Hi everyone. I'm Anne Marie and I've been a BCBA for four years. I'm actually subbing for two very great people. One is John, who is very blessed to be away on a Dominican cruise, and the other Danielle who is very, very blessed as well. And she's on maternity leave. So I am very blessed to be filling in for them and here with all of you.

So here's our agenda for today that are introduction, principles of behavior, functions of behavior, ABA therapy. Just a heads up. This presentation was not made with me in mind some of these pictures I kind of don't understand. So at times I may be going, I don't understand this. So introduction, what is behavior and ABA? What is behavior?

Behavior is the activity of living organisms. So if it's alive, it has behavior. So bacteria have behavior, plants have behavior, trees have behavior, cats, dogs, animals, everything, have behavior, viruses. I guess that's a little questionable, but rocks don't have behavior, it's alive, right? Rugs don't have behavior and soda doesn't have behavior. You get the difference. Yes. Let's see. So behavior or not?

So let's start. I have no idea what movie this is from. Would someone like to fill me in?

I think it's a Weekend at Bernie's.
Anne Marie
Oh! I like that story. I think I've seen a play based on it. So is this behavior?

Audience
Yes.

Anne Marie
Absolutely. They're both alive. Is this behavior?

Audience
He’s alive.

Anne Marie
we think, at least after season one.

Anne Marie
Sorry, spoilers. Is this behavior?

Audience
Yes,

Anne Marie
absolutely. We are Disney people at our company. It is probably a prerequisite, you have to like Disney
to come in. Is this behavior?

Audience
No

Anne Marie
I have to argue no as well, they're not alive, they're cartoons. When I was practicing last night my
boyfriend said they're alive. And I wasn’t going to argue about it

Anne Marie
Is this behavior? Thank you. I agree with you. Is this behavior?
Yes,

Anne Marie
absolutely. What is applied behavior analysis? Applied behavior analysis. This is science in which tactics
derive from the principles of behavior are applied systematically to improve socially significant behavior.
And experimentation is used to identify the variables responsible for behavior change. ABA is also the
gold standard treatment, currently for autism spectrum disorder and honestly, like I said, I love doing it.

Anne Marie
It's truly a passion. I hope whoever you work with, whatever you work with, whoever they are, I hope
it's passion for you as well. All my fun words that just makes me so happy is behavior, response, science,
determinism, environment, stimulus, formal temporal functional. Yes all put smile on my face. The
principles of behavior, reinforcement, punishment and extinction. Reinforcement. Who knows what
reinforcement is? Raise your hand.

Anne Marie
Okay, so reinforcement is increasing any behaviors you want to see more of or as my professor in
college would say, would say contingent upon behavior. Yes. Contingent upon behavior. The probability
of behavior goes "oh, my gosh, I've stayed up all last night. I can't do it any more." Look at that. So
reinforce behaviors. Want to see the behavior goes up.

Anne Marie
So positive reinforcement, we add something. The probability, yes, there we are. The probability of
behavior goes up such as verbal praise. It's quality, not quantity. So be descriptive. Like don't just say
Good job, buddy. Tell the child exactly what they did that was good. So for example, the child played a
good football game or played a good baseball game say you know you really showed, I'm not
sportsperson I just realized, you really hit that ball well you really threw that ball well.

Anne Marie
You really worked together very nicely as a team. Show enthusiasm and praise immediately, praise as
quickly as you can, point it out. Don't wait an hour, a day, do it as quickly as you ca. Physical praise.
Excuse me. High fives are great analogies, like when we were in COVID 19, we were doing this elbow
situation that I don't know what it's about, why it's doing it.

Anne Marie
But the kids love it. Negative reinforcement. When I was practicing this presentation, it can bumble
people. They have never heard of negative reinforcement before. So negative something is taken away
and the probability of behavior goes up. So easy cheat. So you are avoiding something or you are
escaping something. So two good examples. An alarm clock goes off. I am not a morning person.
That annoying noise. So if I'm not a morning person I am going to put my alarm clock on the other side of my room. I need to escape this noise right now, so I'm going to get out of bed, walk to the other side of my room and turn it off. Escape that noise. Probability of behavior goes up.

Anne Marie
So each and every morning they get to that escape, that noise. And I'm probably going to stay awake because I'm already out of bed.

Anne Marie
Let's see, punishment oh goodness such a political world. What do we think about the punishment negative? Oh, that punishment is used when we want to reduce something. Unfortunately, punishment has been a bit of a tainted word, but academic me, I just make up contingent upon behavior, something that occurs and probability of behavior is reduced.

Anne Marie
Yes, I got it. My college professor would be proud so positive punishment. Something is added and probability of behavior decreases. So honestly, punishment should not be used as a first round of action because there are side effects and it can go wrong. So some of the side effects down here are do do do. So it can evoke emotional and aggressive reactions.

Anne Marie
The child may escape and avoid the people doing it, such as they may start avoiding their guardians, their parent, either babysitter or teachers. And you have to tell parents just before you go in. Hence, we always start with environmental factors, anecdotal reinforcement, extinction before we get into the punishment situation. Quite honestly, it's been a while since I've used punishment in any of my behavioral treatment plans.

Anne Marie
That's because all these other interventions just work so well. But I would, if I needed to, I wouldn't necessarily turn my nose up at any of these. There's a reason why they're here. Well, actually, shock. We're not going to get into it. Not for me and I.

Anne Marie
Yeah. We'll get into that. Like, yeah. I just hope my boss speaks Anne Marie enough to know what I'm saying.
[Laughter] so verbal reprimand. Verbal reprimand. As my professors taught me when I was trained to be at BCBA, even though it works, it can be highly effective when done right. Is not recommended. Does anyone know why?

00:08:41:19 - 00:08:46:17  
**Audience**  
why it's not recommended for children with autism? Or general?

00:08:46:17 - 00:08:53:16  
**Anne Marie**  
In ABA. does anyone know why?

00:08:53:16 - 00:08:55:18  
**Audience**  
it's negative? It makes the child bad.

00:08:56:00 - 00:09:19:22  
**Anne Marie**  
That's not necessarily. Not a bad answer, but also not the answer I’m looking for, though I would like to see the reason to that. That's always one of my answers. So most people do not do verbal reprimands correctly. So to do a verbal reprimand correctly, you have to do it each and every time. So guardian.

00:09:19:22 - 00:09:43:05  
**Anne Marie**  
Guardian and guardian all have to be on the same page. So let’s say mom is saying, don't do that, don't do that, don't do that or whatever it is each and every time as BCBA taught her to. But Dad is just giving it every now and again this is not going to work doing it each and every time is can be very difficult.

00:09:43:23 - 00:10:08:13  
**Anne Marie**  
That being said, my professor in grad school while I was training did tell me a story where this did work. It's one of my favorite stories, so I’m going to try to tell it as a can. So when he first entered the school I was training at he entered the adult program and it was a little bit different, a little bit more loosey goosey than what I teach.

00:10:08:13 - 00:10:33:05  
**Anne Marie**  
So they were walking him around, say, Oh, this is our program. And by the way, we don't have any negative behaviors. And he said no maladaptive behaviors, no negative behaviors? And just then an adult male walked by and wam! slammed his head into the locker and he's like “What about that?” Oh, yeah, he does that all the time. And my professor

00:10:33:05 - 00:11:06:02  
**Anne Marie**  
was like, Wait, what? So he made it his business in that moment to reduce that young man's behavior, which. Yes, I absolutely would as well. And so my professor, he tried every as we talked about first, he went into it with the environment and the antecedents that the reinforcers and the DRO, the NCR, the
extinction, everything. And then one day he sits across from this young man's mom, and says, I, what do you do at home?

Anne Marie
Because I know he doesn't do this at home. Mom looked at him and said, Oh, all I do is don't do that. That makes momy sad. Yeah, and he did that once, probed it up. It absolutely worked. A couple of months, this behavior went to zero levels and it was maintained across the years. I even met this young man and he did not engage in that behavior.

Anne Marie
Sorry I thought there was someone behind me. Overcorrection. OVERcorrection is when you excuse me, you engage in behavior. And so not only do you fix your environment, you make the environment better for usually was. So let's say you have a student, the student puts gum under the table. Not only do you have the student clean the gum off under the table, they have to clean the gum off under all the tables in the room.

Anne Marie
Shock. I do not at all recommend physical punishments as my professors in college said, if you're using physical punishments, you are dealing with some very extreme behaviors. As in, this child's about to go deaf, blind, or lose a limb from this, or you took a wrong some place and that's. You can google some things. I'm just going to leave that at that. Contingent Exercise.

Anne Marie
So contingent upon behavior the child has to engage in an exercise that has nothing to do with the behavior that the child engaged in. So let's say I'm looking at a tween or a teenage male who is level one on the spectrum. So contingent upon behavior. Let's say he has a dad who's in the military? Contingent upon behavior

Anne Marie
Yeah, let's say he talks back to his military dad and the dad was well trained by his BCBA. He says, all right, drop and give me twenty. The behavior goes back. And actually there's some nice research on that. So that was all positive punishment. So we add something, behavior goes down. So this is negative punishment. So we take away something behavior goes down.

Anne Marie
So response cost in saying go away. So this is your you know time out, I'm taking away your iPad, taking away your cell phone. Classic things like that. That's a little bit I don't want to say easier, but a little bit less controversial. But once again, we use that as a last resort. Effects are immediate but temporary. Punishment may need to be increased.
So once stopped behavior returns, it may even be worse. Hence, you have to be very careful. You use it, you have to be very smart about it. So escape and avoidance, as we talked about people doing it excuse me, and evokes emotional and aggressive reactions.

Anne Marie
So extinction. Does anyone know what extinction is? So extinction is a little bit different from punishment, though some people do get it confused, especially when you first get to study ABA.

Anne Marie
So punishment is contingent upon behavior. Something is added/taken away and the probability of behavior goes down. Extinction is. Uh. So basically the behavior is not reinforced. You do nothing to the behavior after the behavior happens. So let's say the slot machine. So it's ringing. I don't know. I don't gamble. I'm going to try to pretend to be my grandma.

Anne Marie
Who gambles a lot. She loves the slot machine. Rest in peace granny. She lives in my heart. So ring money comes out, ring money it comes out. So she keeps getting reinforced, so she pulls a lever, that's the behavior, extinction is nothing comes out. She's not reinforced and she's not punished. There you go. So nothing happens. So what's going to happen?

Anne Marie
My grandma is used to getting reinforced, so she's going to start pulling that lever over and over and over again. So the behavior is actually going to increase initially, but there's going to be after awhile, there's going to be a drop. And then perhaps, you know, there may be what's called a spontaneous recovery after a while, but that's going to drop again.

Anne Marie
And you usually get very good results with extinction. If you want behavior to go away, you you don't want to use punishment, use extinction. You know, it's just a little less it's just so much easier. And also, you can use a vending machine example and all I could come up was me just shaking it or paying someone to shake it for me in high school that I don't know my high school antics probably isn't necessary here.

Anne Marie
So so beware of the burst as we just talked about and spontaneous recovery, extinction first immediate increase in the frequency of responding. The extinction procedure is initially implemented and spontaneous recovery as you just talked about, behavior that diminished during the extinction process. Reoccurs even though the behavior does not produce reinforcement this so even though the behavior does not produce reinforcement, the behavior still occurs, this does not mean that extinction was not effective.
So this can be short lived and followed by a decrease in behavior. Or the burst can take a while, but sooner or later it will decrease. So this is what it looks like. This is easier explained in the graph. So the initial behavior, the ring, ring, ring. So the thing about the vending machine, we’re using the slot machine.

So as the slot machine stops giving up coins or whatever it is, it’s like Granny’s going to start pulling on the slot machine a lot more. Or I suppose I don’t gamble. And the behavior goes up. She’s going to get sick of it. It’s going to get less and less. Less. So let’s say this is about a month later, she gets interested gambling again.

So one day she’s just going to go back to Atlantic City, sit there and have a day of gambling, and she sees nothing comes out. It’s going to go away. Does that make sense? There could be resistance extinction. Sometimes it is more difficult to extinguish a problem behavior. There are many reasons why there may be resistance to extinction, such as there’s a long history of high quality, frequent reinforcement for that behavior.

Itnertmittent schedules of reinforcement are incredibly resistant to extinction that continue as reinforcement. The problem behavior response required little effort on the part of the individual or the number of previous extinction trials. This also relates to the intermittent schedules of reinforcement can that they can be very resistant to extinction. So our functions of behavior. Favorite part while...

I was training. I loved to learn functions of behavior. So why? Why did these children engage in what they engage in? So these are your standard functions. So some people argue there’s a little bit more, I do believe there’s a little bit more, but if I was writing the paper, this is what I write about. Attention, tangibles, escape and sensory. And she just cute little girl.

You want me to raise my hand but you never call me when I raise my hand. So I’m going to engage in other things to get your attention. That was me when I was a kid.

how behaviors are more likely to occur during non demand and low attention situations. Yes. me as a kid, I just want my mom’s attention? And she just wants to talk to her church friends.
So after a while afterwards group as she would drag me to rosary group, stations of the cross, all of that. I would. Yes, I'm in the back of the church saying mommy, mommy, mommy, mommy, mommy, mommy, mommy. So that was me. Here's a common one. A child may engage in poor behavior for access to preferred activities and tangibles. So common ones, they may act up for the screen, iPad, the iPhone, things like that.

Anne Marie
Another reason, quite common task/demand presented. So that's classwork, homework chores. next is boredom. I'm doing nothing, so I'm just going to do whatever it is. And this applies to us all. Honestly, sick, ill, honestly, I'm not going to be in the best mood, I'm going engage in some behaviors myself.

Anne Marie
ABA. therapy Who? What? Why? What's it? So who are we?

Anne Marie
So there is to be an analyst or certification board. I fall into this category I am master's level and there are some non certified practitioners. So what's the difference between this one and this one? Because they can be quite similar. So anyone can fall into this category. I have to pass a big ol test to take to become a BCBA.

Anne Marie
I have to take a lot of classwork and I had to do a big ol practicum I'm very tired. so, what was, what was I trying to communicate. So this category maybe has trained or they may not you do not know what you're getting with this category. This category, you know what you're getting.

Anne Marie
How can we help?

Anne Marie
We can help that in a plethora of ways the two main things we do, we reduce behaviors that you don't want these are the main types of behaviors SIB, physical aggression, verbal aggression, like cursing, telling the parents off things like that, property destruction, elopement, disruptions, which I usually call like throwing things that they're not supposed to throw, things like that.

Anne Marie
And behavior increase waiting, accepting no, sharing, taking turns, accepting removals, tolerating change, compliance and communication. Almost done.
proactive strategies, which I've been talking about this entire time. So environmental control and antecedent interventions.

Anne Marie
compliance, how to get people to comply. So some things we can do to change our environment. And this is honestly, you know, this is a very effective first move, changing the environment instead of changing the child.

Anne Marie
This is what I recommend first. It's actually kind of hard because we're telling the parents or the guardians, you have to change yourself instead of changing your child. No one wants to change themselves they'd rather look at other people, including their child, and say they're the problem, change that. I'm not calling the parent the problem. But sometimes we just have to change the household structure.

Anne Marie
We have to work on the transitions. Sometimes we have to change the back room, change the lighting, especially if the child has sensory issues, change the amount of attention the kiddo is getting. Remember it's quality versus quantity. Make sure you're paying good attention to the child, not just you're on your iPhone. Mhm. Yep. Make sure they're getting individual intimate attention.

Anne Marie
Make sure you give the child good choices like truly think about it. Yes, you can ride the pony. You know, pay attention to what you're saying. Would you like to redBlue Pill or the blue pill? Follow through on your choices to the best of your ability. Yes, things happen. Forgive yourself. Perhaps you say if you do X, Y, Z, we can go to the park and then you walk out tired, screaming, That's okay, we'll handle it.

Anne Marie
But if you say yes, if you do X, Y, Z, you have ice cream and give the kid ice cream to do x, y, z if they choose. If it's going to be a big deal, your BCBA can work with you to make a preference board okay. But choices choices are very important and we see compliance go up.

Anne Marie
When you give children choices, respond appropriately to requests. AKA pick your battles. I think you can just forget ABA we can just all use this throughout our live. Premack principle that's my favorite grandma rule first this, then that that works amazingly for anyone, not just in the ABA. Access to highly preferred activity is contingent on the engagement of lower preferred activity.
I used to do this in college. To just train myself to work on activities a lot longer. So 15 minutes of biology, 5 minutes reading? Yes, I'm a book nerd. 20 minutes of biology. Five more minutes or whatever it was, things like that. I would go up and up and up.

Anne Marie
medical considerations is actually really important. So always rule out medical considerations.

Anne Marie
Oh my child, what's a good example? My child, he doesn't pay attention when he writes, he just rushes. So that could be related to or the child could be exhibiting symptoms of ADHD. So perhaps instead of, you know, getting the child to slow down before we work with that, you may want to take the child to a doctor. So if you something happens and you you see a correlation of symptoms, it is good to recommend to the parents take the child to the doctor before he began work on this that and other ways and also learn side effects of medications too.

Anne Marie
It's important. Natural environmental training. This is where I have a lot of fun. So don't assume the individual can or can't do something instead engage that attempt, gauge the effort and be ready to step in using prompts such as verbal prompting, partial prompting, and full physical prompting. The problem behavior may be due to a skill deficit versus performance problem deficit, lack of coping skills. So natural environmental training.

Anne Marie
So people usually think of ABA, classic DTTs, classic chaining, things like that, which, you know, we do a lot of that. The natural environmental training is using is combining the DTTs with the child's world. We do a lot of that in home, depending on the child. So instead of just showing the child a picture, say, what's this? cat. I may take the child's little hand, you know, with mom permission or mom following me, depending on which company I'm working for currently.

Anne Marie
With Step Up to parents always have to be around. Not every company says that so you know we may go for a walk and then if i do the labeling program perhaps there's a kitty, you know, in the street now. I'm from a village in the countryside. I see these in the streets. So I may say, okay, let's label. what's that?

Anne Marie
Gee, that's natural environmental training. I love doing that. So much more fun than staying in the house. some children don't mind that.
So where can you find us? Anywhere. Businesses, schools, in-home intensive therapy, blah, blah, blah. You can find this anywhere. Including the FBI. Yes, my sister keeps trying to get me to work for the FBI. I just, maybe one day actually, I have a younger cousin who’s also Anne Marie who’s going into psychology and I’m trying to encourage her to do this.

00:27:39:05 - 00:27:49:04
Anne Marie
Yes. Keep calm and call a behavioral analyst. I'm not sure how long that was but I'm guessing within the half hour.

00:27:49:04 - 00:27:49:20
Audience
Thank you.

00:27:49:20 - 00:27:51:21
Anne Marie
Any time. Any questions?