attention may include saying a friend's name so you can tell them some exciting news or calling someone on the phone. Finally, the automatic function, sometimes also referred to as sensory, is a form of behavior that does not require an external variable to gain reinforcement, such as hair-twirling, lip-biting, or in some cases self-injurious behavior (SIB). It is not uncommon for one behavior to serve several functions (Hanley et al., 2003; Iwata et al., 1990).

Challenging sexual behaviors serve similar functions as other challenging behaviors. Individuals typically learn when and where it is appropriate to engage in social or sexual behaviors such as with one's partner, or in private. Most individuals also do not engage in inappropriate sexual behavior to gain tangibles, attention, or escape in generalized settings such as the classroom or grocery store. The challenge for educators and practitioners is that individuals with disabilities may be unable to discriminate what behaviors are appropriate at what times or with whom, and therefore engage in these types of inappropriate sexual behaviors to gain reinforcement in socially unacceptable manners and settings (Bailey & Burch, 2011; Carlson et al., 2008; Davis et al., 2016; Myers, 1991; Pritchard et al., 2011).

Typically, educators react to these types of behavior by removing the student from the classroom, reprimanding the student to be quiet and continue with work, or taking away a desired item. However, these common reactions treat the symptoms of the behavior and not the cause or function. The inappropriate sexual behaviors are occurring for a reason and if the source of a behavior is not correctly addressed then the behavior will continue and may even take another more inappropriate form. Therefore, it is vital to identify the function of inappropriate sexual behaviors in order to implement a behavior intervention plan (BIP) that meets the needs, or functions, of the students' behaviors in more appropriate ways. An evidence-based method for identifying functions of behavior is by implementing a functional behavior assessment (FBA) (Fitzsimmons, 1998; Flannery et al., 1995; O'Neill et al., 1997, O'Neill et al., 2015; Pennington et al., 2019).

An FBA is a central feature of a developing a positive BIP and includes systematic methods to identify sources of reinforcement for inappropriate behaviors. FBAs are implemented to ensure accuracy of functional identification and increase the effectiveness of behavior plans by increasing appropriate behaviors and replacing the challenging behaviors. The FBA procedure should be guided by three questions in order to inform a hypothesis about why the behavior(s) is occurring; (1) Is there a pattern of events or behaviors that consistently precedes the occurrence of the behavior? (2) Is there a pattern of events or behaviors that consistently follows the occurrence of the behavior? (and who engages in these behaviors?), and (3) Can the student be taught an alternative, appropriate behavior to accomplish the same function as the inappropriate behavior? (O'Neill et al., 1997, O'Neill et al., 2015). By allowing these questions to guide the assessment, the data collected will inform a hypothesis which will act as the basis for a BIP. There is a series of steps in conducting an FBA that ensures a comprehensive assessment has been completed.

Research for Utilizing FBAs for Inappropriate Sexual Behaviors

A small research base exists for examining FBAs for identifying the functions of inappropriate sexual behaviors, as this area presents challenges for investigation regarding ethical and safety considerations (Davis et al, 2015). However, some studies have reported the use of FBAs to successfully identify the functions of these behaviors to inform behavior change plans. In 1992, Sprague and Horner conducted an FBA on a 12-year-old female who demonstrated that her shirt lifting behavior was maintained by attention for work help. Fisher et al. (2000) described implementing an FBA, with an older 19-year-old male who was exhibiting public masturbation and determined the function of his behaviors were maintained by tangibles to preferred items. Similarly, in 2002, Hagopian et al., demonstrated that the results from the FBA implemented in their study, showed that public masturbation, genital display, and inappropriately touching others were all maintained by the attention function. A few years later in 2004, Fyffe and colleagues identified that a 9-year-old female's inappropriate behaviors of touching others' body parts was maintained by attention.

Later in 2006, results of an FBA conducted by O'Reilly et al., demonstrated that inappropriate self-touching behaviors of a 20-year-old male were partly maintained by access to attention. Self-touching in a 16-year-old female was a behavior investigated by Cihak and colleagues in their 2007 study in which her FBA demonstrated that this behavior was maintained by escaping from task demands. Similarity, Najdowski et al. examined the behavioral function of an individual who displayed public masturbation, engaged in inappropriate language about others' genitalia and then proceeded to grab other individuals' genitals in 2008. The FBA demonstrated that these behaviors were maintained by attention. In another study, Carlson et al. (2008) conducted FBAs on two individuals' behaviors whose public disrobing or urination in their clothing was maintained by access to tangibles, particularly preferred alternative clothing.

These research studies detail the implementation of FBAs that were successful in identifying the maintaining consequences of the inappropriate sexual behaviors and contributed to the development of behavior plans to teach alternative and functionally equivalent behaviors. Identifying the function of an inappropriate sexual behavior is vital in assisting individuals who have not learned to discriminate between situations in which sexual behaviors are, and are not, socially acceptable. (Bailey, & Burch, 2011; Carlson et al., 2008; Davis et al., 2016; Myers, 1991; Pritchard et al., 2011). Implementing an effective behavior plan can contribute to a higher quality of life for an individual who may not be able to keep his job due to genital exposure, or another individual who may not be allowed to stay in school due to inappropriate groping behavior.

For the purpose of this article on explaining how to utilize FBAs for challenging sexual behaviors, we will focus on three example students with disabilities to illustrate how inappropriate sexual behaviors may serve a function and how identification of the function can assist educators and practitioners in developing effective interventions. *Camilla, a 10-year-old female diagnosed with Fragile X syndrome pulls up her shirt and exposes her breasts to peers in the classroom. Many of Camilla's teachers have reported this behavior in their classrooms and are at a loss for how to react to stop this from happening. Some of her teachers have explained they have removed her from the classroom, but that they do not feel this is a successful strategy. Dakota, an 11-year-old with diagnosed*

developmental disabilities rubs their genitals on tables, chairs, or walls in the classroom and tries to disrupt other students in the class. The teachers comment that it is very difficult to complete a lesson and help all the students as Dakota's behavior can be so distracting for others, and it is almost impossible to redirect them back to the task. Conan, an 8-year-old male diagnosed with autism, exposes his genitals to the peers at his table several times during various classes throughout the day, causing difficulty in the classroom as his peers do not want to share a table with him. His teachers have been having him leave the group table to minimize the disruption, but they report that this is not changing his behavior.

Conducting an FBA

Indirect methods. Indirect data collection methods involve collecting data pertaining to the student and the behaviors without having to directly observe the individual and his/her/their behaviors. Indirect information for the FBA can be collected through behavioral interviews and/or the use of behavioral scales and questionnaires. Indirect methods use recall of information from individuals who know the student well. Often, parents, other teachers, or therapists are asked to contribute information. If possible, the student themselves can also be asked to contribute information. These methods are less intensive, more peripheral, and the materials needed are easy to obtain and implement. The disadvantages of indirect methods involve the lack of accurate recall of information based on memory, possible biases of the individuals being interviewed, and the instrument reliabilities are typically low. However, these methods are an effective starting point to build a case history of the student requiring a behavior change plan.

Behavioral interviews represent one type of indirect method. These interviews involve asking informants about what they recall regarding the topography, frequency, and duration of the student's behaviors, such as (i) what time of day, (ii) during what activity(ies), using what materials or supplies, (iii) setting events, (iv) other people present, (v) what are the antecedents that occur right before the behavior, and what are the consequences that occur right after, (vi) what is the student's behavior right after the occurrence, (vii) what are other peoples' reactions right after a behavioral occurrence, (viii) how does the student typically communicate, and what efforts have already been made to reduce the behavior. The advantage of these interviews includes providing the informants with an opportunity to explain scenarios in detail, however, this can also present as a disadvantage as there may be errors or biases in the interpretation of the informants' choice of explanation (Lennox & Miltenberger, 1989; Zarcone et al., 1991).

Another indirect method is to use behavior rating scales in order to hypothesize the function of behaviors. Many of these have been developed based on Likert-scales, such as informants filling out items on questionnaires with answer categories ranging from "never, seldom, usually, and always." The Motivation Assessment Scale (MAS), which categorizes behavior into the behavioral functions of tangible, escape, attention, and automatic, represents one example of a popular rating scale (Durand & Crimmins, 1988). Items on the MAS include "Does the behavior occur following a request to perform a difficult task?" which is designed to identify whether an individuals' behaviors may have an escape function (escape from a difficult task), and "Does the behavior occur to ever get a toy, food, activity that this person has been told that he/she can't have?" which is designed to identify whether an

individuals' behaviors may have a tangible function (access to a preferred item that s/he/they is not permitted) (Durand & Crimmins, 1988).

Similarly, the Problem Behavior Questionnaire (PBQ) developed by Lewis et al., (1994), uses a 7-point Likert-scale to identify possible behavioral functions. A few of the items on this scale include, "Does the problem behavior occur to get your attention when you are working with other students?" and "Does the problem behavior occur in the presence of specific peers?" Another commonly used rating scale is the Functional Analysis Screening Tool (FAST), which allows informants to both rate items and describe events (Iwata & DeLeon, 2005; Iwata et al., 2013). Similar with other rating scales, the FAST categorizes behavioral functions as social (attention, preferred items, escape from tasks, or activities) or automatic (sensory stimulation or pain attenuation), and is designed to identify which factors may influence the occurrence of problem behaviors. Some of the questions ask informants to fill in answers that are related to the topography of the behaviors, the setting events, and people present when the behaviors occur, while the direct questions require a "yes, no, or N/A" answer. Some of the questions focus on when the behaviors are occurring, such as "Does the problem behavior occur when the person is not receiving attention or when caregivers are paying attention to someone else?" while others aim to identify times that the behaviors do not occur, for instance, "Is the person usually well behaved when (s)he is not required to do anything?" which is an important aspect of ascertaining the function of behaviors (Iwata & DeLeon, 2005; Iwata et al., 2013).

The FAST, along with other rating scales, calculate the results based on which function category has the highest scores. In this respect, these scales can be relatively easy to administer and score, however, the research demonstrates that reliability of these instruments tend to be low. For instance, the FAST has a reliability of only 67%, whereas the reliability of the MAS is an extremely low 20% (Lennox & Miltenberger, 1989; Zarcone et al., 1991). The greatest disadvantage with using indirect methods is that informants are relying on memory of events, mixed in with their own biases, thoughts, and opinions, thus, the data are very subjective in nature (Lennox & Miltenberger, 1989; Zarcone et al., 1991). Given this subjectivity, the information provided may be inaccurate and as a result, lead to an incorrect conclusion about the function of the behavior.

Direct methods. In order to reduce the disadvantages of indirect methods, one should also use direct observational methods to assist in identifying behavioral functions. These methods involve direct observation of a student's behaviors as opposed to relying on informants' recall of events. Direct methods require that a trained observer select specific times to observe the student in her/his/their natural environments, including schools, homes, or community settings. Observations should occur across multiple days, times, and settings. Additionally, collecting highly detailed observation notes throughout the observation sessions could result in more data being recorded for analysis. Direct observation performed by a trained observer will yield more reliable data than asking people to remember scenarios, and this direct observer is a critical element of performing a high-quality FBA. Three direct observation methods that build a descriptive assessment include, (i) anecdotal assessment, (ii) scatterplots, and (iii) ABC (Antecedent, Behavior, Consequences) analyses (O'Neill et al., 1997, O'Neill et al., 2015).

Anecdotal assessments involve a trained reporter directly observing the student in several environments and

explicitly documenting in written form, the events that occur around the student and her/his/their behaviors. The written reports typically include information relating to the setting(s), what other people are saying and doing, and what events are simultaneously occurring that could affect the individual's behavior, such as the noise outside, or slamming doors in the hallway (O'Neill et al., 1997, O'Neill et al., 2015). The key element of these descriptive reports includes a description of the observable facts of the environment while refraining from writing inferences, for example, "the student kicked the trash can," as opposed to "the student was frustrated." Figure 1 describes an example anecdotal assessment for our student Camilla, our 10-year-old who pulls up her shirt and exposes her breasts to peers in the classroom.

Student: Camilla Anderson Observer: Deion Johnson Date/Time: April 19, 2023: 1.18 p.m.
Relationship to student: behavior support specialist

Observation 1: General Education Classroom, Math
Anecdotal Notes:
1.19: The teacher, Mrs. Harper, says "everyone come to the carpet". Camilla walks to the carpet at the front of the room and sits in the second row on the left side on the red circle, her assigned space.
1.23: Mrs. Harper says, "today we are going to look at telling the time," Then turns around to face the board with her back to the carpet. Camilla then stands up and lifts up her shirt, exposes her breasts, and makes the sounds "um-um-um." Mrs. Harper turns her body to face Camilla and says, "we don't do that." Camilla giggles and wiggles her body twice and pulls her shirt down and remains standing. Mrs. Harper then says, "and sit down please." Camilla sits down and giggles while she is sitting down.
1.27: Mrs. Harper is explaining the concept of "o-clock," and she is scanning the class as she speaks by moving her head in small motions left to right to address the whole class on the carpet. Camilla is on her knees on the carpet bouncing up and down with small bounces.
1.29: Mrs. Harper asks, "if the big hand is on the 12, and the little hand is on the 4, what time is it?" Camilla puts up her hand and waves it in the air along with six other peers scattered on the carpet. Mrs. Harper calls on a peer to answer and Camilla immediately stands up and lifts up her shirt, exposes her breasts and makes a moaning sound. Mrs. Harper continues to look at the peer answering the question but stretches her arm out and points at Camilla (no eye contact) and says, "no," but does not look at Camilla. Camilla remains still but moans louder. Mrs. Harper then looks at Camilla and says, "shirt down, and sit-down Camilla." Camilla waits 2 seconds and then puts her shirt down as she sits down.
End 1.36 p.m.

Student: Camilla Anderson Observer: Deion Johnson Date/Time: April 21, 2023: 9.14 a.m.
Relationship to student: behavior support specialist

Observation 2: General Education Classroom, Reading
Anecdotal Notes:
9.15: Camilla is sitting around a square table with 3 peers. Camilla has a worksheet in front of her with reading

questions, and 2 pencils. The desk has a large caddy in the middle for supplies for sharing. Camilla's table is on the far right of the room, and the tables are spaced out to leave a wide walking path in between.
9.17: Mrs. Harper has been explaining to Camilla and the students at her table how to complete the worksheet, "…if you come across a question, you do not know the answer to, I want you to move on to the next one, and at the end raise your hand and I will do my best to come and help you. Remember, we have lots of friends in this class so you may need to wait a few minutes, but I will get to everyone I promise. Everyone understand?" Camilla nods with the other peers and Mrs. Harper smiles at them and goes to the next table.
9.20: Camilla looks at the direction of Mrs. Harper, who has her back to Camilla about a foot away, Camilla stands up and then pulls up her shirt, exposes her breasts, and starts stomping her left foot on the ground. Mrs. Harper turns around and says, "Camilla, stop that and start the worksheet, I know you can do it, I will be along to help in a little bit." Camilla giggles and hops on one foot and then puts her shirt down as she sits down.
9.24: Camilla stands up and goes to the peer on her right and taps his shoulder and he looks at her and she squeals and lifts up her shirt to expose her breasts. The peer pushes her and yells a loud "no," and Mrs. Harper turns around and walks very fast over to Camilla and the peer and pulls Camilla shirt down and firmly says, "no, shirt down, sit down please." Camilla says, "um um um" and sits down.
End 9.29 a.m.

Figure 1. Anecdotal Notes for Camilla

Analyzing the information from these two direct sets of observation notes, an educator may hypothesize that Camilla engages in the breast-exposure behavior when Mrs. Harper removes her attention in the form of facing her and talking to her. The exposure behavior results in positive reinforcement as, when it occurs, Mrs. Harper will stop whatever she is currently doing and turn her attention to Camilla in the form of eye contact and/or speaking. When Mrs. Harper does this, Camilla will stop exposing her breasts.

Anecdotal assessments can prove to be very useful as the data collected can demonstrate when the behavior occurs and when it does not occur. It is important to consider that the absence of a behavior can also aid in identifying the function. However, several of the disadvantages of this methods involve observer bias and the projection of one's own opinions on the situations while writing notes, known as the "Hawthorn Effect" which explains that observed individuals may change their behavior because they know they are being observed (Cooper et al., 2019).

A second direct observation method that collects information to assist with identifying a possible behavioral function is a scatter chart (scatterplot) (O'Neill et al, 2015). This is a useful method to visually track the behaviors of an individual during direct observations to demonstrate a relationship between two variables. A scatterplot aims to quantify the occurrence of behaviors in the environment and present an overall visual picture the presence and absence of the selected behavior. When setting up data collection using this method, a couple of options exist. For instance, the options include tracking the presence of behaviors by units of time or by activities, and Figure 2 shows an example for two of our students.

Student: Dakota Reinhard Behavior: Rubbing their genitals on tables, chairs, or walls
Setting: School
Scorer: Layla Knowles Date Range: May 10 – 14, 2023

Scoring: / = 1 occurrence, blank = 0 occurrences

Time	Mon	Tues	Wed	Thur	Fri
9.00-10.00am (period 1)					
10.00-11.00am (2)					
11.00am-12.00pm (3)					
12.00-1.00pm (4)					
1.00-2.00pm (5)	//	/		/	///
2.00-3.00pm (6)	////	/////	///	/	///
Totals	**6**	**6**	**3**	**2**	**6**

Student: Conan Taff Behavior: Exposes his genitals to the peers at his table
Setting: School
Scorer: Sanchi Patel Date Range: April 7 – 11, 2023

Scoring: / = 1 occurrence, blank = 0 occurrences

Time	Mon	Tues	Wed	Thur	Fri
9.00-10.00am (period 1)	///	//	/	///	//
10.00-11.00am (2)	/	////	//		///
11.00am-12.00pm (3)					///
12.00-1.00pm (4)					
1.00-2.00pm (5)					
2.00-3.00pm (6)					
Total	**4**	**6**	**3**	**3**	**8**

Figure 2. Scatter Chart Data for Dakota and Conan

Looking at the visual data for Dakota, we can see that their genital-rubbing behavior occurs later in the school day. This offers useful data for educations and allow them an opportunity to look at what variables are present in their environment in the later hours of the school than the earlies ones. For Conan, it is the opposite, and we can see from the data that his inappropriate sexual behaviors occur earlier on in the day in the first few school periods. Therefore, it would be important for his educators to look at events and variables that occur in his environment that are absent in later school periods.

The final direct assessment method is to complete an ABC chart, in which data are collected about what occurs in the environment before a behavior, a description of the behavior itself in relation to the individual and the environment, and what occurs immediately after the behavior (O'Neill et al, 2015). This structure permits the observer to look for patterns in individuals' behavior. This highly individualized method can further refine the information from the anecdotal assessment and scatterplot and focus on the exact events surrounding the behaviors. There are numerous ways to collect ABC data depending on what may be important to individual situations. Figure 3 shows a detailed example for our student Dakota.

ABC Analysis Data Collection Form

Name: Dakota Reinhard (D) Setting: Science Class (Mr. Smith) Activity: Paired Assignment

Observer: Annette Moyen Date: May 27, 2023

Description of behaviors: Rubs their genitals on a table, chair, or wall.

Date	Time	Antecedent	Behavior	Consequence	Possible function
4/29	12.14 p.m.	Smith selects D to read the paragraph in the textbook.	D lies on table and starts their rubbing genitals on flat surface.	Peers laugh. Class disrupted. Smith selects another student to read.	Attention or Escape
4/29	12.39 p.m.	Smith finishes explaining the assignment and peer faces D and says "let's get started on Q1"	D starts rubbing their genitals on his peer's chair and his body touches the peer but is looking at the ground.	Another peer yells "euch gross." Class disrupted. Peer yells loudly "Stop it, stop it, Mr. Smith?" Smith firmly instructs D to sit down and their peer can start on Q1 alone.	Attention or Escape
4/29	12.48 p.m.	Peer says to D, "okay I did Q1 but you have to do Q2"	D runs out the room and starts rubbing their genitals on a wall in a covered corner of the empty hallway	Not completing work. D placed self in an alone environment.	Escape
4/29	1.25 p.m.	Smith asks D to read out their answer to Q3 to the class	D runs out the door at back of room into empty art studio and starts rubbing their genitals on a desk leg.	Not completing work. D placed self in an alone environment.	Escape

Figure 3. ABC Data Collection for Dakota

The data in this example demonstrates some repeated patterns about when the behaviors occur and the possible functions. Looking at the consequence column, one can see that Dakota always had the work task removed after a display of their behavior of rubbing their genitals on a surface. The advantages to all three of the direct assessment methods described in this section depict a much more detailed picture of the behaviors occurring by identifying specific environmental variables that are present and the reinforcer (payoff) for our students when the consequences are more thoroughly described via direct observation. Although direct methods can build a clearer picture of the behaviors, there are some disadvantages which include figuring out the complexities associated with scheduling to observe between observers, schools, agencies, etc., ensuring there are trained observers, the cost to employ observers over multiple instances, possible student illness and absences, and the effort involved to complete these direct observations as opposed to some of the indirect methods in which informant simply rates

items or answers questions to be scored.

Functional Analysis

The next step in conducting an FBA is to conduct a functional analysis of behavior (Neef & Iwata, 1994; Iwata & Dozier 2008; Iwata et al., 2013; O'Neill et al, 2015). When conducting a functional analysis of behavior, variables in the environment are manipulated to experimentally test a hypothesis. Rather than an extensive observation, many educators use a brief functional analysis, in which individuals are placed in a variety of specific settings and their behaviors are recorded to identify any patterns and differences. Essentially, a functional analysis is implemented to verify, refine, or clarify a hypothesis that has been developed by data from the indirect and direct components of a functional assessment. The functional analysis results serve as the initial development step of a hypothesis of the function of the behavior to change (O'Neill et al, 2015).

A brief functional analysis consists of five conditions; (i) tangible, (ii) escape, (iii) attention, (iv) alone and (v) play or control condition (Neef & Iwata, 1994; Iwata & Dozier 2008; Iwata et al., 2013). Within each condition there are specific antecedents and consequences which have direct effects on behaviors and allow functions to be identified. In the tangible condition, the student can interact with adults but does not have access to any of his/her/their preferred object(s), activity(ies), or event(s), and if the student exhibits the target behavior, then the student is permitted limited access to the preferred object(s), activity(ies), or event(s). If a student's engaging in the behavior as a means to gain access to tangibles, then the frequency of the target behavior should increase. In the escape condition, the student is presented with an undesired or difficult task and is prompted through the task by the evaluator. Within this condition, each occurrence of the target behavior results in the task being removed for a brief period, and if the function is escape, then occurrence of the target behavior should increase. The attention condition involves the individual having access to various activities with no demands and the evaluator reads or engages in some unrelated task making sure to not give any attention to the individual unless the target behavior is exhibited. If the function of the behavior is maintained by attention, then the occurrence of the target behavior should increase. To implement the alone condition there is a void of items, materials, activities, or any reinforcers including the evaluator. If there target behavior occurs, no external consequences are delivered. If the behavior increases, this provides evidence that the behavior is maintained by self-stimulation, and therefore occurs due to an automatic function. The fifth and final condition is a control play condition in which the individual is given engaging items and evaluator attention, and the occurrence of the target behaviors should be minimal as the individual has unrestricted access to all other conditions (Neef & Iwata, 1994; Iwata & Dozier 2008; Iwata et al., 2013).

Although a functional analysis can take a considerable amount of time, it represents a vital component needed to ensure that the correct function is identified as this will inform the development of a BIP (Fitzsimmons, 1998; Flannery et al., 1995; O'Neill et al., 1997, O'Neill et al., 2015; Pennington et al., 2019). If the function is incorrect, then developing the BIP will be like trying to unlock a door with the wrong key; the door just won't open; the plan just won't work. For our student, Dakota, we have the results of their functional analysis displayed in Figure 4. We can see from the data, that the function of their challenging sexual behavior is escape from task demands

which is supported by previous data we have collected on this student.

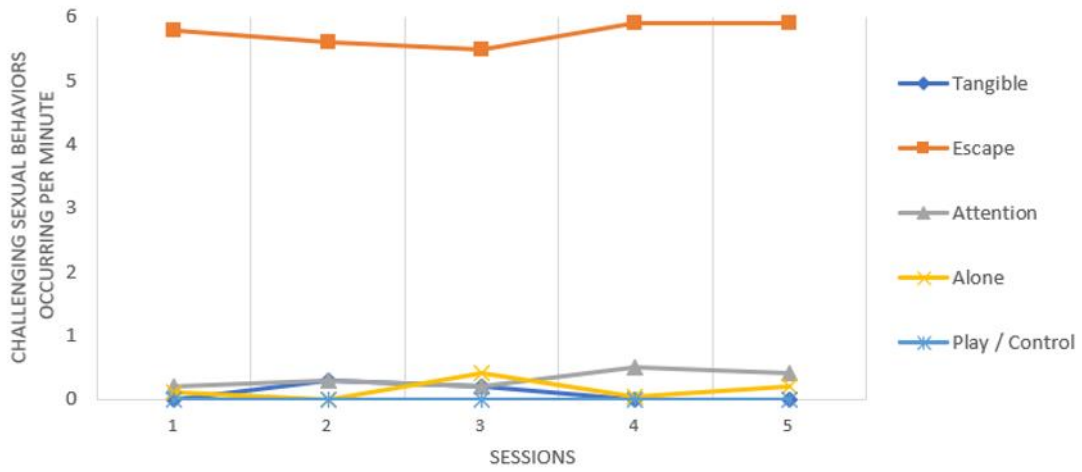

Figure 4. Functional Analysis Data for Challenging Sexual Behaviors for Dakota

Developing a Behavior Intervention Plan

By this point in the process, there is a large compilation of data. The results of the brief functional analysis have either confirmed, altered, or redefined the hypothesis of the maintaining function of the inappropriate sexual behavior, and the next step is to develop a cohesive behavior plan. Data collected from the FBA will be used to construct a comprehensive plan that strategically fits together to develop a behavior plan that likely will result in lasting behavior change (Fitzsimmons, 1998; Flannery et al., 1995; O'Neill et al., 1997, O'Neill et al., 2015; Pennington et al., 2019).

To begin creating an effective behavior change plan, an individual must be taught skills that will replace the current target behavior with more appropriate replacement behaviors, yet still be functionally equivalent (Cooper et al., 2019). In the case of our students, Camilla needs to learn more appropriate behaviors to request her teachers' attention, Dakota needs to learn more appropriate behaviors to ask for help with difficult tasks and how best to wait for assistance, and Conan needs to be able to engage in more appropriate behaviors if he does not get his snack immediately in his classroom.

It is important to remember, a BIP is not trying to change the function, but merely change the behavior around accessing the reinforcement that is maintaining the behavior to achieve the function. For instance, if the function of Dakota's genital-rubbing behavior is escape, then their BIP must include a functionally equivalent replacement behavior to escape the task without rubbing their genitals. Some replacement behaviors could include asking for a break, working for a short time with several breaks, or being able to ask for helps or prompts. These behaviors would allow Dakota to escape the task, but also terminate the inappropriate sexual behaviors in the classroom. When developing a BIP for behavior change, the focus must always be on teaching the functionally equivalent replacement behavior or else the individual will simply continue to engage in the inappropriate sexual behavior.

Summary Statements

One of the most important parts of the BIP is the development of summary statements about the hypothesis of the function of behavior. Using the data from the indirect and direct assessment methods, initial summary statements can be created. A summary statement is a diagram that clearly explains the events surrounding, and maintaining, a maladaptive behavior. There are four parts from left to right which include, (i) Antecedent setting event, (ii) Antecedent stimulus event, (iii) Problem behavior, and (iv) Function (maintaining consequences) (O'Neill et al, 2015). By diagramming these four parts, a summary statement can be created to inform a BIP. Summary statements should be developed for each behavior or class of behaviors that appears to serve a particular function, and each type of situation in which that behavior or class of behaviors occurs. It is important to remember during this process that there may be more than one function for the same behavior. Figure 5 details the summary statement procedure for our students.

	(1) Setting Event	(2) Stimulus Event	(3) Problem Behavior	(4) Maintaining Consequence (function)
Camilla	Lunch and recess over	Working in a group	Exposes breasts to peers	Attention (teacher gives attention)
Dakota	Full school day	Work demand presented	Rubs genitals on furniture/wall	Escape (demand removed)
Conan	Starting first classes	Told no snack available for 30 minutes	Exposes genitals to peers	Tangible (given snack)

When Camilla has been in large group situations and is asked to work in another group setting, she her exposes her breasts to her peers, which is maintained by attention from her teacher.

When Dakota is in the later classes of the day and presented with a demand, they rub their genitals on furniture or on a wall in the classroom, which is maintained by escape from demands.

When Conan is partaking in his earlier classes of the day, and then he is refused a snack during worktime in the class, he will expose his genitals to his peers, which is maintained by being given a tangible (snack).

Figure 5. Summary Statement Development for our Students

Interestingly in these statement summaries, is that Camilla and Conan display very similar behaviors of exposure, but the functions of their behaviors differ, which is why it is important to go beyond simply looking at the topography of a behavior but to identify the function. Once a clear summary statement has been developed, the next stage is to describe new behaviors that will be taught in order to ensure the current inappropriate sexual behaviors are irrelevant, ineffective, and inefficient (Cooper et al., 2019). When a behavior becomes irrelevant it no longer occurs because the setting/antecedents that used to elicit the behavior have been changed, and a new more appropriate replacement behavior has been taught that gains access to the same reinforcer (function). A behavior becomes ineffective because new consequences are in place so that it will no longer produce the desired

effect; the student will no longer get what they want when displaying the behavior, and finally, a behavior becomes inefficient as a new more efficient behavior is taught which results in access to the same functionally equivalent reinforcer but is easier, quicker, and less effortful.

One of the aims of understanding the functions of inappropriate sexual behaviors is to implement strategies to prevent them occurring. In order to develop individualized strategies, a "Prevent – Teach – Consequences" model can be used for strategizing (O'Neill et al., 1997; O'Neill et al., 2015; Sullivan et al., 2021). Prevention strategies are antecedent modifications that are made to the environment to help minimize the possibility of a problem behavior occurring or to increase the probability of a positive replacement behavior occurring. The most important element of a BIP includes the teaching strategies that involve teaching a new functionally equivalent replacement behaviors as alternatives to replace the inappropriate sexual behaviors. This educational approach produces behavioral change through teaching and increasing adaptive behaviors, resulting in the inappropriate sexual behaviors decreasing and terminating. Consequence strategies involve what happens after the behaviors occur and therefore, maintains them. It is important to reinforce the new alternative behaviors and not inadvertently reinforce those that are inappropriate (O'Neill et al., 1997; O'Neill et al., 2015). Figure 6 details the strategies for making our example students' inappropriate sexual behaviors irrelevant, ineffective, and inefficient by implementing the Prevent – Teach – Consequences model.

Prevent Strategies	**Teaching Strategies**	**Consequence Strategies**
Have Camilla eat some of her lunch with 1:1. Have Camilla go to class early to help the teacher set up the class for some extra attention. Set a schedule for Camilla to receive small amounts of attention from her teacher during class.	Teach Camilla to put up her hand to request attention. Teach Camilla to wait for the teacher after her request. Teach Camilla to monitor her schedule of attention in class so she is aware of when she will next receive attention.	If Camilla lifts her shirt and exposes her breasts, teacher and peers ignore. If Camilla raises her hand, the teacher should acknowledge the request and tell her when she will give her attention or refer her to check her schedule of attention. Praise Camilla's waiting behavior (even a quick smile or comment from across the classroom)
Build prompts into Dakota's work in their later classes (i.e., guided worksheets, graphic organizers). For difficult work, prepare to have 1:1 help with the assignment, or a peer.	Teach Dakota to raise their hand for help. Teach Dakota to place a help card on the table to alert the teacher that they need help. Teach Dakota to sit while waiting for help.	If Dakota rubs their genitals on tables, chairs, or walls in the classroom and tries to disrupt other students in the class, ignore this behavior and redirect and not permitted to escape task. If Dakota raises hand or uses help card, acknowledge, and praise, and help with assignment. Praise sitting and waiting for help.

Prevent Strategies	Teaching Strategies	Consequence Strategies
Always pack a spare snack in Conan's bag. Remind Conan to eat a snack before coming to class. *Have Conan eat a snack on the bus.* *Allow a 5-minute snack at start of class*	Teach Conan to wait 1, 2, 3, 4, 5, 10, 15, 20, 25 minutes before requesting snack before implementing the next teaching strategies. Teach Conan to oversee the timer for snack time. Teach Conan he can put the desired snack on the table and eat it when the timer rings.	If Conan exposes his genitals to peers, immediately prompt an alternative behavior to obtain his reinforcer more appropriately. Immediately reinforce Conan with snack after waiting specified time. Praise Conan for doing well at overseeing the timer. Praise Conan when he waits for his snack.

Figure 6. Prevent – Teach – Consequences for our Student Examples

Figure 6 shows a good example of how individualized students' BIP need to be in order create lasting behavior change. It is possible that educators and practitioners will not have any control in changing the variables for prevention strategies. It is likely that students may arrive in your classroom and that is where you have to start the day with them, however, it is important to share some examples for students who you may be able to help during antecedent times. Some of the italicized examples in Figure 6 may only be suitable for some students in some circumstances. For instance, it may not be suitable to allow a 16-year-old to eat in science class, but you may be able to suggest this to the IEP team as a prevention strategy for a student in kindergarten or first grade. However, it is always important to consider the age of your student and his/her/their functioning level when developing these strategies. For our student Conan, we would have to consider whether having his "overseeing" of the timer for snack is appropriate for him in his general education class with his peers at his age. There is no right answer, but your guide for writing successful BIPs is to consider both individualization and social validity.

Summary

Although a small literature base exists on using FBAs to identify functions of behavior with individuals displaying inappropriate sexual behaviors (Carlson et al., 2008; Cihak et al., 2007; Davis et al, 2015; Fisher et al., 2000; Fyffe et al., 2004; Hagopian et al., 2002; Najdowski et al., 2008; O'Reilly et al., 2006; Sprague & Horner, 1992), it is important for educators and practitioners to understand that these behaviors have the same function as all other behaviors. With this understanding, they can implement the established steps for completing FBAs with students displaying sexually inappropriate behaviors to identify the functions of these behaviors. Once the functions have been determined by the FBA process, educators and practitioners can then start to develop individualized BIPs to ensure these challenging sexual behaviors become irrelevant, ineffective, and inefficient, allowing students to learn new more functionally equivalent appropriate behaviors. The FBA process involves several steps that build a comprehensive assessment to test and retest the hypothesis of the function(s) maintaining the sexually inappropriate behaviors.

Within this article, we have demonstrated how to implement the FBA procedure using our own example students.

For instance, we learned that Camilla's breast-exposure behavior was maintained by attention from her teacher, therefore her BIP would include more appropriate ways to request attention such as teaching her to raise her hand and monitor her own attention schedule. Dakota's data demonstrated that their genital-rubbing behavior was maintained by escape from difficulty tasks, so they would benefit from an individualized behavior plan that involved teaching more appropriate methods to ask for help with classwork rather than engaging in sexually inappropriate behaviors. Finally, for our student Conan, who engaged in genital exposure in his classroom was maintained by being refused a snack, he could learn behaviors to interact more appropriately about requesting and waiting for his snack as opposed to resorting to challenging sexual behaviors. The FBA process represents an evidence-based procedure for identifying functions of behavior to support the development of successful behavior intervention plans. We can use the same procedure for those individuals with developmental disabilities who display inappropriate sexual behaviors, and it is important for educators and practitioners to understand the usefulness of implementing FBAs in order to develop successful behavior plans for their students.

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