Session 20: Greg Hanley Part 3

Matt: [00:00:00] You're listening to session 20 of the behavioral observations podcast with Matt Cicoria.

Intro: [00:00:11] Well come to a behavioral observations podcast stimulating talk for today's behavior analyst. Now here's your host Matt Cicoria.

Matt: [00:00:23] Everybody it's Matt here sessions 20 already how do we get here so fast. Hey thanks for joining me today.

Matt: [00:00:30] Today's a long awaited question and answer show with Greg Hanley you guys have been so patient we've tried to schedule this once or twice and we managed to get it done over the holiday break so you know Greg's been kind enough to appear for the third time on the podcast. His first two appearances have been the most downloaded of all the podcast to date. We take quite a bit of time going through all these questions so I'm going to try to keep this introduction short. But I do real quick I want to thank all of you who took time to fill out the survey that I sent out and that survey was a listener feedback survey design dad giving me information so I can improve the listener experience. I can't get into all the results here and might do that in a future episode but in brief I will let you know. I read every single response and I got quite a few suggestions on how to improve the show. I look forward to taking action on these things as we transition into 2017 here. Getting back to this episode I find myself really enjoying the listener Q&A format. Going forward I'm going to try to work in some listener questions or two into my regular interviews so you can stay tuned for that. The way I'll probably do this is that the next time I conduct an interview I'll send a note out to mailing lists subscribers and let you know the guests and the topic then I'll choose a question or two from what I get back.

Matt: [00:01:55] So if you want to get on that list you can head on over to behavioral observations dot com and click on the bright red button to your right and follow the prompts from there. It's pretty simple. So again I want to keep this introduction really brief because we do have a lot of material to get through. So without any further ado please enjoy this listener Q&A episode with Dr. Greg Hanley.

Matt: [00:02:17] Hey Greg Hanley Welcome back to the behavioral observations podcast. How are you doing.

Greg: [00:02:21] I'm great. Matt thanks for having me back. Happy to be here.

Matt: [00:02:24] Well I really appreciate you coming back for round number three. So this is I've had some repeat guests but this is the first three peat if you will so thanks for indulging the crowd once again. You know I want to let you know that you know I know we were chatting prior to hitting the record button here that you know there is an intense interest in what you have to say and the topics that you like to talk about. You know so episodes 1 and 7 that you appeared on have been the most downloaded shows out of the 19 or so podcasts that I've published to date. So it just speaks I think to the message of what you have to say and people's intense interest in trying to help kiddos and adults with problem behavior. So I think it was the number one man downloader almost 10000 times which is just completely mind blowing.

Greg: [00:03:24] Yeah that's really neat. I mean it's it's an important topic right. Most of us as a call to mind to help folks with problem behavior. So I just happen to be talking about something that has value too. We are a field. I tell you I've been enjoying your podcast. I really like what you're doing and it's just great to see the feel communicating in multiple different ways. And we need that so

that's great. And you reach and practitioners when I go to conferences and I meet up with people and they know the kind of things that we are working on right now. So how did you learn about that and they say why listen to the observations podcast. I say I'll write one another point from that. So yeah. Good stuff what you're doing. So thanks for doing it keep doing it.

Matt: [00:04:08] Thanks I appreciate it. It's a really fun project. Do people ask you. Do people ask you if you want a whisky smash. They

Greg: [00:04:16] do. Thank goodness. Yeah. So at the very least there's that right. Yes.

Matt: [00:04:23] So I've got a list of questions here. But is there anything. So what's crazy is that we're record the second episode more than a year ago. Excuse me and if I didn't release it I really said more recently than that but so I wanted to see before we get into the questions here.

Matt: [00:04:45] Is there anything new that you want to update us on in terms of the IISCA process and what sort of research you're doing and things like that.

Greg: [00:04:54] Sure we have a fair amount of projects going on. Basically we are really trying to move it out and figure out ways to get the treatments to work in relevant settings. You know we're asking questions about maintenance generality parent training the preventative advocacy of a program like this as well as gearing up to do some kind of randomized controlled trial to really see it in somewhat of an actuarial sense whether you know what's the probability this process will improve outcomes in meaningful ways for the kids it's designed for and really get a hit rate. Well looking at it those sort of questions they're intriguing us right now. We also have a really neat home based prevention program called balance that we're working on but it's in its infant stage and what I'm excited about that. And then there's a question that someone had that will probably get to but we're also applying some of our skill based treatments better to automatically reinforce babies especially stere oddity and that's really exciting. Oh yeah. So we've got some we got some good stuff going on. We're just trying to move forward.

Matt: [00:06:06] And before another question before we get into the listener questions is I can't let this opportunity pass without asking you about the supposed them. AB I last spring in Chicago. For those who weren't there there was kind of a earlies I'm going to editorialize here for a second but that was kind of an epic showdown between you and Wayne Fisher who is a mentor of yours and certainly and it was it was like watching a a teenager or a young adult argue with a parent. And I had that like you know like an Irish Thanksgiving or something like that.

Greg: [00:06:53] That's a good way to frame it. Let's take.

Matt: [00:06:58] I'm half Irish despite my last name so please please don't write in.

Greg: [00:07:00] You know I don't know if I don't know how it came across necessarily. I do know that I was thankful that Wayne started out and modeled some kind of cordiality and I hope I followed suit. I have a lot of respect for Wayne obviously I mentioned that several times at that. And and gosh you know we just happen to disagree on you know some details. But I mean the devil's in the details and they are important details. But nevertheless you know I give I give Wayne a lot of credit because a lot of people have commented in in ways that they don't either don't understand or don't appreciate the way we're doing analyses nowadays. But Wayne was generous enough to talk about it publicly Wayne was generous enough to do a comparative analysis spend some of his research time on it and engage the conversation. So you know I've always respected Wayne since the day he hired me and I continue to this day. Because of the way he handles himself professionally in such a transparent way. But it was fun. I I think we left with a little more common

ground than we started with. I think that was a good thing. And I think we probably dispelled some of concerns that people may have had about why Wayne proceed one way why my research and practice group proceed a different way. And what's neat is the conversation still going it's going on in the journals although that's a slow and grinding process. And so we'll see what shakes out.

Greg: [00:08:38] But it was a nice opportunity and I really wish there were more events like that at all but to be honest where we just in a transparent sense talk about the things about all just pages you know yeah yeah it was.

Matt: [00:08:51] It was unlike any event I've seen. And you know I've been doing this for a little bit and it was it was you know it's funny it was in Chicago and it was at that was at the Hilton down the street you could have done it in the room with the Lincoln-Douglas debates. You know it took took place you know where were the ABA was held.

Matt: [00:09:09] And with five or six years ago I think you know it was really it was. Anyway I'm not going to belabor the point but it was don't we don't we don't see disagreement erode out much.

Greg: [00:09:21] You know in a public sense and that's unfortunate. I would say we see it more in basic research you know when there was debates non-matching and Molar versus molecular interpretations different predictive models. There was much more public disagreement that was fun even if you weren't really into that content. You went. Just because it's interesting to see that kind of dialogue is people were tracked to that. I think people were looking more for more of a train wreck and more of you know I wanted to attack each other but there was none of that. There was just the content and the disagreement.

Matt: [00:09:55] There was there was some passion there though.

Greg: [00:09:57] So there was actually they were running out of time. We are pressed for time. And so that made that added another factor to an already potentially contentious event just being pressed for time made it that much more intense if you will.

Matt: [00:10:11] Yeah I saw some colleagues who right after that who were attending a different event and I was like you guys just missed something awesome.

Matt: [00:10:21] So anyway it was it was it was fun. But again I don't want to belabor that point but I I want to highlight that because it was it was cool and hope to see some more dialogue like that at future conferences. And I agree with you I think that that's healthy.

Matt: [00:10:35] So having said all that I've got some listeners who have been really champing at the bit to ask some questions about the process so if it starts with you. So let's go through and check. Check out what people are asking about.

Greg: [00:10:51] Great let's get into it.

Matt: [00:10:52] All right cool. So I'm going to go to just kind of bang through this list here and it kind of be mindful of your time here.

Matt: [00:10:58] I know you're probably about an hour and a half south of where I am right now but we've got about a storm that's going to bring about 20 inches of snow on us.

Greg: [00:11:08] You got you more than me but we're both going to get whacked.

Matt: [00:11:12] We're going to get whacked here. Yes. Well we'll we'll be mindful of time may not be able to get it all in but we're just going to go through and see what we can get to some.

Matt: [00:11:20] All right. Without any further ado Greg Elsje asks How do you run the early phases of tolerance training when the reinforcer is not immediately available or not available at all. For example I want Disneyland.

Greg: [00:11:32] Sure. Yes this is a great question that Greg ask what I try to teach our group to focus on is to set up your original analysis conditions to evoke Manze that can be reinforced in somewhat of an analog setting.

Greg: [00:11:53] OK so we're not running our analyses and the natural conditions we're usually running a minute in a controlled space and we do that partly so that we can get a lot of repeatability of set the IIO get a response response and so on so forth. So again some kids are going to make requests that are completely unreasonable. Unreasonable says we can't reinforce them in the moment. We try to deal with that in the early stages well before we get the towels trained to teach kids the game. These are the things that you can man for that we going to provide. And then eventually withhold. So we deal with that at that front and we also have this phrase where when someone asks for something that's not deliverable at the moment we say I'm sorry. That's not reasonable. And we move on it's basically signaled extinction OK. And so we try to get some kind of control over that type of man that will be admitted and then we can begin our tolerance training so we can make it clear that we are going to reinforce them intermittently and unpredictably with that thing they mandate for. So again the trick is really in the analysis phase to give that child a opportunities to man for things that are available who want to populate that environment with the many things that are going to evoke mending that can be reinforced at the moment. And that again goes back to synthesized contingencies right now putting a toy in the room putting many toys in the room that people have used to control problem behavior.

Greg: [00:13:16] And then again using a signal to extinction as needed those unreasonable unreinforced people mans get tagged with as not reasonable and no reinforcement this unfortunate that sometimes leads to a little resurgence in problem behavior. And we simply deal with that through extinction but it's extinction in the context of differential reinforcement those reasonable Manze then become stronger and probability. And then we're off to the races.

Matt: [00:13:41] And I would imagine if you know people in the natural environment aren't consequating problem behavior with Disneyland all with all that much frequency's so I'd imagine some of those there might be some from an analysis standpoint. There's more than likely something else that's reinforcing those that repertoire of challenging behaviors is that fair to say.

Greg: [00:14:01] I think that's a good question. We don't know. Sometimes it's just part of the response class of man thing and the man's get a little more unreasonable as a larger chunk of or reinforce consistently so it could simply be that that is the reinforcer. It is a man they are specifying the event that's important to them at the moment. It could also be that that unreasonable Mand is maintained by a different reinforcement continuously just like you're saying and there's no doubt that just controlling the conversation and getting access to somebody who's attention is a reinforcer. And so those on reasonable minds can certainly be influenced by that although you had ever shown that I believe that to be the case certainly yeah could make people jump through hoops and things like that that's kind of where I want it.

Matt: [00:14:45] Yeah.

Greg: [00:14:45] Yeah. No I think you're right on. I think that's something needs to be

demonstrated. We have control by preferred conversations and things like that but I don't think we've shown I don't think anyone's shown that these are unreasonable Manze are maintained by some other reinforcer than that which the man specifies and undoubtably that is happening in kids in a lot of kids with autism that mans that are completely out of stimulus and evocative control. Are they just messy. Manders I call them men and those messy Manzer are usually maintained by things that are not specified and usually simpler than the thing that is specified.

Greg: [00:15:22] But again that's a that's an empirical thing that needs to be demonstrate empirically just something you and I see in practice. But the research has yet to catch up.

Matt: [00:15:31] Ok cool. Laura Peterhof asks. She's got like a five part question, I'll ask them one by one.

Matt: [00:15:38] Yeah. I have to tell you people are totally into this. She has what do you tell parents or school staff. Excuse me. What do you tell parents or school staff to do if the client starts to say my way outside of the session. Do you tell them to reinforce it every time if reasonable? I can tell she's been listening because she used the word reasonable.

Greg: [00:15:56] There you go that's a term I like to use to with families and teachers. We do say if the child if the mands that were teaching in sessions bleeds outside session which is in the long run a good thing right that kind of generality we do say try to reinforce it as much as you can. If we're in those early stages of f.c if we're in a later stage we'll already begun tolerance training will try to export that kind of schedule where you sometimes reinforce the man and you sometimes expect more behavior. So we we basically have changed our tune a little bit in how we transport the treatment out and this question kind of allows me to talk about that a little bit. We used to really focus on shaping up the entire repertoire. OK communication toleration compliance. And until that repertoire was completely shaped We didn't export the treatment to other settings and we really didn't want people relevant people from relevant context implementing the treatment. But like Laura brings up sometimes those skills come out. And so that's one reason why we changed our transfer model. The other reason is we noticed that sometimes when we waited for the whole skills all skills to be acquired and then we put mom and dad in the room we saw our return to baseline levels despite the contingencies supporting the right behaviors.

Greg: [00:17:15] And so because of those two reasons we have a different transfer model now and it goes something like this at every stage of treatment let's say would FC one stage once they have the communication response. We now like to bring the parents or the teachers or at least someone else in the room to implement the treatment and we start the general generality process earlier. OK. So then once they learn the town's response from an expert the expert develops the tolerance response. Then we put the parents back in the room so we're now introducing parents to the treatment sequentially as opposed to at the very end of the process. Once we introduce him sequentially we still say listen don't take this on the road just do what you've been doing to manage at home. If the if the communication no toleration response happens though we do say just like or insinuate we say reinforce it to the best you can.

Greg: [00:18:08] We worry about chaining problem behavior and all that with these nice skills but it's inevitable. And so I think the best way to get through this at all. And on this the best way to deal with this is to do the treatment as fast as possible. Got that the last thing we're trying to focus on was spent we. My group spent too much time developing these skills we have models where parents come in but two hours a week it's just not good enough. We really need to see kids for five hours a week. We need to be in schools implementing this two hours three hours a day so we can get through the skill building process fast so we get it out into the natural environment quicker. And then we can avoid all these issues more readily.

Matt: [00:18:51] OK. So you are already kind of when they hadn't answered your second question. Would you even consider this process for a behavior which in which the re-inforce here is one you cannot deliver for example Pica or and here we can also put self-injury in there anything. And kind of harmful realm.

Greg: [00:19:12] We certainly do this this question kind of has two bits to it.

Greg: [00:19:15] OK so the question seems suggests would you do this with automatically reinforce behavior so I'd like to touch upon that then the other one is would you do this with severe topographies of problem behavior. So I'd like to talk about that because they're really independent factors to consider. Let's take the second one. First we do the ISCA with severe problem behavior no matter how severe the behavior is. In fact the early understanding was this might be a good procedure for kids with like kind of easy to manage low intensity problem behaviors. I don't know where that came from but that is not the case. In fact the first three kids in the studies did not have easy behavior was quite severe quite harmful. They were breaking bones and hurting people and on their way to residential programming. We do this with a severe problem and we think the reason why it's important to us to their problem is this is fast and it's relatively safe because we stop the behavior quickly by with a synthesized reinforcer. So yes we apply this to the problem including self-injury. Now when it comes to things like pica readily admit that I have not applied the IISCA to pica. I was fortunately involved with the early pikas studies with functional analyses with Kathleen piazza. They involve baiting the environment with safe to consume items. It's certainly and you should probably be doing this with medical oversight.

Greg: [00:20:41] I had the luxury when we did these analyses with Kathleen of having medical availability of personnel during the analyses I think that's one of the reasons I don't do that and do not have medical personnel in my outpatient clinic. But nevertheless. Could you do the school with pica. The answer is yes. Let's give the caveats one. You've got to bait the environment with things that are safe for the child to consume. You might consider allowing the behavior to occur and then upon that first instance reinforcing it and ending the session before they consume the item that might be consistent with a trial a latency based analysis. I think that would be a smart application of it. Again just because you do a latency a trial based doesn't mean you need to use the standard procedures you can still synthesize and inform the contingency. But just once the behavior occurs one time provide the reinforcer and move on. I think that would be a smart thing to do with pica. Again I think having some medical personnel there would be in people's best interest. But I see no reason why it could not be done with pica. The assumption that pikas often maintained by automatic reinforcement probably isn't true. If you look at any review that social sensitivity has been shown with pica. Repeatedly. So yes I think you can do this. I haven't. But those are the things I would consider were I to do it.

Matt: [00:22:06] OK so let's look at stereotypic behavior then.

Greg: [00:22:09] Yeah. Great. Lots of people ask Well what about automatic reinforcement every time I do a workshop there just politely waiting for me to talk about automatic reinforcement and how the desk addresses that. So let me take that on its own We'll get the story out of the when we do an interview it becomes somewhat evident that the behavior seems to be controlled by automatic A sensor reinforces during that conversation if that's the case we simply ran in alone condition.

Greg: [00:22:40] And if behavior persists in the absence of any change in the environment we use that as a baseline to treat. Now it doesn't mean prom aver is insensitive to other reinforcers. And sometimes we will run an ISCA with a social or synthesize social reinforcer to see if we see more behavior than we do in a alone condition. In other words to see if it's sensitive to those social

reinforcers. If it is we'll treat the behavior with the treatment predicated on control by social reinforcement. But that which remains that which is leftover that persist in the without any change. That's what we would consider the automatically reinforce behavior and we would treat accordingly. So what would that analysis look like. It's one condition called the alone or ignore condition.

Greg: [00:23:27] And so there is nothing special about a standard analysis for detecting control by automatic reinforcement. It's simply a default when we show it persists without change. And so we do that in a single condition. Is that an IISCA. I guess so it's informed by an interview and I'm not running four or five conditions I'm merely running the one. There's precedent for that. Well before we started doing what we do. So that's the first thing. What we do in the analysis. But secondarily Dr. Jessica Slayton has just started a project while it's been on going on for about a year and a half now where we're applying our skill base treatment to automatically reinforce stereo's to be honest and this is not automatically reinforce self-injury This is automatically reinforce behavior that we can tolerate occurring some time and the treatment effects are really pretty strong and we're very happy with it.

Greg: [00:24:21] And I'm pretty excited to share it soon.

Greg: [00:24:24] But basically it looks like this we teach the kids engaging in chronic stereotyping that's interfering with learning or social interaction. We teach them to ask for permission to engage in stereotyping and we're working with kids that don't have any sometimes vocal verbal behavior but they learn to say things like. May I play now. May I do it now. OK and they sometimes have interesting words that their parents have taught them to label their stereotypic and they may end for it. And what do we do at first what we say yes. Every single time. And if they don't man for it we block stereotyping.

Matt: [00:25:01] Do you block them as prior to prompting the man so they're not having free access to that right.

Greg: [00:25:09] That's exactly right. So it looks like this. They're engaging in stereotyping. We put our hands on their hands to quiet the hands are quiet their body depending on the form of this very odd to be. And we prompt say May I play they say it and we back off.

Greg: [00:25:24] Let them engage in stereotypic. Thirty seconds later we go back in. We restrict access to stereotype be prompt the Mande move off within usually sessions. These are five minute sessions. The child learns to emit some rudimentary Mande and then we shape it up and do that. You know something stronger. And then we go right into tolerance training and then we go right into compliance training. And what Jessica has shown is we've got kids who haven't done discrete trials for a long time. The IP goes on being met. But when we apply this intimate unpredictable reinforcement of communication toleration compliance these kids learn their skills. So when they sit down at the table they're working they manned for stereotyping. We sometimes say yes we sometimes say no. They say OK no problem.

Greg: [00:26:13] We sometimes reinforce that we sometimes don't and then sometimes we say in a field a A-6 match this point to this and we get that discrete trials going without any stereotyping it's going really well. What I see it's very exciting. I'm really Isma It's a project that is most interesting to me that we have going on right now because we're in the thick of it and the data are coming in it. Look at Sharp the kids. The other thing that was neat is we got a couple of kids were targeting motor stereotype. They have vocals on it. It's obviously easier to target the motor it with blocking and differential reinforcement.

Greg: [00:26:52] And we're seeing concomitant effects on the vocal stereotypy. So although we're not treating vocal stereopticon we're not because we can't block it. Right. I was going to ask about some interruption right. And we will talk about that but we just let it be. We just don't have any programmatic contingencies in place but we're seeing it Coalville are you in other words it's happening when the motor stere out to be as allowed to happening. It's not happening when we made it clear motor stereo ought to be Shouldn't these other behaviors should happen. So that's pretty exciting. I don't know if that will hold up. I have a feeling we're going to meet some clients and we'll get nice influence on motor in the vocals. Will we'll need something else.

Greg: [00:27:28] We're extending the treatment now where instead of blocking we're using Dr. Ahearn's treatment, response interruption redirection. So instead of blocking We have the child do three vocal compliances if there if they will or will do three motor compliances so we can guide them. And and I don't know how that will work out we're just starting those projects right now. But it's exciting it's basically the same treatment and I'm I like things that are consistent and fairly straightforward and that's what this is. No matter what the controlling contingency is we're using the same skill based treatment and then that leaves off one section of the population that we serve and that is kids who have self-injurious behavior that is this valey injurious and it's automatically reinforced. And when I do workshops I make it very clear that I can offer nothing special for these children that which I do with these children has been in the literature for 10 15 20 30 years. What what we've been doing is what I would do to theirs. I have nothing new to offer in that department. I think we're where we're fairly effective with right now and probably it is maintained by social reinforcement indoor prom behaviors non-injurious and maintained the automatic reinforcement. But it's that that last quadrant if you will of right automatically reinforce self-injury that where basically enriching the environment trying to teach and play skills and using some sort of punishment contingency to decrease that aid or using protective equipment and trying to fade out that equipment.

Greg: [00:29:06] That's what we've been doing for I was taught to do in the early 90s 90s that is and that's what I'm continuing to do with the kids present in that way.

Matt: [00:29:15] Yeah I worked a lot with the population many years ago and yeah that's it's just a really really tough profile to program for so it is I get it.

Matt: [00:29:28] All right. So let's see. Laura last question here. When the interview and F.A. show the problem behavior occurs when mans are not complied with i.e. someone's being told no. Do you still teach the simple and complex. FC T. I think she means of S.R.. If so what would this look like. Would the student mend the teacher say no. The students say my way please. And a teacher would then either deliver or say no again. Or would you skip the simple and complex F.C. teen go directly to delay and denial tolerance training program.

Greg: [00:29:59] Good. That's a really great question. I want to make clear that little interaction that Laura described is exactly the kind of interaction we're trying to program. It sounds a little bit laborious this conversation going back and forth but I try to have that happen for kids who are not interacting verbally i.e. socially with other adults. OK so to me that dialogue that just happened I would try to program something like that for kids who are not engaging in that dialogue. By contrast I meet some kids that with or without autism they like many lawyers. They're constantly engaging in the dialogue and that's exactly what the parents and teachers do not want. And so again whether we're programming that interaction or not really depends on the baseline and what the parents goals are regarding language and continued interaction. But more to the point of the question. If the child's manners are incredibly precise it's fairly obvious that. That which they're mending for there is a controlling establishing operation and when the man does reenforced it satisfice the child then I sometimes do go right to tolerance training. And I think that's fine if this

precision to the Mande and we can turn prom behavior off by reinforcing those manners. Each and every time. Then I don't think it's a problem going right to challenge training however many of the kids with problem behavior that we see their mans are somewhat imprecise and demands have also been changed.

Greg: [00:31:38] Probably with problem behaviors so it's it's really a mess and when it's a mess like that I like to go back and clean up the language game a little bit by teaching them a generalized mandate to get all their reinforcers to turn off all LEOs to make sure they will not occur. And I will rebuild that repertoire and I'll get back to a specific manner. We have a neat project going on that teaches us how to do that. So to me it's all in the precision of the man.

Matt: [00:32:05] And that's why you'd use a novel mand to write with no baggage associated with it.

Greg: [00:32:11] That's exactly right and you hate it. There's another question here if you don't mind me now. Go right ahead. Do it by a Chad Farve. He was asking because during a previous podcast I referred to a study that it kind of conferred the advantages of that novel Mande match just like you mentioned. And it's we need more research in this area but I really like this. What this study contributes is by Mark Derby. Wayne Fischer Kathleen Piazza art Wilkey and I believe Catherine Johnson who has published a behavior modification in 1998 and basically it's a really elegant analysis showing that when you reinforce existing mans and you put problem behavior on extinction problem behavior will persist because presumably it has some response class shared control by problem behavior.

Greg: [00:33:04] And these in these old mands are being controlled by the same re-inforce and because they've been historically reinforced in the same context. When you reinforce that preexisting man you will get problem behavior despite not reinforcing it at the moment. They showed how. By contrast when you shape the new command and you differentia reinforce that new Mande they did not see persistence of the problem behavior. And they think they showed it in a reversal design. It's a pretty elegant study. But you know more information would be nice but that's enough information for me to say let's go with the new man. And we might see the effect of differential reinforcement more readily than choose to preexisting man for ease of acquisition.

Matt: [00:33:48] Cool. All right.

Matt: [00:33:52] So Mina Benjamin asks Did discrepancies in construct validity found across indirect direct and experimental phase hold up for functional analyses of rebel behavior as well.

Greg: [00:34:07] I'm that be honest with you I don't know how to answer this question. There's a lot going on in there. Discrepancies and construct validity. I

Greg: [00:34:20] don't I don't know exactly what they're referring to there are some studies comparing indirect and descriptive and functional analyses. And I understand why those studies were conducted when they were but for me in this day and age these are different things. And it's not surprising that indirect and descriptives and analyses don't match up because the world of controlling variables is too big and they are complementary not substitutable assessments so I don't lose sleep over this construct validity issue in functional analysis. The only validity that matters to me is treatment utility. And we've shown that by combining interviews and analyses we can effect meaningful behavior change.

Matt: [00:35:07] And what was your process it's not like an either or right. So you're using audio interview to help guide the analysis process.

Greg: [00:35:15] That's right. So I don't see them as distinct. I see them as complimentary. And so I don't know about the first part of the question.

Greg: [00:35:24] And as far as implications for meeting verbal behavior deficits there are there are really two gross paths if you will to two big paths you can take and one is taken kind of a verbal bater approach and there are curricula out there to develop language skills and I prefer that kind of functional approach. And then the other approach is well starting with evos for problem behavior in teaching language that seemed to be related to those evos those events that are of open problem behavior. I obviously prefer that path because the kids that are coming to us are people complaining about problem behavior. So we start on that path and then to me again it's not they're not substitutable they're complimentary I think practitioners would be smart to start with problem behavior because that's where the child is exceptionally motivated. You have a powerful reinforcer and we're going to teach language from that establishing operation and then once we have that going down and problem behavior to zero levels then I think taking non verbal behavior approach other like curricula would be great. I am fairly certain I did not answer minors question but I'm simply responding to some of those words that I understand and those are the responses I have to it.

Matt: [00:36:46] OK.

Matt: [00:36:49] Let's let's go to Michelle Mazal Leni. She asks What's the deal with visual schedules being bad. And I'm tempted to do that and like a Seinfeld voice but I don't nauseate the listeners. But it sounds like something Seinfeld. What's the deal. So this is a question I've gotten quite a bit.

Matt: [00:37:06] As a matter of fact and I get into little arguments with some of my some of the people I consult with who you know I think don't just say ritualized the use of official schedules but use them regardless of whether they're beneficial or not. In other words if you're if you if you have autism you need a visual schedule you know. That's right. That's right.

Greg: [00:37:30] So. Well I I agree with the sentiment that you're sharing visual schedules are neither good nor bad. OK. But I would agree with the sentiment that we may all be used them we may put a little too much confidence in their ability to do good. OK. And I think last we as a field are appreciating the fact that not only can they sometimes be relevant but they may be relevant to influencing problem behavior. In other words they may lead to a worsening for the child not necessarily some benefit. So I again I may have said this in some presentations based on a little bit of data and we need a lot more data here and I'm not saying these things to be provocative I'm saying these things because I'm sitting on research that it's going to take a while to get out in publication. But I will refer to one study this is a study by Joshua Jessel. It was published last year in Jaba. It's a translational evaluation of transition's for though I refer to it for two reasons. One he outlines some nice basic research and some applied research that shows the trouble with what might be best called signaled transition's which is what we're essentially doing with visual or textual schedule's signal transitions. The basic research is from Mike peron's group primarily. And what it shows is that when you have someone working in a relatively rich reinforcement context and they're going to transition to another reinforcing context but it's not as rich. OK so it's a leaner reinforcement context there's nothing necessarily inherently aversive about the second context.

Greg: [00:39:18] It's simply not as good as the primary or the context they're in when there's a signal that's. An animal or non-human animal or a person is moving from the rich schedule to the relatively lean schedule. And again that transition is signaled that's a reliable way to produce pausing meandering escape behavior. OK so given that let's think about what a visual schedule does. About 50 percent of the time there's a rich Tylene transition in we're signaling to the child

Hey kid I know you love what you do and now I just want to let you know that it's going to get crappier. Let's go. That's what's happening. That was my attitude. That's right. Now the other 50 percent time what's happening. They're going from a relatively lean schedule if you will to something more rich and you'll see some nice beautiful transition. So when we say the child's having problems transitioning and I see that there's a visual schedule on the wall that is actually influencing the child they are under control of the visual schedule. That might be a problem because with signaling impending doom with signaling worsening. OK. The treatment for that is not is not terribly forthcoming but there's a couple ideas. One remove the signals. If you simply go to the next place and you don't tell the child in advance that it's going to get worse you might get rid of any transition related issues. What Josh recommended in his paper was we call him might think we call him surprise boxes but basically we put question marks on the schedule.

Greg: [00:40:56] And so the child doesn't know whether they're going to an area that is better than where they are currently or worse than where there are currently. And when we have this intermittent and unpredictable improvement in worsening we think we can eradicate some of these transition difficulties. So it's really a complicated topic. I am clearly not saying get rid of visual schedules when a child with autism comes into a new program and they're anxious. I do believe it makes good sense to teach them basically where they're going to go where they are going to be next when the vans are going to come. All those kinds of things. But to me once a child comes under control those cues. That's exactly when we need to start working on dealing with going to a worse location and putting in some unpredictability into the schedule and teach him to tolerate that. Ultimately too though we need to teach kids to tolerate impending doom right when they overhear that they going to the dentist tomorrow. OK so there's a lot of clinical opportunity here is what I'm getting at. And it there's a developmental process. OK. But the bottom line is vidual schedules are neither good nor bad. They're complicated and I think we need to appreciate the nuance with these visual schedules.

Matt: [00:42:15] Yeah.

Matt: [00:42:15] And again I I agree with that and I also think that it's something that a lot of people that we consult to have kind of grown up literally in the field using and relying on and and stuff like that. And so it's sometimes at least in my experience really difficult for a special education teacher who's been using these systems for for years and years and years to take the schedule down. You know that's hard because they've seen it. And if you think of it from a reinforcement standpoint they've seen it work. You know a high probability you know well met the working part.

Greg: [00:42:54] You know one of the doctoral students in our doc program here Western New England names a Berglund spine's daughter. She did a wonderful review paper and in that review paper she looked at the efficacy of visual schedules for producing you know behavior change. We don't have a lot of support for visual schedules being important for managing problem behavior but that's usually what people are using them for. We have studies showing that can help people do their laundry better. We have studies showing it can help kids learn to use board games better maybe interact well. Knowing when to pick up the board game and when to put it away. Things of that nature. But we don't have a lot of evidence showing that child has problem with transitions the visual schedule as the independent variable that decreases that problem. But when I see them being used and I say why do you have that schedule. It's for behavior management and that's that that's where I think we have the disconnect at least that's what Berglund literature review taught me.

Matt: [00:43:52] OK cool. I'd love to check that out.

Matt: [00:43:57] All right. So Jessica Baer asks very kind of broad question but important if you can go through the tolerance response procedure and a little bit more detail.

Greg: [00:44:07] Yeah I'm happy to say I'm not sure if this will be sufficient detail what I want to preface this bit with is a there's a study by a machined guy a Mogami. It came out in the very last issue of Jaba. So the 2016 issue for I think was released last week and in that paper it's titled contingencies promote delay tolerance. In that paper she painstakingly details these tolerance procedures across four different clients who present very differently.

Greg: [00:44:44] We have a toddler we have an adult in a vocational facility and we have a couple our kids 6 to 9 years old from outpatient services. And so I really would encourage Jessica to look through that article. She does a really great job articulating the variance in the procedures that we use to teach tolerance funding.

Greg: [00:45:05] But essentially it goes like this. Once the child has a reliable Mande it's occurring independently and to the exclusion of problem behavior not an 80 percent reduction of problem behavior and 80 percent independent zero problem behavior a 100 percent independent man under control of the ego. Then we stop tolerance training the very first step in and at the end the ratio depends on the probability of problem behavior. So let's say we have a child who has a very quick trigger. In other words they take they take the problem behavior very quickly. The sessions will look like this. We will offset the eow for the man when they may and we will reinforce that probably 80 percent of the time four out of 5 trials let's say one out of five trials we will say no to the man. We will deny the main and we'll have somebody else or that person denying the Mande prop the talent response we make it developmentally simple. If the child does not have language we're going to we're going to mold our hand into a thumbs up or perhaps cross laced their fingers and put them on the table as in a quiet hand response if they have some verbal vocal verbal behavior we're going to teach him to say something quick. OK. No problem. I'm cool. And we're going to drop that in as soon as they do that. We're going to provide the reinforcers that they mandate for. We're only doing this one out of five trials. And so that's the beginning.

Greg: [00:46:38] If a child does not have a quick triggered a problem behavior that takes time to percolate we may go into a 50 50 probability. In other words half the trials we reinforce them and immediately the other half we prop the talent for spots and reinforce the talent for spots. So we play that game for a while once the talent response is occurring independently and zero behaviors are occurring and there's no emotional behavior there's no tears there's no whining there's no discomfort whatsoever. Then we might change the ratio a little bit. We deny more we'll get it down to at at worst or best to a third of the time we reinforce the made man immediately in the other trials we deny and we reinforce the town's response again. Once that's happening great then we ask for more than just the tolerance for spots. Now I'm moving into the area we call compliance training and so under compliance training it's going to look like this. About a third of the time we reinforce the Mande about a third of the time we reinforce that nice tolerant response. But a third of the time after they say I'm OK we ask him to do something that's contextually relevant an academic thing a transition thing play our way sort of thing. Once they do what we asked them to do what we asked him do is very little at first we reinforce that and now we're at the very beginning of the of the final treatment which is intermittent and unpredictable reinforcement of the LifeSkills of communication toleration of compliance. The final step is to increase the amount you want them to do during that delay period till it gets to be something that's developmentally reasonable.

Greg: [00:48:14] So I'm sorry if Jessica wanted something more specific than that but that's basically tolerance training in a nutshell. And again I'd look at Mark Shields article for the details.

Matt: [00:48:25] OK and I'll run down that reference of good. I was I've got the issue right here in my hand. I'll make sure to put that in the show notes so break it with me kind of piggyback a question on that. So with regard to the will moving on into compliance.

Matt: [00:48:43] Do you use any kind of behavior momentum techniques in terms of you know when when you start compliance training. In other words you know like starting something very very easy to do and an escalating up to something that has historically evoked problem behavior do you go right to something challenging.

Greg: [00:49:02] Yes any question. We do indeed start with something that's very easy for the child to comply with developmentally inappropriate. In other words it's below them development and we might be able to get over that. Yeah. They could code a computer we have to give us high fives yet we do that. OK it is embarrassing slightly for a few sessions. By relying on behavioral momentum perhaps that's a theory that's a concept it might be helping us but I'm not doing it for that reason I'm doing it because I'd like the process to be fairly errorless I'm doing it to keep low rates or problem behavior. But we may be leveraging if you will this concept where if we build up a lot of reinforcement for compliance in that context it'll persist despite disruption in another context so that that may indeed be happening. But the bottom line procedurally is you are correct we do start with very easy things for the child to comply with and then we then escalate the number of things we ask them to do. And the difficulty of the things we ask them do until it emulates this stuff the parents want the child doing when they can't have their reinforcers. But yeah we don't start there and there perhaps is some benefit to starting there perhaps experiencing extinction early in the process would be healthy. It's just that for me I'm trying to move into context that I've struggled with in the past like public schools and group homes and in those conditions.

Greg: [00:50:39] To me it's very important to be somewhat errorless to move this process and make it look like coaching when we're just working on skills and practice and it doesn't look like Escape extinction is at play sure.

Matt: [00:50:52] OK.

Matt: [00:50:54] All right. Megan Miller from session 14 asks after listening to the podcast and hearing the discussion you all had about the application of Esca with other populations and now having heard Mark Dixon say that they're showing undifferentiated functional analysis results with their participants who score higher on the peak assessment. I'm dying to know if Greg or others who have been working in the area of FAA for decades have experienced this. And she writes more complex functions of behavior with higher performance on assessments or for individuals who are so-called higher functioning. So I let me just kind of I guess try to summarize what she's saying you know or I'm guessing at least so you know higher cognitively functioning individuals is it. Is it your kind of experience whether it's documented in the literature or not. Do they have more complex functional analysis or a more broadly functional assessment results.

Greg: [00:51:58] Yeah there's nothing in the literature that would support the saying that the higher functioning higher cognitive abilities the more likely we're going to see a complex function or even multiple control. OK we don't have those data. But that said I was waiting for that. Yeah. When we've done these IISCA replications and Josh Jessel just published 30 seconds I have another student at a theone Rajaram on. We have about 100 risk is that he's working on a paper to show the replications. There are some times when we do an interview and we do an analysis and we we get what's closest to a single or simple or generic function. And those are almost always folks who are adults that are severely cognitively impaired and are in fairly tough resourced situations group homes without a lot of stuff vocational sites without a lot of stuff. And we're seeing single functions like s be maintained by food for instance as an example in Josh's paper so that is I see that. OK. And when it comes to kids who have language so let's say if a kid's as fluent vocal verbal and vocal verbal fluency Let's call that high functioning. Those kids clearly are more likely to have compliance with Manze as one of the controlling variables for their problem behavior. In other

words those kids are asking for things to be a particular way or to have things. And when those bands are not reinforced they have problem behavior. That is definitely a more complex relation than attention or stuff or merely escape OK it's a little more dynamic.

Greg: [00:53:47] They may and it's denied the denial of folks the problem behavior the parent teacher then tries to turn off the prom behavior proper providing that which was manded for that's more complicated than attention. So I believe Megan is correct and if Dr. Dixon's article might be bearing this out that kids with language have more dynamic controlling variables I have no doubt. I also have not met a kid with good language that engages in problem behavior for single things attention stuff or escape. But I also don't believe those functions exist purely in nature anyway. The more I'm thinking about it and writing about it the more I'm learning that there is no pure test for attention. There is no pure test for attention escape and there is no pure test for tangibles. People deliver tangibles. People escape to things. Attention often leads to some sort of interaction with materials in the environment. There's all sorts of interactions going on. So let me I guess end on this I believe all kids problem behaviors probably maintained by more complex functions than that which we've been seeing and describing to date. And back to Meghan's point is it likely that kids with language have more complex control of behavior certainly. Yeah. There's no doubt it's just the letters it's going to take time to catch up with that.

Matt: [00:55:11] So to kind of piggyback on your answer there you know you know getting to the notion that if I've heard you correctly in previous conversations you know there is no.

Matt: [00:55:22] When you say something like there is no true function does that kind of get to I don't know if I said that entirely precisely but as that kind of get to you know what Jack Michael is writing about you know a while back in terms of you know the distinction between positive and negative reinforcement is somewhat I don't know. Correct me if I'm not saying this in the right way but somewhat arbitrary it's that we're all kind of fleeing some aversive state to something that's more reinforcing in general.

Greg: [00:55:48] And we just kind of characterize that as positive and negative reinforce then listen as scientists whose behavior analyst we're cutting up the behavior environment interactions into tidy units we can understand them. OK that's in a second sense sense what we're doing. I get it itch itch. That's what science does and that's good. But yes I am parroting if you will. That notion that Jack Michael gave it said it's not that positive or negative is arbitrary per se it's just that they're not discrete they're continuous variables are these things a positive reinforcement. And we might imagine them more as these continuous variables that have more overlap than not. And I do find the language game regarding positive and negative reinforcement to have been exceptionally useful in the history of understand the variables controlling prom behavior. But I see it now is an obstacle that we need to get over. If you only look for is it positive is it negative you're going to miss these these qualitatively rich controlling contingencies like compliance with manners that has a whole bunch of positive and negative reinforcement rolled into it and you're not going to see it if you're going to try to put it in those tidy boxes. So I do think historically useful useful constructs positive and negative reinforcement. I think they're still useful but I think we need to recognize that they're very hard to isolate that they don't occur in nature in isolation and that. Our attempts to be maybe hyper analytic are probably thwarting our efforts to be effective as interventionists. These things are powerful together.

Greg: [00:57:26] I've mentioned this in previous episode but it bears repeating escaped to stuff is more powerful. We have evidence of that. There's a study by Jens Marconi in JABA. You know it's escaped and nothing or escaped to you know play in and clearly escape the play was more polypill I think I have that right. Kathleen Piazza's I believe in author on that but there's other articles in the literature. Mike Mueller has some studies. Nate call has some studies. We have studies showing that

when you combine positive and negative reinforcement you show problem behavior sensitivity. And when you try to isolate them you don't. So again I'm really glad we we tried to isolate these things going in historically because that's taught us to look for them now. But I think we need to be less reductionistic and more holistic as we look at contingencies going forward. And it's not holistic in that negative. Like I don't know nonscientific way to approach a problem. It's just trying to understand the coherency in the whole of our contingencies.

Greg: [00:58:32] And I think we're in a mature point in our field where we can do that now. Thank goodness for the hyper analytic stuff that has been done in the past but I think we can do it now.

Matt: [00:58:45] OK. So Edward Pollard he wrote in with with a pretty long question I'm going to try to summarize it here. He works in public school settings in general education classrooms and there's some students that he's working with. The general questions about using this process with kiddoes with emotional behavioral disorders kids who perhaps are you know from a cognitive standpoint are you know who you know within you know kind of typical ranges if you will or as I think you mentioned in a previous interview sometimes even you know had superior cues and things. And but nonetheless have challenging behavior so some of the kids he works with have problem behaviors that include you know profane language bolting climbing fences hitting and spitting spitting so is one that gets people worked up.

Matt: [00:59:42] Isn't that a toughie. It's so the people I work with like I'd rather get hit than spit out. You know it's just proper destruction et cetera. So let's see try to get to the nub of this question here. So he's been trying to figure out a way to apply to get to this population and he's found a couple of barriers. One is he. He says it's not always possible turn off the behavior by reinforcing it. In other words once kids are escalated they don't easily de-escalate. And so once that kind of firmness is stoked that fire takes a long time to put it out and kind of paraphrasing here and I've seen this certainly in my own work even when they're provided with any and all the reinforces that they hypothesized or a play here and then the follow up question to that is that he can't always control the reinforcing consequence. In other words sometimes it may be peers. You know and I'm sure anyone who's worked in regular ed settings Certainly I've seen you know that that's very very near impossible variable to control. You know when peers react to challenging behaviors and things like that and so forth. So having said that what are your thoughts on applying the IISCA process to a you know in the EBD population and regular ed settings with other circumstances where the re-inforces a very difficult to control and and problem behaviors evoke escalation that takes a long time to kind of de-escalate.

Greg: [01:01:16] Sure. Sure. Let's take the latter first. That whole notion of once they escalate hard to de-escalate and people worry doing an analysis because it if they're evoking the behavior they may not be able to turn it off. I think that's an excellent concern. We should all have that concern before we do an analysis especially in public school especially with kids who have a really dangerous behavior that can hurt themselves or hurt others. So that said to me it's all in the message logical detail so let's go over the reasons why behavior doesn't de-escalate. Number one it's sometimes because we're not providing all the reinforcers. So that is the first thing I want this person to consider is that let's make sure we do a good interview and we're providing all the possible reinforcers. That's my main issue with isolating reinforcers it's not that sometimes when they're isolated we don't see sensitivity that's a problem too. The bigger problem is that we have multiple egos operating. We provide a single reinforcer. We're not able to turn off that problem behavior. And so that really takes us back to the importance of an interview make importance of having multiple reinforces that may be controlling problem behavior at hand in the test condition of analysis. But that's not the real solution that that can be helpful though. The better solution is this in the interview we need to ask about all of that co-occurring topographies are problem behavior so we can reinforce early members of the response chain.

Greg: [01:02:49] When I used to do analyses if they people complained about yelling hitting or asking knocking things off the table as well as severe self-injury and aggression in my analysis I waited till we saw severe aggression or self-injury perhaps until we reinforced under those conditions it is possible that the reinforcer may not escalate behavior but that's usually the case when there's some emotional responding and emotional responding often is correlated with these more intense forms of aggression or self-injury.

Greg: [01:03:17] So that said what's the solution solution is interviewing identifying precursors or co-occurring behaviors or another way to say it is early members of the response chain. And in the analysis to reinforce those members and people are worried about that.

Greg: [01:03:34] People don't like that inferential leap. They figured out why the kids throat pushing materials off the desk. They showed sensitivity to the contingency but they never saw aggression. So them mine are we saying yeah but it's the same reinforcement contingency controlling that severe behaviors that which I showed controlling the precursor behavior. I think we've have enough studies showing that when people report these things co-occurring in time and in context that they're probably maintained by the same reinforcer. There's a study by Christine wunner she's presented in a Babiche she'll be presented it's presented APBA and again AB AI and basically it shows that when we've done extinction analyses in other words we keep running the ISCA out and putting milder topographies problem even on extinction as we do that we see the more severe topographies emerge and we see control by that same contingency. So let me make something clear. When people report these problem behavior forms co-occur they're probably maintained by the same reinforcer.

Greg: [01:04:36] Be comfortable with the inferential leap that if you reinforce some kind of low intensity behavior that that's probably the same as controlling variables the high intensity behavior and the final thing is the truth will be borne out by the kids response to treatment. So you can't base a treatment on that. You know what you learn from the easy to watch behavior then in all the prom behavior is remedied with the treatment deal is done. We call that response intervention. That's a that's a healthy way to approach the situation. So let me summarize for this issue of de-escalation. 1 provide all the possible reinforcers to provide them for all topographies or problem behavior in the ISCA. It sounds sloppy but it's the way to maintain a safety and probably efficacy with this process.

Matt: [01:05:23] Cool cool we'll well stated. All right so Jennifer Labarga asks a question for Dr. Hanly. Sometimes I struggle to figure out the function of a child's behavior especially if it can be a multiple function. What resources should I go to to improve my analysis.

Greg: [01:05:41] Garrett thanks for setting up this question. Here's what I want do.

Matt: [01:05:45] Practical functual assessment. That's right.

Greg: [01:05:47] That's right. I want you to go to our Web site go practicalfunctionalassessment.com and take a look at some of the materials. I mean basically Jennifer.

Greg: [01:05:57] I believe that most behaviors under multiple control I think that's been a big mistake in the history of our understanding control and barrels for prom behavior I initially was taught and learned that you know multiple controls are fleeting low incident kind of phenomena. I just don't think that's the case any more now. Partly it's because we're dealing with a wider array of people and controlling contingencies than we did in the past. OK. But I think it's also because we're seeing multiple control more now because we're looking for it because we're designing analyses that

are able to detect it.

Greg: [01:06:32] So what resources. I. I really would just do I assume multiple control.

Greg: [01:06:39] And I just do an IISCA and I synthesize those contingencies in a single test control analysis. If I am able to control behavior effectively i.e. zero in control in a short latency to prom even the test I know I've got a properly motivated kid to learn my skills the skills I want to teach him. And I know that I can turn off behavior and I know I can be safe. And so I proceed. So go to that Web site check it out I hope it's useful.

Matt: [01:07:03] Yeah. And I would add Jennifer I would recommend on Greg's Web site and again I'll just reiterate it's practical functional assessment dotcom. There's a YouTube video that is particularly helpful of Greg doing a training and that that's probably one of the one of the many resources on that site that you could check out. And Greg also talks about this in sessions one and two.

Matt: [01:07:31] And we do some follow up questions about this process and Section 7 of the podcast as well so you can go to behavioralobservations.com and look for sessions one and seven. But practical functional assessment Dotcom's going to be your go to for all things IISCA. So thanks for writing in Jennifer. All right so I've got a question from Laura and she is a. Looks like she's a master student she's trying to figure out what to do for a project sir.

Matt: [01:08:01] Let's see.

Matt: [01:08:04] She's curious if Dr. Henley has any thoughts on alternative types of assessments and I'm not exactly sure what she's asking about specific here but she is planning on conducting a study for thesis where she's manipulating antecedents for a seat and controls control study but she's not attempting to control whether or not the target behavior is reinforced or not. And to conduct the study in a natural environment she doesn't specify what environment that is. It's the interview relevant adults and attempt to set up my experimental control condition and control conditions to. Any suggestions on ways to improve my design or its reliability.

Greg: [01:08:45] You know I'm really glad Laura shared this and here's the deal.

Greg: [01:08:53] I hope Laura is listening and I'm going to give some advice she asked for advice on how to give it. And my advice is don't do what you're planning to do. And that sounds a little harsh and it sounds it lacks some tentativeness that perhaps an adviser should have but here goes. Identifying various antecedents data control and prom behavior is a good quest but you articulated that you're not going to attempt to control whether or not the target behavior is reinforced. And to me that is dangerous. And we already know the answer to this question. Historically in the 80s there was an AB model of analysis. It was where there was the establishing operational manipulated but there was no direct manipulation or consequences it was not described where having found problem behavior was left to very naturally. The problem with that is twofold. Number one scientifically if you allow the consequences to very naturally we do not know what's controlling behavior. If you don't describe them and program them. OK so scientifically is challenging but practically it's tough because if you set up provocative conditions into seeing conditions that will actually evoke problem behavior and you do not reinforce them I want you to think about what's going to happen. If you don't reinforce the problem behavior. It's going to persist and in fact it's going to induce variability. It might get worse and that's where analyses become unsafe.

Greg: [01:10:25] We don't need that alternative assessment if we're going to not be marginalized as professionals and invited into schools and homes and hospitals. We need to ensure safety of our

clients. And oddly enough safety is almost ensured by providing the correct reinforcers. It's a funny thing in the history field this is complicated lore so please don't take my words the wrong way. This is something we've been dealing with as a feel for a long time. Ted Carr is one of my heroes. OK. But Ted Carr wrote in several articles in the late 70s where he was kind of describing the the possible variables that might control self-injurious behavior and teaching us about how attention my control behavior escaped my control behavior. Really powerful articles in the context of those articles he wrote that he thought it would be an ethical to provide those. Supposed reinforcers for problem behavior in an analysis. To Ted Carr it seemed on ethical to provide reinforcers for prom behavior it seemed really counterintuitive to reinforce prom behavior like it does to many people but that was 40 years ago.

Greg: [01:11:37] And what we've learned in those 40 years is that reinforcing the problem behavior turns it off reinforcing the prom babies humane reinforcement prom is what leads to safety not reinforcing the problem behavior is probably going to get you into hot water. I don't think we need that alternative assessment we've had it. OK. And we've decided not to use it any longer as a field. By and large. OK. Let's take you back to the thesis about this.

Greg: [01:12:02] OK good. I was I was I was good. I was going to go. That was a negative. Let's get positive.

Greg: [01:12:07] How about manipulate those antecedents because that's really what you're excited about I think this probably various At seems in there. There are qualitatively rich for the clients that you're seeing. You want to discover whether those qualitatively rich and the seeds are differentially controlling their behavior. Great do that. But in your methods provide the reinforcers in that and the seat analysis but just provide the same synthesized reinforcer across all the different antecedent conditions.

Greg: [01:12:38] You still have a nice controlled analysis if you see differences across the conditions. It's clearly the different antecedent but you're going to do it in a safe context because you're providing those putative reinforcers. So I think it's a cool project. And I hope you're listening to this. Good luck with it.

Matt: [01:12:55] All right.

Matt: [01:12:55] Hey Greg thanks for giving her some putting her in the right direction with some alternatives for that because I know students well a large percent of the audience are students and things like that so that's not only going to be helpful for Laura but for many many listeners to the show so let's see. Write the following question this individual deserves an award for homework that she really really cheered really went to town here.

Matt: [01:13:32] Maithri Sivaraman and I profoundly apologize as someone who has a last name that's difficult to pronounce. I feel your pain so if I've butchered your name I sincerely apologize.

Matt: [01:13:44] But Maithri asks and she's writing in from from from India.

Matt: [01:13:51] Hi Matt I absolutely enjoyed the podcasts on your Web site and said some nice things. Thank you Maithri. It's my pleasure. I'm the CBA in Chennai India and I've implemented the IISCA approach with two of my young learners. Awesome. I have a couple of questions for Dr. Hanley's upcoming Q&A session number one.

Matt: [01:14:14] Are there any generalization data. In other words has tolerance and compliance training in a few chosen provocative situations resulted in improvements in other provocative

situations. For example if I escaped to play at home with mom is a synthesized contingency where training occurred. What about similar provocative situations at school or in a store etc..

Greg: [01:14:38] Get a simple question all these questions are great. She's smart.

Greg: [01:14:43] Smart person. Yeah you can tell she's right in the thick of it doing great work. This is this complicated a bit. I'll try to be quick with it. Generalization can be somewhat assumed from the original article in the sense that we did indeed teach the skills in a particular context outpatient clinic extended them to parents and then in sessions outside the room and then in the home and then we was socially validated the outcomes were parents said listen you know the child's doing well and all these other contexts that we didn't directly teach. So we can assume some generalization from those data. That said now that we're actually studying that generalization process in other words we're trading in context day with person A and evaluating whether that transitions to context B in person C without any direct teaching what we're finding is a failure to generalize more often than not. I want to make that very clear. We are not seeing the skills readily transition to new context unless we have the child experience the treatment in that new context with that additional person. Now we are seeing some generalization when I'm saying those we're seeing incomplete generalization. A couple of things you might want to look at there's a neat study by Kevin Luscynski. It's basically on the preschool LifeSkills which are essentially the same things we're talking about here. Communication and toleration and he showed that they didn't they. There was some generalization but complete generalization in other words absence of prom behavior independent skills required them experiencing the treatment in that setting which is not generalization. Right. It's just multiple exemplar training.

Greg: [01:16:25] So might short end of answer then is this we cannot hope for generality here. We have to program it just like Stokes and bear taught us. If it if there's a challenging context in which you did not extend the treatment to I suggest you have the child experience the treatment in that context and then through multiple exemplar training we are seeing extension to context in which we never did any direct training. Tanya moussaka is doing that study she's presented those data at our local BABAT conference she should be presenting similar data. I believe it ABA. So we're working on it. But my safe and conservative recommendation is to make sure you do training in multiple challenging situations for this treatment to have impact on a 24/7 long term basis.

Matt: [01:17:11] OK.

Matt: [01:17:14] Now would you say skill acquisition is faster once you start training and other all the exemplars in that that's great question.

Greg: [01:17:22] Actually Tonya's data bears that out completely. Every time we implement the treatment in a new context we see the amount number of sessions it takes to get elimination of problem behavior and skills all independent to be fewer and fewer. Tom sometimes to the point where it happens all in the first five minutes. And so I low earnings high here. Yeah exactly. I learned a learned phenomenon Pusey It's called learning Satz I'm not sure the appropriate term but you're spot on that we see the treatment have the desired impact quicker and quicker each time we extend that.

Matt: [01:17:54] All right cool. All right. So Maithri's second question here during compliance training Hanley's 2014 study had instructions classified that all three levels of increasing complexity. How will these instructions determine how was complexity measured. What role did the interview play in this. Well that's a that's a that's an awesome question.

Greg: [01:18:14] It really is. Great detail oriented question. We did use three levels of complexity.

They are not arbitrary but there's no great measurement of complexity. I want to be clear on that. It's more like what I call backward design where we're moving backwards from the parents goals. We ask them in the interview and you're right the interview is relevant here we ask them in the interview when they can't have these things that are apparently reinforcing their problem behavior. What do you want them to do. OK. What is appropriate what are your expectations for them so if it's a child that has prom behavior when they're a young child when their mom leaves them and takes their toys away. Obviously the parents are going to want them to learn to play with other stuff without the mom. OK. So that's our goal. Another child they may have a problem when they have to lose their steamy toys and do discrete trials.

Greg: [01:19:03] So what are we going to want them do what's the goal level without just empty toys and be accurate with your discrete trials. And so we get those goals from the parents and we backward design those three levels from those goals so that top level are those goals. The second level is an approximation of the goal so we want the child to do a bunch of discrete trials we're going to do a few discrete trials. OK. And the first level is just simple. Usually imitation stuff that we know the child can do just so we can get some compliance off the ground without problem behavior. So the three levels of complexity again the last level of the parents goals the amount and type of things they want the child to do. The second level is an approximation of that. In the first level is just simple stuff to get compliance on the ground.

Matt: [01:19:48] Awesome. Any particular reason to prefer the contingency based delay over the more traditional time base delay.

Greg: [01:19:57] Again this is a great practitioner if she has a interest in applying to graduate school she might look at the New England University program because I love these questions. Basically the quick answer to this is look at the latest issue of jobs. For that study I mentioned earlier by a machine I am Mogami she her entire dissertation was comparing contingency based delay to time based delay and in each and every application progressive or or the contingency based delay conferred advantage over time based delay. Let me give you a long story in a nutshell. When you use time based delay when the delay ends according to TIME YOU provide the reinforcer what we're doing is accidentally reinforcing whatever's happening at that moment in time. By contrast with contingency base delay we're reinforcing something specific. OK we're not ending the delay until they've done precisely what we expected them ask them to do. And by so doing we're shaping up a really nice repertoire of things to do during delay rather than accidentally reinforcing things. So that's really where we we find the advantage of TGT based delay. And for us it's it's a definite. The only advantage to timebase delays you don't have to have any vigilance. Okay. And so we worry a little bit about how much you need to watch kids during delays during containership delay and we're working on that just to give you a foreshadow. We do what what might be best called the momentary dicere which looks like this.

Greg: [01:21:30] Parents check in on the child during the delay and if they're doing what's expected then we reinforce that and so we don't have to have vigilance during that whole delay period. But that might be beyond this question. The main point is look at machines 2000 16 article and really articulate why we prefer continuously contingency over time basically.

[01:21:51] So I actually.

[01:21:53] So is that the.

Matt: [01:21:56] That's with you. And Joshua Jessel right. And that's continue to promote delay tolerance. That's exactly right Kate. All right. So I've got the exact citation here. That'll be in the showdowns since with reference that a couple of times here. So so awesome awesome. See. Based

on Hamleys 20:16 study where there are seven participants who needed secondary or tertiary interventions are there any suggestions to prevent this from happening. What was missed in the first iteration for these participants.

Greg: [01:22:26] Another great question. Just to clarify the study that she's referring to is was published first author is Joshua Jessel. It's Jessel Hanly and Guy amalgamates also in the last issue of job. And it's the 30 replications of the ISCA in that paper. We made it very clear that in those 30 differentiated analyses some were not differentiated on the first attempt. And I want to make it clear that historically when functional analyses have been published that which we're seeing in the journal is not necessarily the first attempt so we are encouraging authors to describe the number of iterations of the analysis before they arrived at the one that was differentiated. And Josh is taking a lead by making it clear in this article is very transparent.

Greg: [01:23:16] Yeah I think it's important for us to try to get there without littering the literature with a bunch of undifferentiate analyses so we got to find that balance perhaps perhaps a sentence in the text is sufficient.

Greg: [01:23:26] But nevertheless what I'm finding is that this iterative process is happening at least 20 to 25 percent of the time we do it because let me be clear on that.

Greg: [01:23:41] Three out of four times four to five times the IISCA's yields a different analysis the first time. But 20 25 percent of the time we have to try again. And I don't know how to prevent this yet but what we are learning and collecting information on is the changes we're making to get a differentiated analysis. We're working on a paper right now. Robyn lander will presenting data at the APBA conference titled something like progressing from an undifferentiated to a differentiated IISCA and she's outlining all the things we do when we initially fail. I'll give you what I think is probably the main one that leads to a change. Very often the interview suggests it's escape to tangibles and attention when we ask the questions and then try to emulate that story in the analysis when we give instructions we're often given instructions at too fast a pace and we're getting too much attention to the child while we're giving them instructions. That's not similar to how they get instructions in their classroom or in the home in the home in the classroom it's more like do this worksheet and the aide talks to somebody else or maybe engages another child or the parent says Brush your teeth and then walks away. When we emulate this in the analysis we're often talking to the kid too much while we're instructing.

Greg: [01:25:05] And I think what we're doing is well backlashing the value of attention and thereby not oking problem behavior so a lot of times in the second iteration when it the contingency is a traditional escape to stuff and attention what we're pulling out is how much and how fast we're prompting a child to do what we asked him to do. And when we make that change we're often seeing that change result in the education of problem behavior. So that's just one example. I wish I could give you more detail but this is something we're figuring out. But the main point and I'm really happy this question was raised because I can make this main point. The main point is functional analysis is to be understood as an iterative process. You interview you analyze if you get good control of the behavior you treat it if you don't you continue to analyze and you make changes till you get good control of behavior. That's the point. You know we are behavior analyst. The point is to keep up your analysis till you control behavior and make slight modifications based on what the parents and teachers tell you. Again I meant made this clear in previous podcasts we always have the relevant people watch our analysis and if the analysis isn't differentiated I simply go outside and ask them what are we doing wrong. And they usually tell us and we make that change and that's why it's hard to put in an article and categorize these things because the parents are just seeing that we are behaving in a somewhat ecologically invalid way and then they teach us how to behave like them and when we do that we see differentiation and we will describe it scientifically

it's just taken us some time to do that.

Matt: [01:26:42] Know it's why they call it practice right.

Greg: [01:26:45] That's right. And as you go they go.

Matt: [01:26:48] Cool cool. Well Maithri thank you so much though as you know. Really. Yes she gets the homework award for sure for her questions. I have the yeah I have both those studies. Those will go in the on the show notes. So last question here Gabrielle asks I've been using Greg's functional assessment to help determine functions of behaviors and I do like it. All right. So far so good right. That's right. Oh we'll take it. I was wondering about behavior plan formats specifically New York State outlines components of behavior plans to ensure that they have necessary items. But I was wondering more about how he or other BCBS is right the mastery criteria section. My colleagues and I find this awkward to detail unless there is a clear IEP goal. Otherwise would it be percentage decrease from baseline or in cases of aggression as IB said or would it be zero occurrences over a period of time. So you know one of the things anyway.

Matt: [01:27:54] So I've got some thoughts on this but I'm a Lumi we hear what you have to say that you could probably answer this question better than I can but I'll give it a first stab and then please follow up and help me. And Gabrielle but basically it is important to write objective objectives. And sometimes those are lacking in IAP goals. But let me make it clear when we get to the point we're involved in this beta plan process. Our goal is for prom behavior to be zero. So I just want to make that clear. The goal is zero. And for precursors to and we can get zero because we're teaching replacement skills. OK. The goal is zero. But then we have to have a criteria in X many contexts. We describe the context for X many observations so that's where it becomes an objective all objectives have to have a criteria where the child passes succeeds or fails so that we can adjust or we can pass them on. And so for us all off this process all the Bips have a problem behavior objective that objective specifies the learner 0 level.

Greg: [01:29:05] It specifies the number of context the context other provocative context parents described in the interview and describes how many observations we need to see zero consecutively. So that's the first one. Secondarily we always have skill based objective so that active cannot just be on problem behavior. We're going have objectives on communication toleration. Those objectives are going to be more of base. So we're going to say when given the establishing operation given an opportunity to communicate we're looking for the probability they will independently communicate. We are not looking for 100 percent of trials. We love it if we present a very difficult instruction and the child does not ask for their way that they simply persist and do it. But we are asking for a percentage of time that they will engage in the communication response independently. We also have an objective relaid when they're denied that they will engage in a percentage of time in the town response and again we specify in many contexts describe those contacts and how many observations before we pass them on that goal. And then finally we have a compliance goal compliance is never 100 percent. We're not looking for that but we're looking for something above baseline that is reasonable for the teachers and it's the same kind of criteria. Specify the context specify how many observations before they're passed you might be looking for something more and I'm sorry if I'm missing your point Gabrielle but that that's basically what we write in our Bips.

Greg: [01:30:30] Yeah. That makes a lot sense and that's what I was going to suggest is you know writing what I like about this process.

Matt: [01:30:36] I don't want to sound like you know.

Matt: [01:30:41] Fanboy here but you know is that there are very tangible things to measure in

terms of skill development you know and so you could certainly program around functional communication toleration and compliance.

Matt: [01:30:56] So yeah cool well that I think that's going to do it for our questions here. So thanks for taking the time to this morning. I'm looking out my window here.

Matt: [01:31:09] The snow is starting to come down so it's probably best for me to see my snowblower starts. Exactly.

Greg: [01:31:16] And Greg where where can we see you coming up. I know you're on the road quite a bit.

Greg: [01:31:24] Yeah I've been traveling a bit less. I'm doing much more Journal work now and I'm trying to allocate much much time to that which is fun. But let's see I'm going to be in Chicago and I'm going to be in Chicago in a couple of weeks and on the Web site I'm going to post those dates today as well as the materials for that conference. And then my students and I are going to go to APBA and my students have some really nice data present and I'll also be doing a workshop and that is happening in March. So I guess those are the two coming up and and I also want to mention that I because there's been other questions about why we do what we do. And I just want to make it clear I guess our defense of this discussion. Sure. And so I I made a set a narrated slide and I'm also going to post that on the practical functional assessment Web site. I'm really doing it for practitioners who have chosen to do this the way we've described it and they need to be able to defend it sometimes. And I want to help them be able to defend it because I think it's highly defensible. But it is different and in so many ways these narrated slides might be helpful to folks.

Matt: [01:32:40] Great great if you send me the link to that I'll make sure that goes for this case as well.

Matt: [01:32:45] And so we can get it out to as many listeners and viewers as possible so great. Great. Greg thanks again for taking the time to do this. I know my listeners greatly appreciate it. They get a chance to get their questions answered directly from the source which is which is pretty cool. So again appreciate you coming on the podcast for round number three so thanks for keeping us informed about all things IISCA.

Greg: [01:33:13] So thanks Matt again I appreciate what you're doing. You doing is a great service. I love the podcast so keep it up. And good luck with the blizzard we're about to get and look forward to talk to you again.

Matt: [01:33:25] All right. Right on. All right bye bye. Bye bye.

Matt: [01:33:29] Well that went a little longer than expected. I think we're clocking out at well over an hour and a half which is about 35 minutes longer than most of the episode that I've done thus far. But in my humble opinion lots of good content there because you guys provide the content you guys sent in all these awesome questions so we wanted to take time going through them to make sure that we answered them to the best of our ability. So again this is a really fun episode. It made my interview prep quite easy. As a matter of fact but that's not the only reason I like it. I liked it because it was a chance for you guys to have some more interaction and to add to the community aspect of the show which is something I really like. So show notes. Head on over to behavioral observations Talk column look for session 20 and I will have that link to the narrated PowerPoint that Greg was talking about. You can also check it out at practical functional assessment dot com. And let's see what else. Oh and I'll have links to those articles that Greg mentioned as well so you can check those out again at behavioral observations dot com session 20. And I think where we'll

have all that stuff there I think that's pretty much it for now. I think I'm going to cap this episode before we get to an hour and 40 minutes. So thanks for taking the time to tune in. I will leave that listener survey up.

Matt: [01:34:57] You can check out my Facebook page Facebook dot com forward slash behavioral observations. The service will still be there or leave it live. So if you didn't get a chance to fill it out you can head on over there and share your thoughts on the show.

Matt: [01:35:11] So until 21 rolls around. I will. See you guys.

Outro: [01:35:17] Thank you for listening to the behavioral observations podcast with Matt Cicoria. You can find Matt's notes on this episode at w w w dot behavioral observations dot com. We also invite you to stay connected with us on Facebook at Facebook dot com forward slash behavioral observations and on Twitter behavior podcast