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Hi, my name is Christine Austin and I've been with Step-by-Step for eight years now. What I'm going to talk about today is decreasing problem behavior, using an FBA, but talking about the individual assessment components. So our objectives today are going to be able, or the objectives are going to be to identify the need for a behavior reduction plan and construct a behavioral definition. In addition, we, I will show you how to complete a functional behavioral assessments including the indirect and direct assessments and also the functional analysis. And then at the end of the presentation I'm going to help you identify various reinforcing variables that maintain challenging behavior and how to successfully implement neutral redirection. So I will go through, identifying the different variables that maintain behavior and then just talk about the very first behavioral intervention that you do want to apply, which is neutral redirection.

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So it is very important to identify what is maintaining the problem behavior to move into the construction of a behavior support plan. But I want to show you what to do in the meantime while you are gathering all of your information. So the first question is, what is a problem behavior? Behavioral excesses are socially significant. They affect others and the surrounding environment, they're typically of sufficient intensity or frequency that the safety of the person engaging in the behavior or others around is threatened. So when we're looking at challenging behavior, we first look at what, what is most detrimental to the child and the people and the environment around that child. So the most obvious that you can probably think about as aggression or self-injury because it does result in injury to other people or to the child. And we're looking at health issues.

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But we also want to look at some of the other problem behavior that hinder the ability of the person or others to acquire new skills. So as we're analyzing what it is that we want to tackle, first, we want to look at what is impeding the child's learning opportunities and also socialization opportunities for him or her. But it's also important to look at what leads to restrictive living arrangements. So if the child engages in aggression or self-injury, that's obviously going to warrant the need for support,









behavioral support from another person or a more restricted environment. But then we also want to look at some of the other problem behaviors such as noncompliance or tantrum behavior. And there's many other topographies out there, but just identifying what, what hinders the child from either learning or being in a least restrictive environment. So I know that many of you are probably familiar with ABCs of behavior, but I do want to review this just quickly. For anyone

Christine Austin: 00:03:00 out there who may not be familiar with some of the terminology. Here, you see the ABC's of behavior. And I bolded the first letter because you can see the antecedent or the A is for the antecedent. The B is for the behavior and the C is for the consequence. And you can see that both of the arrows go directly toward the behavior because both the antecedent and the consequence affect the future frequency of behavior. So just to analyze this a little bit further, we have the behavior that's the target behavior of interest. So whenever the behavior occurs, we want to analyze what happened right before and what happened right after the problem behavior. So the antecedent is just what happened right before the behavior, what happened immediately before the behavior occurred. And then the consequence is what happens immediately following the behavior. As you can see here in the blue, we're also going to talk about motivation.

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And as you hear we talk throughout the presentation, I'm going to talk about motivating variables or setting events or some of the other variables that are not maybe not able to observed right before the behavior. And these are things that happen, well before the behavior, but still affect the frequency of that behavior. So some of the examples that I have would be how well the child sleeps, eating patterns, maybe his mood that day or maybe, he has indigestion problems. These are all factors that affect our behavior but don't happen immediately before the behavior. So we'll talk about later on through the presentation, how to assess for the antecedent and consequences and then also how to gather information about the child's motivation.

Christine Austin: 00:04:50 So one of the hardest things to do is to select the behavior for reduction. So some of the questions that you want to ask yourself are, does this behavior present as a danger to the





person or others? So those obviously are of concern, first and foremost. So aggression toward others or aggression towards self are obviously of concern even if the behavior only occurs one time in a day, if it results in injury, then it's of significance. And that leads to the next one. How often does this behavior occur? And again, you want to ask yourself, is this impeding on learning opportunities or socialization opportunities? If the behavior occurs only one time a day and it only lasts for five minutes, is that of significance to start treating with a full behavior plan? An example would be maybe the child engages in tantrum behavior and it lasts one time, but it lasts for two hours.

Christine Austin: 00:05:48 Well then that is of significance. Maybe the child engages in tantrum behavior and it's five times per occurrence, but it happens 10 a day. Again, significant. So we'll talk a little bit later on about how to collect data to determine the significance of the behavior. But again, you want to go back to, is this going to impede on learning opportunities or socialization opportunities? Another question you want to ask is, will changing this behavior reduce negative or unwanted attention from others? If it is, then it is of significance. So think about the child engaging in tantrum behavior in the classroom, then the other children may not come up to that child and play with him. It may hinder those opportunities or like we were talking about before with the noncompliance, maybe the child engages in noncompliance and this reduces the teacher coming up to him to attempt to teach him again, impeding learning opportunities.

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Another question that you want to ask yourself is, will changing this behavior provide more learning opportunities? I think, I think we've covered that. And that's really, you know, here at Step by Step, that is our goal. Is to reduce problem behavior, to increase learning and socialization opportunities to increase the quality of life of the child and everyone surrounding him. You also want to ask yourself how likely is the behavior to change here at Step-by-Step we provide behavioral services to children and adolescents ranging from two and a half all the way up to age 22. So it becomes a bit of a challenge when we, when we have a new adolescent who is of the age 14 who has a 14 year old behavior and we want to know is it likely to change? So if we're talking about self-stimulatory behavior, is that something





we're going to be able to change or do we modify the environment for the child?

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If it's aggression, obviously it does warrant the need to reduce that behavior for a transition into adulthood. But those are some of the questions you want to ask yourself. Are, are we likely to change this behavior? Another question that you want to ask yourself is how much will it cost to change this behavior? You really want to identify if you have all the resources available to be able to treat this behavior. So again, we do have some students that Step by Step that are 14 or older who are of our size or maybe even bigger than us, and that might warrant the need for additional staff members. We'll talk a little bit later on about neutral redirection but how do you do that safely with someone who is of the same size as you? If you want to treat the problem behavior, but you also have to look at what resources do I really have to be able to effectively change this behavior.

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So maybe your child engages in more than one problem behavior. And of course we'd all like to be able to tackle everything all at once. But it is very important to prioritize. And the first thing to ask yourself is which one is most intrusive? Again, self-injury and aggression are the most intrusive, but if the child is engaged in a noncompliance for the majority of his or her time, then that could be the most intrusive. So we'll talk a little bit later on in the presentation about how to define a problem behavior but it is very important to identify which one is truly the most intrusive. And again, going back to what's impacting learning opportunities and then what is going to decrease reinforcement opportunities. As we talk a little bit later on, we're going to identify what those maintaining variables are for challenging behavior.

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And we want to identify what are we able to decrease the reinforcement opportunities for. Again, we also want to ask herself which one happens more often. So if it's happening throughout the day, then that does hinder opportunities to learn. So as I was talking about self-stimulation, self-stimulation may be very hard to change but if it hinders opportunity for the child to learn or for those socialization opportunities, then it does warrant the need for change. And then we also want to ask ourselves which one can we work on first to get an







immediate change? A lot of our students do come with a history of reinforcement. A lot of you out there do work with students who have had prior behavioral intervention. Maybe no behavioral intervention, but we don't start with, we don't always get the very young children in early intervention. We might take a student that's 10 years old or older, and from there we want to look at which one could we make the most change with first. You don't always want to tackle the hardest one to change. You might just want to prioritize and see which one you can decrease first before you tackle the next.

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So talking about defining a target behavior for reduction. You can either define it by the function or the topography. So the topography of a behavior often reveals little useful information about the conditions that account for it. Identifying the conditions that account for a behavior on the other hand suggest that condition conditions need to be altered to change the behavior. So when I'm talking about the function versus the typography, the topography of a behavior is basically what does it look like? What form does it take? What does hitting look like? Is it a slap? Is that a punch? Is it a scratch? That's exactly how you want to define the behavior. When we're talking about the function of the behavior, we're trying to identify what function does it serve, why is the child engaging and the behavior that he's engaging in. And really we're just looking at how well can we define the target behavior so that everyone who works with the child or records data for the child really knows what it is that they're recording

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for accuracy. So looking at specifically defining the problem behavior, you want to make sure that it's objective, observable, measurable and without emotion. So you want to make sure that it is explicitly stated what it looks like. If you are defining the behavior by the topography. Again, the form that it takes and what it looks like, you need to define that specifically. So the example that we have here is that or would be out of the topography of the topography of defining the behavior of what it looks like for hitting would be striking another person with an open or closed fist, not tapping or gently placing a hand on another person. So there, we can define what it looks like, but then also what it does not look like. So we want everyone who works with the child who is either going to treat the behavior or record the behavior.





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We want them to never have to guess in the moment what it is that they're collecting data on. So the best way to do it is to identify what it really looks like, but then also give some examples of what it does not look like so that people are not guessing in the moment. When we talk about defining the behavior by the function, we're defining the behavior by the purpose that it serves. So the example that we have here is hitting and spitting are both to get out of a demand. So here, the tricky part of this is that it's easiest to define a behavior by the topography, by what it looks like. But the difficult part is that as you treat one topography, the topography of the behavior may change. So for example, I was working with a student who would engage in protesting and he would swipe materials.

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So immediately after you ask him to do something, he would just swipe the materials out of his way. And that was his way of protesting. After we treated that behavior through differential reinforcement of other behavior, he then started to become compliantly noncompliant. So he would basically just sit back in his chair and fold his arms and just refuse to do what he was doing or refuse to do what was asked of him. So the tricky part there was the staff were treating the target behavior of swiping materials, but they were not treating it when he would just refuse by sitting back. So that's where you want to look at defining the behavior by the function. You could say noncompliance is defined by any act of not or refusing to engage in the presented task within five seconds. And it serves the function of getting out of work.

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So really you're looking at not only not what it looks like, but what purpose it serves. The tricky part with that is that I've noticed through my experience is that defining the behavior by the function really requires a very well trained staff who were well trained in applied behavior analysis and are able to identify those variables in the moment, whether it's from the antecedent condition or by the consequent events. They're able to identify why he's doing what he's doing in the moment so that they're able to treat it. So again, it's easiest to do it by the topography, but you want to make sure that you stay on top of that behavior. So you're observing frequently so that you notice if the topography changes, but you can do it by the function. But again, it's going to require staff who really are trained well





in the principles of applied behavior analysis. So what I want to talk about today are the components of the functional behavioral assessment. And this enables a hypothesis about the relations among the specific types of environmental events and behaviors. So we're looking again at the antecedent and the consequence, what's maintaining the behavior, what's provoking the behavior, but then also looking at those setting events or motivation that could also be producing the behavior. And an FBA is designed to obtain information about the purpose of the target behavior. Basically what function of behavior serves for a person.

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So first I want to do a little overview of why we behave the way that we do. There's really two reasons. It's either to get something that you want or get out of something or to get away from someone. So with the first example, it's basically positive reinforcement. We're delivering something, following a behavior to see the future occurrence. So the first example that we have is social positive reinforcement or attention. Because we are social people, we want to interact with others. So a lot of the times we engage in behavior to get a reaction from others or to just get attention. Maybe it's a hug, maybe it's just a hello, but those are where we're just looking for the attention of someone else. And then we also have tangible reinforcement. And this is providing something to the child in his environment, following the target behavior to then see a future increase in that behavior. So the example would be

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the me asking my friend for their jacket because I want to go outside. It's still mediated by another person to get the item that I want. And then we also have automatic positive reinforcement. And this is, this is where another person is not involved. So you don't need to get the reinforcer from another person. It's just automatically delivered by the behavior. So an example of this would be, you know, a lot of the times because we're talking about children with autism, our self is selfstimulation, the child engages in a behavior and he gets some kind of sensory input or some kind of feeling with immediately following that behavior that then increases the behavior in the future. So a lot of these examples would be hand flapping or rocking or twirling or playing with objects in repetitive manners. It's something about the interaction, engaging in that behavior





is just automatically reinforcing and it does not have to be delivered by another person.

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And then the other type of reinforcement is negative reinforcement. And this is the removal of something from the environment following a behavior to see an increase in the future. So our first example is social negative reinforcement. And this you'll hear me say as escape or avoidance maintain behavior. And this basically means I want to get out of something. Someone asks me to do something, I make something up and say, Oh, I'm busy right now. I can't because I got out of the original and then I get out of the original task. So I could just make excuses in the future. And then I know I can easily get out of doing the original work. Sometimes the students that we work with do not have the ability to communicate reliably. So they may engage in other behavior to get out of doing work. And we do have a lot of examples of that where the child engages in aggression or some type of tantrum behavior or elopement from that environment so that they do not have to work.

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And then the other example that I have is automatic negative reinforcement. And this is just like automatic positive reinforcement, except you're removing an adversive or an annoying stimuli from the environment that doesn't have to be mediated by another person. So the easiest example that we have is you have an itch on your arm, you scratch it, that's your scratching behavior and the itch goes away. So then you learn very quickly for the future, every time I have an itch, all I have to do is scratch it and then it stops. And a lot of people use that. Another example would be that you have a headache and then you take aspirin and then the headache is gone. So you quickly learn. All I have to do is take some type of pain reliever to remove that annoying or a verse of stimuli. And then that is gone.

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So this is what we're looking at today is how do we identify why the child is engaging in the behavior that he is engaging in. It's either to get something that he wants or to get out of something that he wants. In part two, I'll go into detail of how to implement appropriate preventative procedures. And consequent procedures in addition to appropriate replacement behaviors for all of these functions of behavior. But it starts with







the assessment. If you don't start with the assessment, then it doesn't matter what your behavior plan is, because if you have not identified what is truly maintaining that behavior, you're not going to make progress with your behavior plan. So the three components of the FBA include indirect assessments, descriptive assessments, and functional and a functional analysis or an experimental analysis. So throughout this presentation I will show you how to use the different forms or the tools that I have given you through the presentation with the direct assessments also, uh, through the other assessments. And then I'll show you clips of how to score the different types of problem behavior through the descriptive assessment and then also the FA.

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So the first or indirect assessment that I want to show you is the motivation assessment scale or the MAS. And this is a questionnaire that's designed to identify the maintaining environmental variables that control the frequency of the target behavior. If you look at the tool that we've provided you it basically will show you that it isn't a Likert scale form. So obviously you do want to put the name of the child or the participant that you're working with. And then also who is rating the child. So if it's the parent, then the parent can fill this information and then you also want to provide the date. Immediately under that you'll see that there is the description of the behavior. So as I talked about before, it's easiest to define a behavior by the topography, what it looks like. It would not be ideal to write a aggression on here because aggression could take many forms.

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Maybe the child engages in hitting and spitting at other people. Well then you would want to write the description of the behavior and be very specific about what you're looking at. You could reference the example that we had for hitting where you know, it's either an open or close fist with a strike to another person. But you want to make sure that it's very detailed so the person who's collecting or giving you the information about the problem behavior knows exactly what behavior you're talking about. So if you do have hitting and you do have spitting, you're going to want to fill one out for hitting and then another one for spitting. Don't assume that the same aggressive type behavior serves the same function.





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So again, this provides a Likert scale to determine the frequency and the different conditions. And you'll see that the MAS will provide information about sensory or automatic reinforcement like we were talking about before escape attention or tangible conditions or looking at those as maintaining variables. I have two other types of indirect assessments that I want to show you how to use but just know that this one is going to give you results of those four maintaining variables. So if you look at the form, again, you're going to want to write down the behavioral description for the person so they know exactly what it is that they are giving you information about. And then also a setting description. So the the parent or another teacher or another instructor could provide you information about when it typically occurs. Maybe they only want to talk about classroom behavior because it's a teacher.

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Maybe the parents want to talk about information, about what happens in the home. Just make sure that you write down the setting description. Now, looking specifically at the questions, the good thing about this is that it is a Likert. So it goes from, it never happens to, it always happens. So you can kind of get an idea of how frequently this behavior occurs. So the first question that we have here would be, would the behavior occur continuously if this person was left alone for long periods of time? I have to tell you that I find it most effective when you sit down and interview the parents and ask them a little bit more about the situation than just handing this to them and asking them to complete it, to return it. It does seem to be the easiest way to do it, but it might not be the most effective.

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So sitting down and actually asking them a little bit about it could help them guide the results. You want to make sure that you're not leading them to the question and trying to get them to answer for what you're trying to get them to answer, but you don't want to lead them to the results. But looking at the first question when it says, would the behavior occur continuously if this person was left alone for long periods of time? A lot of the times the child is not left alone for long periods of time. So the parents or the teachers may just say, Oh, it always happens, you know, during this time. But not really looking at the fact of if somebody does not attend to the child, if no one is interacting with him, would the behavior still occur? And if you are a





behavior analyst out there, you can look at page three, it will kind of guide you on what the questions are looking for.

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So the first one, sensory. So looking at automatic reinforcement and then escape attention and tangible. And you can see here where under the sensory it has one, it has the questions. One five, nine and thirteen are really getting you to look at is this a behavior maintained by automatic reinforcement? And then you can see how the questions kinda correlate. Again, it doesn't mean that you want to guide the parent or the teacher to answer to get these results. It just kind of gives you an idea. If you do need to help with some followup questions in the moment. And then it's very simple. It provides you the scoring key at the end to where you just divide it by four and you get your mean score. So the good thing about it is that it is a Likert. So it's not just a yes or no question because sometimes it does happen. Sometimes it's a little bit more frequent, maybe it's not as frequent and it gives you that kind of outlook on the problem behavior.

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The next indirect assessment that I want to talk about is the FAST, and this is the functional analysis screening tool. And this is a scale that identifies environmental factors that influence problem behavior, but it also provides a narrative survey for the interviewee to provide additional information. So if you look at the tool that I have provided you, it gives you a lot more information than just how frequently the behavior occurs. The other good thing about the FAST is that it talks about not only a sensory stimulation but also pain attenuation. So is it negative automatic reinforcement or is it positive automatic reinforcement? It gives you some of that information as well. So all of the areas that it'll cover for assessment would be attention or access to preferred items. Iwata and his colleague had actually put those together because it is just positive reinforcement.

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But then we're also looking at escape. And then again, like I said, sensory stimulation and pain attenuation. But the good thing about the FAST that I kinda like through my experience is it provides people either a yes or no. Some of the supervisors that I've worked with in the past, they kind of overthink what the answer is, is it sometimes is always, is it often and they kind of get hung up on what the answer would be. And I guess it







depends on the person that you're working with. If you know that they get hung up on some of those details, just give them the FAST because it's either a yes or a no. And then it also prompts you through it to get a little bit more information about how long you've known this student. So the reason I like this is because I like to work with people who know the student very well.

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a history with them. They're most likely to give you accurate information. But on the flip side of that is that they might put a motion or past experiences as examples or they might use some of the past experiences within just this one assessment. So it might actually be beneficial to get someone new who has only known the child for a couple months to try and get fresh eyes. It just depends on who it is that you're working with and you'll know who to ask and who will be able to give you accurate information. The other good thing about the FAST is that it'll say, in what situations do you typically observe the person? So it will give you right away, Oh, I help him with self care routines and maybe leisure activities and maybe they never see problem behavior, but then another person might score them and say, I work in academic skill training or work or vocational training. And here's where we see a lot of problem behavior. That right

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doesn't occur. But if I'm placing a lot of demands and really trying to teach this person, it's kind of its own functional analysis in the moment of the information that you're given. And then again, here, it's just a very simple score. So at the end you just tally it up and then which one has the most scores in it. That is the highest probability of the hypothesis of what is

there is an analysis for you saying that if we're doing things

where it's just in the natural environment or I'm

maintaining that behavior.

Christine Austin: 00:30:14 And then the last one that I want to talk about is the questions

about behavioral function. And again, this is a questionnaire that is designed to identify the maintaining variables that control the frequency of the target behavior. So again, we're looking at the antecedent and the consequent events. And again, it's like a Likert scale to determine the frequency of the different conditions. So this is kind of the best of both the FAST





and the MAS because it does talk about all of the different possible maintaining variables, but it provides it in a Likert scale so that you can identify which one happens most frequently or which one's most probable. So again the behavioral functions that are assessed are attention, escape, sensory stimulation, the physical or the pain, and then also the tangible. So it's kind of a blend of both. And again, it's very simple. Here they're going to just fill out whether it does not apply either, never, rarely, some or often. So it's not the same type of Likert scale that we had with the MAS. It's kind of a little bit smaller, but it's also not just a yes or a no, so they can provide that information. And then you do have the scoring at the very bottom to try to determine what those maintaining variables are.

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Again, I think that it's best to sit with the parent or the teacher or the staff who work with the child to fill these out. You could just send it home, but again, they might not take it as seriously as maybe if you're sitting there talking to them about it. And they might actually have questions for you. So the advantages is that it is easy and fast to conduct and that the information is gathered by those that are familiar with the people. It would, it would not be ideal to just start with ABC data because you want to find a lot of information about what happens that you can't see. And those, those are the parents. The parents are the experts of the children. They know what happens when nobody else is around and they can give you the most information. And a lot of the times just through the descriptive assessment with collecting ABC data, you're not going to be able to see a lot of those setting events or the motivation that's behind a lot of the behavior cause it might not happen right before the behavior. Something that was interesting actually that happened just a couple of weeks ago when I was working with a family in one of our locations was a girl who engages in noncompliant behavior for at least a third of her day. And, you know, we brought it up to the parents saying this is a concern. Obviously our concern is that we're losing learning opportunities to teach her appropriate adaptive skills, because of the noncompliance that she's engaging in. So when, when we gave the FAST to the parents and ask them to fill that out, they kind of didn't see it as a problem because she's nine years old and she's been engaging in this behavior for nine years.





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And they're like, well that's our daughter. That's what she does. So they didn't identify it as being a problem because they were desensitized to it. That's their typical life. And that's what they're used to. And they're used to that behavior with their child. But then when we were able to talk through the FAST with them, they were able to say, you're right, this really is impeding on learning opportunities. This is something of significance. So that's some of the advantages or some of the ways that I think are best to conduct the interviews because you can talk to the parents and you know, sit there and ask them right away, what are your goals? What, what are your goals for your child? Maybe the parents don't care that the child engages in self-stimulation, but as clinicians we do because we're trying to teach them or you know, the example that I gave or the parents were maybe not so concerned about noncompliance because they were just used to that behavior.

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You can use that to then guide your goals for the child. The disadvantages of the indirect assessment is that there's little reliability when conducted alone. So you would not just want to hand this piece of paper over to a parent or a teacher or someone else working with the students, say, fill this out, collect this information, then create a behavior plan. Direct observation is going to be key. And that's what I'll talk about with collecting ABC data. But this is again a crucial part of the assessment. You do not want to skip this portion because you can find a lot of information that you cannot directly observe in the settings that you're currently working with the child.

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So now I want to talk about the descriptive assessment. And I'm sure a lot of you out there have heard about ABC charts. Um, and what, what those do basically is we as an observer would record what happens immediately before the behavior and what happens immediately after the behavior. And then we also collect other notes either provided by the parents or other instructors working with the child or other people who know the child so that we can kind of collect all that information and then determine what would be the most likely maintaining variable. And then after I show you how to collect ABC data, I'll also show you some an alternative to that, which is ABC coding. A lot of the time we'll hear it Step by Step the person who's actually working with the child throughout the day is the person collecting ABC data.





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But if the behavior occurs that frequently they might not be able to write out all of the antecedents and the consequences. So you could give them an ABC coding chart where they can just tally marks and say, and I'll talk to you a little bit about that later on, but it's just, it's that easy. You just mark what happened right before and what happened right afterwards. So that it makes it easier for them and more manageable. And then I'll also show you a scatter plot as well. And you do have all of these tools readily available for you. The key for all of these tools is that they do involve direct observation. So for this presentation, I am going to walk you through just a couple examples, but please know that you do need to have repeated observations to formulate a hypothesis. Don't assume that you could just go in, observe one instance of the problem behavior, collect your antecedent in your consequent data, and then say, Oh, it's maintained by escape.

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It's over repeated observations that you then analyze the data so that you can determine what truly is maintaining that behavior. So here's an example of the ABC chart. This is what we use very often at Step by Step. And I'm sure a lot of other places use this as well. Here you'll put in the instructors initial or name and it's important. Maybe you want to go back and ask the instructor what happened during that time. I know I've done that a lot. Training is crucial for people to collect reliable ABC data. So sometimes if the person did not collect maybe they didn't put in a very clear antecedent, I can then go back and ask that person what, what happened during this time and then take and use that as a training opportunity so they know how to collect more accurate information later on.

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Other things that you want to look at when you see that it only happens with one instructor is maybe the child does not prefer to work with that instructor or maybe this is the instructor who makes the child actually follow through and places more demands. Those are some of the things that you want to tease out when you're analyzing problem behavior. The next column that we have is the date and the time. So this is important, you know, when did it occur? Are there trends? Does it always happen right before lunch? Does it always happen right after lunch? Those are some of the things that you want to look at. And then it will obviously give you an occurrence per day so that you can just quickly tally that from a glance. If we were



collecting data on noncompliance, we could see, okay, well there were two occurrences of noncompliance today just because two lines were filled out. Or if there's 10, then you know, it happened more frequently. In the antecedent column, this is where you want to write down what happened immediately before the behavior. And this is where you do not want to assume any kind of emotion. So you just want to say what happened

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right before the behavior was it, I asked the child to complete a puzzle appear, came up and took a toy away from the child. Maybe the child was playing by himself and no attention was being provided to him. Or maybe he was just playing by himself and problem behavior occurred. One of the things that I had seen a lot of the times here at step-by-step is a lot of people will say there's no clear antecedent. Sometimes it's difficult to identify what the antecedent is, but you want to make sure that the staff who are collecting this information right now, what was going on in that environment. Like I said, was there a demand given was a preferred thing taken away. Maybe he transitioned from a preferred activity to a non preferred activity, but there's always an antecedent and all they have to do is just write down what happened in the environment prior to the behavior occurrence and train your staff that the more information the better.

Christine Austin: 00:39:32

Don't assume that anyone who reads the ABC charts are going to know what happened. The more information the better. Now looking at the behavior, one thing that we do at Step by Step is that we'll actually define that behavior for the person collecting the data. So it depends on what type of staff you're working with. If your staff are new to behavioral intervention, you want to define the behavior for them. Noncompliance looks like refusing to complete the activity within five seconds with or without aggression, with or without engaging in swiping materials. So then they can easily just put noncompliance in that behavior box right there to where they don't have to then define the behavior every single time. If you're working on more than one behavior, again, you want to prioritize which one's the most intrusive, but maybe there are too intrusive behaviors.

Christine Austin: 00:40:29

Maybe there's the hitting and the spitting. Well then you could just make codes at the bottom of your sheet where it says,







spitting is an S, and hitting is an H and then define that behavior so they can just put an S or an H in that box so they're not taking more time collecting data and not working with the child. And then the consequence is just what happened immediately after the behavior. Maybe after you asked the child to do the puzzle, he hit you. So then you took the puzzle away or maybe you then prompted him through the puzzle, whatever occurred immediately following that behavior you want to document in the consequent column. Again, do not assume emotion, do not say, you know, I asked him to do the puzzle, he engaged in hitting. And then the consequence was he didn't feel like doing it. You just want to write down what happened in the environment surrounding that behavior right afterwards. And then other very important information that you're going to want to collect is intensity and duration. So like I was talking about before was noncompliance.

Christine Austin: 00:41:34

Maybe noncompliance happened ten times that day, but each time it was only ten seconds, not that significant. Maybe it happened ten times that day and each time it occurred it happened for fifteen minutes each. That is significant. So that's the information that you're looking for. You want to guide your staff to collect this information. So at a glance you know exactly what happened during that session. And then also notes. This is really good to indicate some of those setting events that I was talking about before. Here at Step by Step, we do provide communication from the parents to the instructors and then from the instructors to the parents. So we have a communication notebook that goes home with the child every single day so that the parents can write down he only got two hours of sleep last night. So then when we see noncompliance increase on a certain day and the parents have already indicated to us that he only had two hours of sleep, well that's probably an indicator of why he's being so non-compliant.

Christine Austin: 00:42:35

Nobody really wants to put 100% effort in if they don't have the sleep that they need. And then another way that we do use the ABC chart, but please be mindful that you do want to use an experienced instructor or someone who is well versed in creating or collecting ABC data is sometimes when a new child might start. Here at Step-by-Step, I might give an experienced instructor, just an ABC chart and I would say collect some data today for the next couple of days on what type of problem









behavior you will occur or what you observe. So maybe you see noncompliance. Maybe you see hitting, maybe you see crying and then that instructor can then just write down everything that they see collecting ABC data around that. I would not do this very long because here you're just taking some baseline on what do you see as most problematic.

Christine Austin: 00:43:28

But again, you want to make sure that you do have an experienced instructor who knows how to collect ABC data. Otherwise this is going to be overwhelming. So if you already know the problem behaviors that you do want to collect ABC data for, then define those behaviors, put it at the bottom of your sheet, and then have your instructors collect information around that. But if it's a kid that's new to programming, you don't know him very well or new to your school and you don't know him very well, then you might want to take one or two days worth of just ABC data on any type of problem behavior that you might see. So now what I want to do is practice collecting ABC data. The first, uh, let's see. So in this, what I'm going to do is play the video clip for you and I want you to practice collecting the ABC data for the purpose of this. Just collect the antecedent and the consequence. Obviously you're not going to have other notes, but I will show you some of the notes that you could put in during that time.

Christine Austin: 00:44:52

Okay. So in this example, the problem behavior is ripping up the paper. So I'm going to show this again and then write down the antecedent and the consequence that you see,

Christine Austin: 00:45:17

So would anyone like to provide the antecedent or the consequence? Okay, so here are the results. In the antecedent condition, the instructor presented the worksheet task and said, do worksheet. Here, this is exactly how you want to write it. Just say, do worksheet. And then obviously they're providing the worksheet. The behavior was that the child rips the worksheet and then the consequence was that the instructor removes the task demand. So immediately following that, she's like, okay, nevermind. We're not going to do that. Let's just move on to something else. Some other information that you might want to put in here is that she was working in a one-on-one ratio. So some of you out there might be teachers. So if you're in a ratio of one to fifteen or maybe one to thirty, you'd want to put that information out there because that put, give some indicators of





why the child is engaging in the problem behavior. So let's look at the next example. And for this girl, we have three different examples and we'll show all three in the neslide. But we'll go through each one at a time. For this one, you can't hear what she's saying very well because she's not very loud and has articulation problems, but just know that she's cursing and she actually says SOB. So when she says something, it's muffled, but she's actually cursing during this time.

Speaker 3:	00:46:54	Well, let's use nice words, Rain.
Speaker 1:	00:46:56	Okay. So I'll show that again. When she does say that it is curse words. So let's just show that one more time.
Speaker 3:	00:47:09	Well, let's use nice words Rain.
Speaker 1:	00:47:12	Okay, so now let's move on to the next video of the same little girl.
Speaker 3:	00:47:19	Hey, nice job. Let's not kick Rain.
Christine Austin:	00:47:25	Okay. So in this example, what you, what you can't see very well is that she's actually kicking the instructor from under the desk. She's actually in the middle of working on a conversation programs or what you might hear as intro verbals. So she's just answering questions and she said, I, I believe she said paint or something like that. And she is responding appropriately and independently to what the instructor said, but she's also kicking her at the same time. So I will show that one again for you.
Speaker 3:	00:47:58	Nice job. Let's not kick Rain.
Christine Austin:	00:48:03	Okay. And then here is our third example of the same little girl. You can hear what the instructor says, but it's kind of hard to see, but she does engage in spitting
Speaker 3:	00:48:20	[inaudible]
Speaker 1:	00:48:22	Okay. So one more time.
Speaker 3:	00:48:31	[inaudible]





Christine Austin: 00:48:33

Okay. So would anyone like to share their results? Okay, so let's look at the results for each one. So for the first video that we showed, the child was sitting at the table looking at the camera and the instructor was not interacting with the child. So that's the antecedent and that's the information you want to give. You can just say the child sitting at the table, looking at the instructor or looking at the camera and the instructors just not doing anything. So then she swears. And then the consequence here is, let's use nice words. So we know that she's providing attention to her at that time, but when you are recording what the consequence is, you want to make sure that you write down exactly what the person said in the moment, because that might be what's maintaining the behavior. Another thing to talk about is when you're collecting ABC data, you might want to put codes on your data sheets or be mindful of what it is that you're writing down.

Christine Austin: 00:49:37

Obviously, you do not want to write down curse words during this time. Some of your students may read and they, they catch on to what's going on. So you might want to use some codes during this time. The next antecedent is for the next video is the instructor asks the child a question. So it was when she was in the programming. The child answers the instructor and she does this independently but she's also engaging in kicking behavior at the same time. And then the consequence here is the instructor praises the child's response and says, let's not kick. So you've heard that during the time. And again, this is a really good example of where you're identifying what the person is saying. And then the third example that we have i the instructor provides a vocal cue to the child to indicate the next task will be presented soon and then the child spits on the table.

Christine Austin: 00:50:36

This is important to identify because the child's spitting on the table and not at the instructor. You want to just to find, you know, what the behavior really looks like. And then the instructor calls attention to the spitting behavior. Here we would want to add the information of what the instructor actually said. So this is a really good example of probably a behavior maintained by attention because you can see what's going on here with the consequences. Someone is always attending to what she's doing. So let's look at our next example and we'll collect some ABC data around this.





Christine Austin: 00:51:33 Okay. So I will show you that one again. So you can write down

the antecedent and the consequence.

Christine Austin: 00:52:02 Okay. So let's take a moment so that everyone can write down

their information. Okay. And now let's look at the results. Okay. So for this child, the antecedent was the instructor delivers a command to the child, gets your pecs book paired with the gesture and cue some other information that you would want to write in here as well. Is he was leaving the swing to then she was asking him to get something, but he was actually leaving a preferred activity because we know this child, pretty well, we know that the swing is actually a preferred activity. Other notes that you can put in there in the notes section on the ABC chart is that it occurred in the gross motor room. So if we know that the child likes to be in the gross motor room, transitioning off of a preferred activity might give an indicator of what's

a preferred activity might give an indicator of what's maintaining that behavior.

Christine Austin: 00:53:04 And then under the behavior you can write the child begins to

protest, and this looks like stomping feet emitting high pitched vocalizations and aggressing toward the instructors such as hitting and shoving. If you want to, you could just write down stomping, feet, admitting, high pitched vocalizations and hitting and shoving. And it's really important to identify that chain of behaviors. So here, because we know the child, we know that he engages in a behavior that we've labeled protest. You would not want to just write down protest, you want to write down what does that look like? Because here you can see how it goes from stomping the feet, admitting a high pitched vocalization, and then it goes into aggression in the form of hitting and shoving. So you could just simply write that all down, but be

mindful not to just write down protest because the person who's analyzing this behavior might not know what a protest

actually looks like.

Christine Austin: 00:53:56 And then the consequence for this behavior is the instructor

does not follow through with the transition and provides the child access to the swing by saying, okay, you can have it. So again, you would run a write down in the notes section that this occurred in the gross motor room or wherever you are, because that might be an indicator of why the child's engaging in that behavior. And then under intensity or duration, you would want to say it lasts for about ten seconds. If it lasts for four, three





minutes, you would want to write that down. And then also if the staff was actually injured or you saw him trying to hit her face, if she actually got injured during that time, you would want to write that down too, which then warrants that it is a priority.

Christine Austin: 00:54:40

So after you've collected a repeated observation, so again, just for the sake of the presentation, I'm only providing you one clip of one occurrence or one discreet occurrence. But that's not going to give you all the information that you need. You need multiple days of repeated observations to be able to identify why the child is engaging in that behavior. So if you go back to, let's go back to the little girl's behavior where we were talking about where it might be maintained by attention. Please know that ABC charts will tend to indicate that it is maintained by attention because someone is always going to intervene when someone engages in problem behavior. No one's going to sit there and let a child continue to spit over and over or engage in self-injury or some type of problem behavior. Someone's going to intervene because we don't want the behavior to occur.

Christine Austin: 00:55:37 So if you analyze this, you would look, if you were only looking at the consequence, you would see that we have attention here, we have attention here and we have attention here. But then if you look over here at the antecedent condition, you can see here no attention was being provided and then she gets attention. But then looking at the next one is the instructor is actually asking her a question, which then maybe it's maintained by avoidance. So they asked her to do something, she engages in problem behavior, she praised her for, you know, engaging in that behavior. But then also gave her attention. And then the very last one is that the instructor provides a vocal cue to the child to indicate the next task will be presented soon. That could be an avoidance behavior. So you want to look at not just your consequence, but also your antecedent variables to determine what's causing the behavior occur. But then also what is maintaining that behavior. So the best thing to do is to take repeated observations and then look out which one has the highest probability. If we know attention is being provided all of this time for every single occurrence, then it's most likely maintained by attention. But if we notice that the person says don't kick and then doesn't follow through, then that's an indicator that it might be maintained by escape.





Christine Austin: 00:57:00

So again, this is an easy way to formulate your hypothesis about what's maintaining that behavior. Let's say that you do have a behavior that's maintained by attention in the antecedent. You could say that it typically happens when no one is providing attention. And then here's the target behavior. Maybe it's spitting or headings. So we indicate what this looks like and then the consequence is that the child gets attention from an adult. And when we see this at high probability then the behavior is most likely going to be maintained by attention. But then here we also have our setting events as well to where we also want to indicate maybe this occurs most often when the child has not been engaged in activities. Maybe the child doesn't sleep well and we see something where the child engages in escape maintained behavior or hypothesized escape maintained behavior when the child doesn't sleep well or maybe had a med change.

Christine Austin: 00:57:59

These are all of these setting events that we want to indicate as well because when we get that information from the parents or the people that know the child, then we might be able to put in appropriate preventative procedures as in that antecedent column that can help prevent the problem behavior from occurring. So in part two, what we're going to look at our results from a previous functional analyses or previous descriptive assessments and then show you how we have created our hypotheses. And then how we have created appropriate preventative and consequent behavioral interventions. And then also show you how to work on replacement behaviors or what type of replacement behavior would be functionally equivalent to what's maintaining that behavior. So again, you do not want to skip the part of the direct observation. It's crucial that you start with an indirect assessment because this is where you're going to get a lot of the information about the setting events. And then you're also going to be able to identify goals of the parents or of the teacher or people that work with the child and then identify what is the most prevalent problem behavior that we want to start working on. What usually triggers the behavior from occurring? And then also what is the most frequent variable that occurs, which will then give you a hypothesis

Christine Austin: 00:59:22

of what is maintaining that behavior. Now, like I was talking about before, and the ABC data is kind of hard to collect the



narrative form if you're working with the child. So something that we use here at Step-by-Step is the just the modified ABC chart. And this is where you would just put the student's name. And then here again, you put the instructor, the date and the time of each occurrence. So one box will indicate the one occurrence of the problem behavior, but this is where they can just check. So I check that no attention was provided, check a tantrum occurred, and then check I engaged in planned ignoring or I just didn't say anything to the child or maybe I neutrally redirected him to some kind of task. So this is where it's very simple where you can just go check, check, check, and you're done.

Christine Austin: 01:00:13

Instead of writing it all out in a sentence form. One of the good things about this is it's just easy to use and it's very quick. The drawback of this is that you might not be able to see what was the command that was given, you know, a command was given, but what kind. So we do leave spaces like this to where we can say just a puzzle. So do puzzle or what that is very quickly. And then they can just mark that put, do puzzle move on. I implemented neutral redirection to another type of task and it's just very simple to where they can just make their checks.

Another component that you don't want to forget about though is that duration or intensity component. So that's why we put this area right here because again, noncompliance could occur for thirty seconds or it can occur for thirty minutes. So you want to make sure that you write that information down because that talks about the significance of the problem behavior.

Christine Austin: 01:01:19

And then the last descriptive assessment form that we provided you is the scatter plot. This is good because you can just write down, you can kind of get an idea of when the behavior occurs. So if you are familiar with collecting interval data, it's very similar to either whole or partial interval data. And basically what that means is if you look at this chart at nine o'clock and you can create this for whatever time you want, you could do it all day or you could just do it for the time that the child's receiving behavioral intervention. But if you look at the first block of nine, that indicates nine to nine thirty and then nine thirty to ten so if the behavior occurred, if the behavior did not occur at all from nine to nine thirty, you would just leave that box open. If the behavior occurred at some point during that time between nine and nine thirty, you could just put an X





there. But if the behavior occurred the entire duration of nine to nine thirty you could put, you could just fill all the way in

Christine Austin: 01:02:20

the indicates for thirty minutes seeing the child engaged in problem behavior. This is not going to provide you the immediate antecedent and consequence for the problem behavior like the ABC chart or the ABC code will do. But it still gives you an indication of when it's most likely to occur. So maybe the child engages in problem behavior most frequently in the morning, then that will give you an indicator that maybe we need to look at preventative strategies in the morning time, or maybe we need to deliver reinforcement more frequently in the morning. But from a quick glance, you'll be able to identify when does that problem behavior most likely to occur. If you're in a school setting, it might occur maybe the child has math from three to four. And at that time, that's when problem behavior occurs. That's when you know that maybe maths a little bit too difficult for the child. And then now you can just go in and if you're going to collect ABC data, only go at that time to collect the ABC data instead of, you know, waiting from 9:00 AM until four o'clock.

Christine Austin: 01:03:27

So the advantages of the descriptive assessment is that it represents contingencies in the person's natural routine. So again, you will collect ABC data in the child's classroom, in his instructional environment, on the playground, wherever he is. However, he's normally interacting with other people. We'll talk about the FA and the FA is more contrived and more of a controlled experimental analysis. But this is really just in the child's natural environment. So you can see you know what's going on around him. So he might be in an instructional room and if we were only to focus on the one child in the FA, we might not see that there's another child engaging in problem behavior in the room next door. Those are where you want to write down some of those notes on the ABC chart so that you do have an actual representation of the child's real life experiences.

Christine Austin: 01:04:21

It's also easy to implement if the observer is trained well. So some of the tactics that we've used here at Step-by-Step to help people learn how to take ABC data is just through video modeling. So we'll just take a video representation of the child engaging in problem behavior, multiple examples of that, and







then sit with the person who will learn how to take ABC data and score that with the behavior analyst and the instructor to just try to find out if we really do have a inner observer agreement, do our recordings match. And after the person can take accurate information and it is reliable, then you now, okay, now I can trust this person's data on ABC data and I might not have to go in and collect my own. If you do not have a person who can collect ABC data for you, then you're going to want a score that you don't want to waste your time. Having someone who's not well-trained, collecting ABC data. You want to make sure that you have accurate information and if you're not readily available, then use your video camera so that you can capture that and then collect your own. And then again, use those same samples to teach the person who's working with the child so that you can use your time to do other things or just help them and train them to be more effective.

Christine Austin: 01:05:45

And then the other advantage is that the data can be used to formulate a hypothesis of the maintaining variables. So again, you want to start with your indirect assessments and then you want to move into your descriptive assessment, and that's the ABC coding. And you can create your hypothesis around those two assessments. But if you still don't know, then you want to move into the functional analysis. For best practice it is best to do a functional analysis. But we'll talk, we'll talk later on about some of the risks that an FA does could produce. The disadvantages of the direct assessment is that it can produce unreliable data. We do know that it overestimates the attention variable because someone's always going to attend to someone who is engaging in problem behavior. We're not just going to let someone engage in self injury or continue to engage in noncompliance. Someone is always going to try to intervene to get the behavior to stop. So that is an example of the unreliable data. But again, it depends on how sophisticated the assessor is. Can they really provide you the environmental information that's going on around that problem behavior? And is this a true accurate representation? If not, that's then where the behavior analyst wants to go in will want to go in and collect their own data.

Christine Austin: 01:07:10

So now let's talk about the functional experimental analysis and the characteristics of this is that it is direct and quantitative observation of behavior. The conditions of observations are





controlled and very tightly controlled. And then it also provides a comparison between the test and the control conditions. So what we're going to do, and I'll show you some examples of this, but you can see that everything's contrived. This is not the child's natural environment. You're going to put them in a barren environment and only expose them to the variables that could be maintaining the problem behavior. So it's always best to do your indirect assessment, your descriptive assessment, and then move into your FA. You don't want to skip those two and go right into an FA because you're not going to be able to see setting events and you're also not going to know what's going on in the child's natural environment.

Christine Austin: 01:08:03 So the conditions of the functional analysis include attention, demand, alone, access to teachable and a play condition. And your play condition is your control condition because the child's going to be exposed to preferred activities and given attention frequently throughout the assessment or throughout that condition. So you want to compare what happens in play to all of those other conditions. All of the conditions are designated to be, or I'm sorry, during all conditions, the designated consequence was delivered every time the problem behavior occurs. So I'll go in more detail about what occurs in each condition. But please know that you will actually be reinforcing the problem behavior. So we have provided you a consent form to give to the parent or the guardian. You never want to conduct an FA without getting the approval from the parents first. Then you want to contact your agency and make sure that they deem you appropriate to conduct a functional analysis.

Christine Austin: 01:09:07 So here at Step-by-Step, it's our certified clinicians who conduct the FAs. We don't allow a direct staff to just conduct them on their own. We make sure that the parents know exactly what we're going to do and the tool that we provided you actually details each condition. So the parent has complete informed consent about what will happen. And there's also a disclaimer talking about potential risk. So if the child engages in problem or engages in a self-injury, we want the parents to be aware that we will actually reinforce that behavior, which means the frequency will increase and they need to be well aware of what is going to happen. So again, please look over that consent form and use that as a template for your agency or yourself as an independent person to use and never just conduct a functional





analysis alone, without consent from both the parents and the agency that you work with.

Christine Austin: 01:10:08

All of the sessions last a minimum of ten minutes. So the examples that I'm going to show you here are conditions where they're ten minutes in length. Again, I'm only gonna show you a couple seconds, a for time reason, but know that for each occurrence they last ten minutes. Now let's say that you have a child who engages in very low rates of problem behavior. Then you might want to increase the time of each session, but please know that each single condition, the attention, demand, alone, access and play all need to be the same length. You don't want to have one ten minutes and the next one at fifteen minutes, they all need to be the same length. And also you want to randomize the order of your conditions. So you don't always want to present it in the exact same way because you could have sequencing events or the results of sequencing those in the exact same way.

Christine Austin: 01:11:01

You just want to make sure that it's randomized. So something that we just do here at Step-by-Step is I just write down the different conditions on a piece of paper. Put them in a bowl, pull one out, one out, one at a time. Write that down. And that's my order of the first functional analysis. Again, you don't just do one of each condition. You're going to do repeated measures. So you're going to do multiple attention conditions, multiple demand and multiple alone. So you'll do all five in a randomized order, collect your data, then take a break. You could do it in one day, you could do it over multiple days, you could do it once a week, however you need to do it, whatever your time works for you. And then you want to do another set of conditions. Again, randomized, do not present them in the same order.

Christine Austin: 01:11:48

The minimum would be two, two points. Creates a data line. So you'll be able to see that. But the more that you have, the more conditions that you have and the more data points that you have is going to yield the best results. So you want to do this until you can see that there is a trend in the data either maybe in the attention for the little girl that we had where we put her in there and we can see, okay, we'll end attention. There's higher rates at that time and low rates and all other conditions after three. You might just want to stop there. If you have data



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across the board, then you want to continue to conduct your functional analysis until you see a trend in the behavior or in the data.

Christine Austin: 01:12:31

So in the first condition of the attention condition, the adult maintains a distance of three to six feet from the participant and pretends to be occupied with paperwork. So you could read a book, you could take notes, just make sure that you can refrain from looking at the student, talking to the student or reacting to him unless he engages in the target behavior. So when the participant engages in the target behavior, the adult approaches the participant. Places a hand on the child's back and gives a verbal reprimand that presents what might typically happen. So this is where through the indirect questionnaires, you can find out what, what the parents typically say to the child. Maybe they say, stop doing that or maybe they say you shouldn't do that or you could hurt yourself. Those are some of the things that you want to find out through interviewing the parents or people that typically work with the child so you can identify what would they typically say and then you want to deliver that as your consequence. When the behavior is not occurring, the adult does not engage in social attention. So you basically refrain from giving any attention to the child. But when he engages in the target behavior, that's when you get the attention. So here's an example of the attention condition.

Christine Austin: 01:14:28

Okay. So for this little boy, his target behaviors are swiping materials and also aggression toward others. So the first one that we have is where he's pushing the materials away. During this, I just asked his mom, what do you typically say to him when he does this? So she says sometimes he'll, he'll push things away during meal times. So he'll push the bowl away. And I say, well, you know, what do you typically say? And she says, don't do that. You could hurt something or don't throw your toys, you could hurt it. So that's the same language that I used during my FA. And then when he pinched me, I asked mom what he typically said and she said that she would say, ouch, that hurts and try to teach him that it was hurting her, not recognizing that she's just giving attention to the problem behavior.

Christine Austin: 01:15:13

So that's where the indirect assessments are crucial. So you can find out that information. So even though the FBA has three





components, you don't just want to skip to the very last one of the functional analysis. You want to make sure that you ask the parents or ask people about, you know, what they typically say during these times. And then through direct observation you can just see what it is that they do as well and collect the ABC data. I see that people do want to talk about interventions. Please know that in this presentation we're talking about the assessment. Because the assessment is going to give you all of the information that you need for the interventions, but please know that in part two we're going to break this down by every single variable that we have, whether it's maintained by escape, attention or access or anything else.

Christine Austin: 01:16:04

And then I'm going to go into detail about appropriate preventative measures, also appropriate consequence procedures, and then also appropriate replacement behaviors. Now at the very end of this, I will talk about neutral redirection and how you can neutrally redirect problem behavior while you're still collecting all of your data and creating your behavior plan. So please just know that we're talking about the assessment now. We will talk about neutral redirection, but about the interventions or, I'm sorry, we're going to go into much detail about the interventions in part two. Okay. So the next condition that we have is demand. And this is where the participant is assigned to a predetermined task that is determined to be challenging, but within their intellectual ability. So you want to present something that they're typically learning in their classroom or whatever their behavioral programming calls for it. You don't want to make sure that you're asking them to do something super challenging or super easy, just whatever it is that they're currently learning.

Christine Austin: 01:17:04

Verbal instructions and modeling of the task are provided at the beginning of the session. So before your ten minutes of the demand condition occurs, you're going to tell the child and what you're going to do, you're going to say, we're gonna work on a puzzle, or we're gonna work on identifying sight words or maybe the phonics of letters. Whatever that is just let them know that what they're going to work on. But within your condition when the participant engages in the target behavior, you're going to remove the task for thirty seconds and you can say something like, it's time to take a break. You can say that. You could say, Oh, I guess you don't want to do this, or, Oh, I







guess you don't like that, but remove the task for thirty seconds. And again, this is where the indirect and the descriptive assessments come into play because you want to know what does the typical person say to the child?

Christine Austin: 01:17:51

And those are the variables that you're looking at in these controlled conditions. And again, following or I'm sorry, following the thirty second break, the task and the demand are presented again. So you'll present the task when the child engages in problem behavior, you will then take the task away for thirty seconds, then you'll represent the task. Now let's say that the child continues to engage in problem behavior during that time. Continue to after you've removed the task and he continues to engage in problem behavior. He most likely won't if the behavior is really maintained by escape, because this is what you're really looking for here in the demand condition. But if he does, just wait him out until he's done and then re present the task. And here's an example of the demand condition. Again, this boy, his target behavior is aggression and swiping materials.

Christine Austin: 01:19:18

Okay. So here when I asked the mom, you know, what do you typically do when she was, you know, talking about like daily living skills and she asked him to get dressed and you know, I said, what do you typically do when you say put on your shirt? And she says, well, if he doesn't want to do it at that time, I said, okay, let's take a break. So, or, okay, nevermind. Not right now. We'll do it later. So that's some of the language that I was using. You can, you can change your language based on what you find out through the previous assessments. What you can see here is he started to spin. You probably can't see it because there's another person in the room, but he started to spend the puzzle piece. So then I just prompted him to get the puzzle piece to complete the puzzle. But then you could see he pulled away immediately. So then I let go and then he dropped the first puzzle piece. We knew a direct assessments or through through ABC data that when you tried to prompt him through that it would just escalate and he would then take everything and throw it off the table. So we knew that that was the start of his a non-compliant behavior chain. So I immediately reinforced that first response of dropping the puzzle piece.





Christine Austin: 01:20:29

Now, in the alone condition, this is where the participant is directed to stay in the assigned area. And this is a room, um, for this example that we have, we were actually able to videotape from outside. But Step-by-Step does have a room that has a one way near to where they cannot, the child can't see you, but you can see them and you can watch them the entire time. Just because you put them in a room alone, please know that you never stop observing them. You're always going to observe. If something was to happen, like the child was going to engage in a dangerous behavior. You might want to stop it right there. But again, this is where that consent form comes into play because you want to make sure that the guardians and the agency is fully aware that you are going to put a child in a room without anyone there for a total of ten minutes. The environment is void of materials, so there's nothing else around. And again, the observer observes from outside of that environment so that there's not that social component. Now, this example that I have of this little boy who's a second little boy that we've worked with, he is, you're not gonna see him

Christine Austin: 01:21:34

engage in any type of problem behavior. Neither one of these boys engaged in problem behavior, maintained by automatic reinforcement. And this is what you're assessing for here in the alone condition. But I just wanted to show you what the room would look like, uh, and um, what that environment would look like so that you would be successful in completing the alone condition. So here he's just hanging out. You can see that there's a chairs and a table just like the typical instructional environment. And there's nothing around. There's no toys. If there were toys, he'd probably just go play with them. But again, you just want to assess to see if the behavior is maintained by automatic reinforcement. Another component is that the child might try to escape from the room during this time. So you want to just make sure that the door is closed. We have experienced in the past where the child will go to the door and leave and then the conditions come tainted at that time. So we might have someone hold the door or it might turn into a game. So just be prepared to not let him leave the room during that time. Again, ten minutes of alone behavior, see if any problem behavior occurs. The next condition that we have

Christine Austin: 01:23:06

is the access to tangibles. And this is where the participant is presented with a preferred item. And this is previously





determined by either an interview with a child or an assessment. So you can conduct a preference assessment to determine what's motivating in the moment. Or if the child, if the child can reliably tell you what he likes, you could just interview him. What you will do is present the item, but then the item is removed after a set interval of thirty seconds. So you'll give it to him, give him access to it for thirty seconds. He's playing with it, he likes it. And then you'll just say my turn and take that away. The adult maintains a distance of three to six feet from the participant during this time. Upon demonstration of the target behavior, the adult will present the participant with the preferred item and say, now it's your turn.

Christine Austin: 01:23:53

Or Oh, here you go. This is what you want. Again, try to identify what the languages that the teachers or instructors or parents typically use with the child. And then you use that within your condition. And then after thirty seconds, the preferred item is removed again with the statement, now it's my turn. And then contingent upon him engaging in problem behavior. Again, you'll give him thirty seconds of access to that item. So this is another example of the little boy that you saw before and the alone condition. And just know that he, in this, in this example, he really likes the iPad with doodle bops and then he also likes an ABC book and those were already predetermined to be effective or potential rewards that we actually use for him. But he really prefers them. And what I did was I gave them access to it in the beginning, but for time sake you're just going to see him engage in problem behavior. And then what I do when he does engage in the behavior. So his target behaviors include falling to the floor. And here's an example of the access to tangible.

Christine Austin: 01:25:14 So during this time, prior to this occurrence, I, at the very beginning I gave them access and then I took it away and then I basically just ignored him. He did come up to me and he said hi to me or he would poke me and try to get my attention in those ways to gain access to the book. But I did not give it to him. I only gave it to him contingent upon the problem behavior. So when he actually fell down to the ground is when I gave him the book, which is the preferred item. He also engages in screaming behavior. So if he would've screamed at that time, I would've given it to him at that time as well.





Christine Austin: 01:25:49

And then the last condition or the control condition, which is the play is where you just provide free access to anything that the child likes. So if I was working with the second little boy I would have just given him free access to bops or the book, but then I would have also given him social attention on average every thirty seconds. So you don't just give him access to what he wants to play with and ignore him. You still want to deliver attention to him as though you're playing with him. And no instructional demands are placed on him during this time. Don't ask him to do anything. Follow his lead. If he goes to the book and he's playing with that, then follow him and then just talk to him about it. Then if he moved over to the iPad, let them have access to the iPad and then you know, talk to him about that. The condition that you'll see here with this little boy is he really likes the movie, the Grinch. So that was what was most preferred in the moment. So we gave him free access to that so that you'll see me sitting right here next to him during that and then talking to him about it. But if he wanted to turn that off and move on to something else and I would allow him to do that for the ten minutes.

Christine Austin: 01:27:10

So again, free access to whatever it is that they really like to play with and then just play with them and then you want to see a problem behavior occurs during that time. Now what I'm going to show you in part two of this presentation is the actual graphs of the results of the FA. And again, like I said before, analyzing the data from the indirect assessments, the descriptive assessments, and then also the results of the FA. I'll show you how to apply functionally equivalent replacement behaviors. How to put in appropriate preventatives and then also appropriate reinforcement schedules appropriate schedules of reinforcement. Another thing that we will talk about in part two is what happens if you can't decrease problem behavior alone with positive interventions? We'll talk about some socially appropriate aversive procedure that we use. So that's in the next part is where we'll show you the results and then also how to formulate a behavior plan.

Christine Austin: 01:28:11

But the cost benefits of conducting an FA include that an FA does provide clear demonstration of functional relationships. So this is not in the child child's typical environment. You don't have a lot of compounding variables that could conflict with the, what could you maintaining that behavior. You're actually





controlling for every single variable and it'll show you the functional relationship you're actually creating or you're actually conducting an experimental analysis to identify which condition provides the highest frequency of the problem behavior. And then after analyzing those compared to the other conditions, you can identify if it happens most frequently in the demand condition, then it's most than it means that the behavior is maintained by escape or avoidance of the demand. And then again,

Christine Austin: 01:29:02

it does provide a clear foundation for treatment development. You know, a lot of the times you really can provide or you can create a well-constructed behavior support plan through the indirect assessment and the descriptive assessment. But through the FA is where you're really going to be able to test those variables and say, yes, I know that this behavior is now maintained by escape, which then moves you into a very structured behavior support plan that will provide you, that will then give you thos interventions that will quickly reduce the behavior. If you, if you're not following all of these procedures and you're just guessing what the behavior could be maintained by then, you're wasting the child's time and all of his resources because you want to make sure that you can decrease problem behavior as quickly as possible so that you can then move into increasing learning opportunities and providing him more social opportunities. But please be aware that there is potential risk. And this is specifically for self-injury or for aggression.

Christine Austin: 01:30:15

So if the child is engaging in self-injury, you want to make sure that he's protected. If you're going to conduct a functional analysis. So if he engages in headbanging, you could conduct an FA, but you're going to want to make sure the hit his head is protected by maybe a helmet. Now, that doesn't mean that you're just going to put a helmet on him and then throw him in this condition. You want to make sure that he's tolerant of the helmet. Maybe if he engages in headbanging, which is a very dangerous behavior, you might not even want to do the FA. It all depends on could your descriptive analysis with the indirect assessment provide you the information alone to be able to formulate a hypothesis.

Christine Austin: 01:30:59

The other potential risk would be if the child's aggressive toward others. In that situation, you want to make sure that





you're protecting yourself. So if we know that a child might bite you or he might scratch you on the arm, then we actually put on protective gear during that time, like arm guards or if the child might kick you in the shin, we might wear a soccer shields to protect us from injury. So it depends on the level of comfort of the assessor, but then you also want to make sure that the child's not going to get injured as well. The other component is that after seeing this, it might seem very easy. Okay. So I put them in a demand condition. I place a demand if he engages in problem behavior, I just remove it. And now if it happens most frequently and that condition will then great.

Christine Austin: 01:31:47

It's maintained by escape or avoidance. It's a little bit more complex than that because you want to take that information and determine what's really maintaining it. So maybe the is maintained by escape, but what produces it? Is it that the content that he's learning is very easy and he's bored, so then he engages in problem behavior can get out of it? Or is it very challenging to him to where it's just too difficult to where that's what he wants to get away from. You can take whatever condition has the highest frequency and then break that down and look at some of those variables as well. So again, it's very important that you work with the behavior analyst to do this. At Step-by-Step we do not allow our direct staff to just conduct a functional analysis on their own. Make sure that you do have the consent of the parents and that you also have consent from your agency and then you can move forward. But again, please be aware that there is potential risk for injury.

Christine Austin: 01:32:49

So again, I just want to review the functions of behavior because the next slide, or the next videos that I'm going to show you are examples of children engaging in different types of maintained behavior. So maybe it's attention made, maybe it's maintained by escape. And then I'm going to ask you what you think and test you on what you think is the maintaining variable. But just as a quick review, what I want to remind you is that we either engage in behavior to get something that we want or to get out of something that we don't want or to get away from someone that we don't want to be around. So here's the different answers that you could possibly have. Either it's for attention. Either it's to gain access to a tangible reason reinforcer, or maybe they just do it because they like it or they're trying to escape or avoid a situation, or they're trying to





get out of something that's annoying or painful that's not socially mediated. So let's look at our first example of behavior maintained by attention.

Christine Austin: 01:34:20

Okay. So in this example, this is a student who also has CP. So he actually has used that a behavior in the past to get attention from others. So he might pretend as though he's falling over from a standing position or that he's falling out of his chair. And then of course, because he has CP people are going to come over and assist him very quickly. And he's a very social kid, so he really likes interacting with others. So what we knew from the descriptive analysis was that every time he would pretend to fall over someone would rush over to him. So you can see, or she would say, you're going to hurt yourself during this time. You know, a lot of people would say that to him and that was just an example of where the person is attending to him when he was pretending to fall over.

Christine Austin: 01:35:10

Again the indirect assessment is crucial here because he does have the diagnosis of CP. If it was me, that is exactly what I would do. If I really thought he was going to fall over from a standing position or a seated position, I will come over and help him cause I wouldn't want him to hurt himself. So that's where it's very important to make sure that you do interview the parents or you know, people that really know the child so that you have the history so that they're not so that we know exactly what can be maintaining this behavior or some of those setting events. Here's an example of tangible reinforcement.

Christine Austin: 01:36:05

Okay. So in this example, this little girl likes to play with arts and crafts and she was playing with her or she was, you know, playing with her arts and crafts materials. The instructor came over and said, okay, you know, time's up. I'm going to take this from you. And then she starts to engage in a tantrum and she immediately gives it back to her. So you can see here that she had a preferred activity. She was required to give it up. She engages in problem behavior. She immediately gets it back. Here's an example of automatic reinforcement.

Christine Austin: 01:36:52

Okay. So for this student, she engages in a ritualistic behavior where she wants to stand on specific spots in the classroom and it's usually where light hits the floor. So she will actually find those spots and it's a ritualistic behavior where she'll go and





stand on that before she can move forward. So here you could just see nobody's attending to her. No one is giving her a command, no one's reacting to her, but she engages in that behavior. Here's an example of social negative reinforcement or escape and avoidance. In this example as the antecedent, she asked him to do a worksheet. He says no, and then she just gives up and removes that. So this would be an example of a behavior maintained by escape where she places a demand, he engages in problem behavior and then she immediately removes it. So now it's your turn to identify the function of the behavior

Christine Austin: 01:38:08 And in this video you're going to want to look for hand clapping

or I'm sorry, hand flapping.

Speaker 3: <u>01:38:38</u> [inaudible]

Christine Austin: 01:38:44 Okay. So what do you think the function of this behavior is?

You're right, it's automatic reinforcement. So you can see that no one's placing a demand on her or nobody is taking a preferred activity away from her and there is no consequence. So here she's just engaging in the behavior and there's nothing really changing around that environment. That's an indicator that the behaviors maintain by automatic reinforcement. Okay? So let's try to identify why the child's engaging in this behavior

and the behavior here is ripping of the materials.

Speaker 3: <u>01:39:41</u> [inaudible]

Christine Austin: 01:39:41 okay. So what do you guys think? The behavior's maintained by

attention. So here you can see that her attention was diverted the entire time and then he engages in problem behavior. And immediately following that she says, no ripping, please don't rip. So then she turns away and then he actually asks, is that bad? So he's looking for some kind of reaction from her and then he engages in the behavior again because she doesn't say anything. Okay. So let's look at this one and tell me what the

function is here.

Speaker 3: 01:40:23 Yeah. All right. You can have one more minute?

Christine Austin: 01:40:31 Okay, so what do you think? You're right, it is maintained by

access. So just so you know, the computer here is a preferred





activity. He's playing some type of video game on the computer. When she says the time's up, which is a signal of we have to get back to work in the classroom. He says, no, I don't want to. Now, please know that this student really engaged in high rates of protesting before of he would throw materials, he would completely refuse to work with us whatsoever. So we've actually been successful in implementing a behavior plan to where the topography has changed to where now, he'll just give a verbal protest of, no, I don't want to. And then here she immediately says, okay, you can have it one more minute. Now it might not seem so bad, but a real life doesn't always allow for you to always have another minute. And then probably what will happen after she says no to him again after the minutes up is where he might protest yet again. So it just depends on the behavior that you are treating. And that would be an example of the behavior maintained by access to a preferred item. So let's try to identify this one.

Speaker 3: 01:41:50 Okay, let's do something else.

Christine Austin: 01:41:53 Okay. So in this example, this is more accurate of what he

typically would have done. Here, this behavior is maintained by escape. So here the instructor asked him to do something. He says, no, swipes the materials off the desks, hits the desk, and then just completely does nothing. And then the instructor says, okay, nevermind then. So this is an example of a behavior

maintained by escape. Well, let's try to identify this one.

Speaker 3: 01:42:37 [inaudible]

Christine Austin: 01:42:38 Okay. So something to know about this video is that the boy

was walking into a room where it's known that he has behavioral intervention. And what he did was, before he even got there, he ran into another room. So what do think the maintaining variable is here? You're right, it's an avoidance behavior. So before he even got into the room, he avoided even going in there and then dashed into another room. And then

let's try to, let's try to identify the function of this one.

Speaker 3: <u>01:43:29</u> [inaudible] [inaudible] [inaudible].

Christine Austin: 01:43:38 Okay. So in this example, she asked him to wash his hands and

then he started to tantrum. So what do you think the function is





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here? You're right, it's escape. So she placed a demand on him. He started to tantrum or jump up and down and start whining. And then she said, okay, nevermind, let's go do something else. So here she presented him a task. He engaged in problem behavior and she removed the task. Negative reinforcement. So while you are in the middle of, you know, maybe you have a child and you don't know what those maintaining variables are, you don't know if it is maintained by escape. You don't know if it's maintained by attention. What you're going to do is just the most basic intervention is neutral redirection. Some people might say, you know, it's blocking an interruption or interruption and redirecting.

Christine Austin: 01:44:31

We just call it neutral redirection here. During neutral redirection when problem behavior occurs, it's very important to maintain a neutral facial expression and refrain from talking and looking at the child. So let's say for example, in the last clip that we saw the instructor wants to neutrally redirect him to follow through with washing his hands. She's not going to talk to him during that time. She's just going to say no, try again, wash hands. So she's going to represent the original tasks that she gave him and then she's going to prompt him through it if it's needed and then reinforce him afterwards. So if you don't know why the child is engaging in the behavior that he's engaging in yet, because you're still assessing, the fallback is always to just implement neutral redirection. So if you've given some kind of task and they engage in problem behavior, wait for the problem behavior to seize and then reintroduce the task.

Christine Austin: 01:45:28

If he's not engaged in any kind of activity and starts to engage in problem behavior, then just redirect him to some type of appropriate task. And really you want to use this when he's not already readily engaged in a task. And then you also want to teach the child how to request appropriately. So maybe he engages in problem behavior to get something that he wants. He starts to tantrum, wait until the tantrum completely ceases. And then just give it a small amount of time and then redirect him to requests for what he wants appropriately. Make sure that you don't do it immediately following the tantrum, cause you could create a nasty behavior chain. Just give it a small break in between when the problem behavior seizes, then redirect him to request for something appropriately and then give him what he wants. And then the other thing to do is to





just teach the child to play appropriately. Sometimes we can't provide attention to the child at all times or maybe we can't always, you know, redirect the self-stimulation. So it's important to teach the child to play appropriately so that he can monitor his own time. So what I want to do is show you some examples of neutral redirection from the video clips that I had given you before. So this is the boy that engages in the attention seeking behavior, and this is what she does to neutrally redirect

Speaker 3: 01:47:14 [inaudible].

Christine Austin: 01:47:15 Okay? So in this example, she just asked him to go do his dishes.

> You can see that he was about to come over to the same area that he was in before where he engaged in an attention seeking behavior, but she just prompted him. She just pointed him right away. So she's neutrally redirecting, but she's actually doing a really good job of preventing the problem behavior from occurring as well. So immediately she just points go wash the dishes and then when he gets over there, she reinforces the appropriate behavior, not the inappropriate behavior. Here's an example of mutually redirecting the escape or avoidance

behavior.

Speaker 3: 01:48:02 [inaudible]

Christine Austin: 01:48:03 Okay, so in this example he said, no, I'm not going to do it. And

> then she says, no, try again. Do your worksheet. So then she prompts him and she points to it and makes them follow through with that very first response and then you can see he gives up immediately. So then she prompts him again so that he'll continue to follow through with the worksheet. It doesn't always happen this easily. This is a student that we've been working with for years now. Um, in the beginning he would completely refuse to respond. So what we would do is basically have to wait him out and then for every single response that he would give independently, we would have to provide a lot of reinforcement. So this is over a lot of time where now we can just say, no, try again. I need you to complete your work and he'll do it. And we'll talk later on in part two about the effectiveness of reinforcement. What's the payoff? Is it, is it better to just get a break from instruction right now or is it

better to actually gain maybe more of a break for completing







my entire worksheet? So again, we'll go in depth into appropriate interventions in part too. Here's an example of neutrally redirecting automatic reinforcement.

Speaker 3: 01:49:12 Go over here and sat down. [inaudible].

Christine Austin: 01:49:26 Okay. So this is a really good example of not only trying to

prevent the behavior from occurring, but also neutrally redirecting her through the use of prompting. So you could see she was trying to come right back to that original spot where she wanted to stand on it. But the instructor actually put her body in that spot to where she couldn't gain access to it and then redirected her to the place where she really wanted her to go. Here's an example of neutrally redirecting access to

tangibles.

Speaker 3: 01:50:37 [inaudible]

Christine Austin: 01:50:44 Okay. So this is an example of where she wants the access to

the craft so that she can cut it out. And when, when the instructor took it away, she started to engage in problem behavior and then instead of giving it back to her, she just immediately redirected her to something else. So she knew that the next tasks that she was going to work on was a reading activity. So instead of talking about it, she said, great, let's work for it. And then just redirected her immediately. And then here's an example of neutrally redirecting automatic reinforcement.

And this is the girl that was hand flapping before

Christine Austin: 01:51:27 and here you can see her redirecting to clapping. So it has some

type of the sensory that she may be looking for before but it's more socially appropriate than just flapping her hands. And then you could see in this very last response, she did it completely independently. So she'd learned just through the first two presentations that she should clap your hands instead of flapping. And then this is our last example of a neutral redirection. And this is probably what you'll see most often, especially when working with children who are early to

behavioral intervention or early to education.

Speaker 3: <u>01:52:49</u> [inaudible] [inaudible]





Christine Austin: 01:52:54

Okay. So this is something that you might see most often for behavior maintained by escape here. He's just really trying to get out of washing his hands to where the instructor has to stand behind him to prevent him from falling down to the ground and actually physically assisting him to wash his hands during the entire routine. So this is where you can see she's not talking to him. She's not you know, looking at him, she's not reacting. She's just physically assisting him throughout that sequence. And then immediately following that, she reinforces the handwashing behavior.

Christine Austin: 01:53:31

So just to do a review of the FBA summary, it's a four-step process. First you're going to gather your information from the indirect and descriptive assessments. Then you're going to interpret the information and formulate a description and a hypothesis. Then you're going to test the hypothesis with the functional analysis. Again, be careful if the behavior could result in injury. You may need to skip this or you may need to get protective gear for the participant or the person or the assessor. But again, just please know that the functional analysis is best practice. You'll be able to actually identify what those maintaining variables are so that you can move quickly into a behavior support plan. And then you're going to develop an intervention based on the function of the problem behavior. And this is what we're going to tackle in part two. I'm going to provide you an example of a behavior support plan that we use here at Step by Step. And some of the data sheets that we use here. And then also a quick reference form, which is something small that the staff can reference anytime that you can put up in any location. But really what the goal is going to be is showing you the data from a functional analysis or a descriptive assessment or both and then showing you how to identify effective preventative measures. And then also reinforcement strategies, and then also how to teach appropriate replacement behaviors.

Christine Austin: 01:55:02 I also wanted to provide you additional interviews and questionnaires. And then I've also provided you references of where we have obtained all this information. Okay. Well, thank you very much for participating in part one. And I hope to see you in part two.