TURN AUTISM AROUND
WITH DR. MARY BARBERA

Transcript for Podcast Episode: 046

Self-Injurious Behavior & Aggression in Autism with Dr. Timothy Vollmer

Hosted by: Dr. Mary Barbera

Mary Barbera: You're listening to the Turn Autism Around podcast, episode number 46, and I'm your host, Dr. Mary Barbera. And today I'm excited because I have an interview that I know you'll love with Dr. Tim Vollmer.

Mary Barbera Dr. Vollmer received his PhD from the University of Florida in 1992, and his primary research area is applied behavioral analysis with an emphasis in autism, developmental disabilities, reinforcement schedules and parenting. Dr. Vollmer has published over 150 articles and book chapters related to behavior analysis and has received many awards for his significant contributions to the field of ABA. So this was a great interview, all about severe self-injurious behavior and aggression, including biting and also some of the main improvements in the field over the years and some of the significant challenges that we still face. So I hope you enjoy this interview with Dr. Tim Vollmer.

Welcome to the Turnout Autism Around podcast for both parents and professionals in the autism world who want to turn things around, be less stressed, and lead happier lives. And now your host, autism mom, behavior analyst, and bestselling author, Dr. Mary Barbera.

Mary Barbera: So thank you so much for joining us, Dr. Vollmer.

Dr. Vollmer: It's my pleasure. Good to see you.

Mary Barbera: Yeah, I was really motivated to try to get this interview scheduled after I saw you at the national autism conference this past August. And you were talking about automatic negative reinforcement and I did a whole podcast episode last week for those listeners who haven't listen to that; that is kind of a primer for this interview. But I'd like to start with describing your fall into the autism world and how you got started.

Dr. Vollmer: Okay. Well I really started with an interest in behavior analysis in general. I was just interested in human behavior and I was fortunate to have been raised in Michigan, where Western Michigan is one of the universities that is known for the study of behavior analysis. So I was exposed to it at a very young age and took as many of the courses as I could in my first couple of years of college and then transferred down to the University of Florida where I finished all of my degrees. And while I was working on my doctoral degree, I had the good fortune of working in the applied laboratory with Ryan Iwata who was my mentor.

Mary Barbera: Oh, I didn't know that.

Dr. Vollmer: Yeah. And at the time of course I was studying severe self-injurious behavior. And so the first several studies that I was involved with involved self-injury and related disorders. And when I graduated, my first job was at Louisiana State University where I tried to translate some of the work we had been doing with adults to school aged children working in school psychology program. And then I briefly worked at the University of Pennsylvania and the medical school and was exposed more to medical variables and interactions there. And I've been back to the university of Florida since 1998 where more and more of our work has involved individuals with autism, although we still work with some individuals who are not necessarily diagnosed with autism, but they have intellectual disabilities or other diagnoses that are contributing in some way to their behavior.

Mary Barbera: Do you have a clinic there or do you only see patients that are enrolled in studies?

Dr. Vollmer: Well we have the behavior analysis research clinic and that is here in my department in psychology at the University of Florida. Primarily that clinic involves the individuals who come in for assessment and treatment of behavior disorders or they come in because they're having difficulty in some areas such as social skills or things of that nature. And primarily my graduate students and postdoctoral associates are conducting research and so their assessments and treatments enter into research protocols because we're constantly trying to improve the assessment process and the treatment process.

Dr. Vollmer: But in recent years we've run into a lot of problems. And this is part of what I talked about with you and others at Penn State and that is that when we are sort of in our silo of applied behavior analysis in a clinic, we cannot really address those individuals who have medical involvement at any stage of the way.

Dr. Vollmer: So, for example, individuals who may have some kind of illness or pain or sleep disorder or something else that is contributing to the problem in some way, we didn't have direct collaboration with individuals who are on medication, and the medication would influence their behavior. That was a shortcoming. And then finally when the behavior produced consequences that were dangerous, such as with self-injury, you know, breaking open the skin maybe possible concussions from banging the head.

Dr. Vollmer: So we had started reaching out to our colleagues around the university and discussing the notion of an integrated autism program and that is now happening. One of my former doctoral students and former postdoctoral associates Carrie Peters, is now in the department of psychiatry and we are developing programs that will allow us to go back to that integrative model integrated model where we were working side by side with professionals of all sorts, including medical personnel so that we can serve individuals who are showing involvement medically in one way or another.

Mary Barbera: Yeah. Wow. That sounds really great. Is this just a new program that the integrative approach or is this starting?

Dr. Vollmer: Well it's starting officially in January 2020, but the behind the scenes work has been going on for what you could say almost 20 years now, but really has been moving much more quickly over the last year or two with different hiring. We have patient navigators now and we're setting up clinics with multidisciplinary collaboration models and things of that sort. So it should really be developing nicely over the next several years. But it will be a slow process because we won't have a residential program or anything like that that will eventually be necessary I think to carry out the different things.

Dr. Vollmer: And it's not only related to treatment of behavior disorders and in fact it's not only applied behavior analysis models, it's as I said, multidisciplinary. But even within behavior analysis, we're looking to develop programs in behavioral feeding disorders social skills interventions, even early learner readiness. A lot of the very young children we see are having difficulty entering schools or even entering early intervention clinics because of behavior, or maybe they don't have some prerequisite skills. It's like an imitative repertoire. They'll need some honing before they can get to that point. So we're eventually viewing the applied behavior analysis component as being at least four pronged and maybe even more eventually.

Mary Barbera: Wow. That sounds great. So many of my podcasts listeners either live or work with kids with moderate severe autism. And why do you think... My experience has been that the more severe the autism, usually the more severe the problem behaviors. Do you find that, and why is that?

Dr. Vollmer: Well, certainly the research shows there's a powerful negative correlation. So in other words, they have a lower the repertoire of skills. The less skills, the fewer skills an individual has, and the more likely they are to engage in problem behavior. And then the inverse is true, which is why I think applied behavior analysis is so important because we don't only focus on reducing problem behavior, we focus on enriching that repertoire, teaching individuals to take care of themselves, to have communication skills. And the more that those skills develop, they start to take the place of problem behavior.

Dr. Vollmer: And if you think about what you and I do and other individuals in our culture do on a day to day basis, there's a finite amount of time and if only a sliver of that time is available to us to do things that are not dangerous to ourselves. Like maybe you can do our work and self-care and things like that, then all of the rest of that time is available for problem behavior to come into contact with reinforcement. But if we can expand that repertoire for individuals with autism and intellectual disabilities, there's less time for that problem behavior to occur and to get reinforced. And all of the other behavior is coming into contact with social reinforcement and through communication, social oriented enforcement through self-care and daily living routines and things of that nature.

Mary Barbera: Yeah, so important. So at the national autism conference workshop, I asked a question that I asked Dr. Brian Iwata, I didn't realize he was your mentor, and I asked the same question three years apart. I'm interested as a registered nurse and a behavior analyst and a mom to a son with problem behaviors and many times related to medical issues with Lucas. And that question was, I'm interested in studies on automatic negative reinforcement. And I did a whole blog about this in episode number 45. So if you're listening and you don't know what functions are and you don't know what I'm talking about, maybe go back to that one, Marybarbera.com/45 to get some information about that.

Mary Barbera: But you told me and Dr. Iwata told me the same answer, that there are zero published studies with behaviors with the function being automatic negative reinforcement. So do you think that's a problem? Do you, what are your thoughts about that answer?

Dr. Vollmer: Well, I do think it's the problem of... And when you asked me a related question at the conference, I was thinking a little bit more broadly about your question. And I was thinking of it from a perspective of 'why have we not done much research on the interaction between medical variables and behavioral variables'? Because I don't think it's always automatic negative reinforcement. It certainly conceptually make sense that, for example, if someone has a skin rash that they might scratch it to the point of bleeding or maybe they have an abscess tooth, then they punch it to the point of self-injury.

Dr. Vollmer: But I think sometimes when there is either a chronic or even temporary medical involvement, it can make other events and the individuals day to day life very adverse to them. So the normal course of instructional activity or work activity becomes more difficult if someone hasn't had enough sleep, or if they have a headache, or if they haven't had consistent bowel movements and they're constipated. Or maybe it's related to the menstrual cycle for women. And you could go on and on with the potential variables.

Dr. Vollmer: And I think more directly to your question about the automatic negative reinforcement, it's simply more difficult to study. So whereas studies on attention maintained problem behavior. So behavior that occurs because it produces tension or a reaction from others in the environment or escape maintained behavior such as behavior that is reinforced by a temporary escape or avoidance of instructional activity that's very easy to study because we can control those variables. Whereas with automatic negative reinforcement, we can't really be sure what those variables are. And if we know what they are, we can't manipulate them very well. But I think that we can start to look at medical variables by tracking them and then conducting good behavioral assessments when those medical variables are present versus when they're absent.

Dr. Vollmer: I think I may have mentioned this summer, I'm not certain if I did in our conversation, but that we're starting to develop protocols to evaluate the interaction between sleep and problem behavior where in the first wave of the studies we were simply trying to measure sleep as best we can. And of course, technology in today's world makes that lot easier than it used to be because we used to have to rely on parent report.

Dr. Vollmer: And there was a study that Craig Kennedy and his group did probably 20 years ago now that looked at sleep and the interaction with problem behavior, but it was reliant on parents report when they were asked the question, how well did your child sleep? And you know, parents are trying to sleep and they're doing a million other things and they might

remember the incident at night or not remember that incident. But if we can track sleep very accurately, then we can start to look at correlations between sleep and problem behavior.

Dr. Vollmer: So we've started to do a little bit of that, and then what we hope to do in the future is conduct an actual functional analysis where we test out things like how does the person respond to instructional activity? How do they respond to attention on days when they've had sufficient sleep versus days when they have not had sufficient sleep? And see if we get different outcomes and that might have therapeutic implications in at least two ways. One, we might work with medical personnel to improve sleep or use behavioral procedures to improve sleep. Or at the other end we might change their nature of their instructional activity on a day when they haven't had an hour sleep. So perhaps not introduce as many instructional demands or different types of instructional demands, but base that on the data that we're getting. So we're using sleep as a model for medical involvement because it is measurable and we...

Mary Barbera: And it's actually really measurable now because a Fitbit or an Apple watch is automatic. And so I was told through one of my friends who uses Dr. Murray, who was in podcast number 28, he is a psychiatrist and he was saying that he wants to use an Apple watch because that is like the best gold standard in terms of research on trying to see if sleep is a variable.

Dr. Vollmer: Yeah, we're going to test out a bunch of different devices. And also we hope to work with some residential facilities that have good systems in place to monitor directly sleep and then from sleep we would want to extend to a lot of those other potential medical variables that we chatted about that I mentioned a few minutes ago, but we need to have behavioral models in place to do that. And I think that is one of the most exciting new directions that the field can take. And it will require an integrated medical and behavioral approach.

Mary Barbera: Which is what you're really working on at the University of Florida now with the integrated model. Yeah, that's, that's excellent. And I do want to add two things. I have a pre-sleep ebook that I recently put together and revised. And that has both kind of assessment and planning and behavioral strategies, and also some considerations for maybe melatonin or avoiding multivitamins at night and those sorts of things that people might not think of. So that's at Marybarbera.com/sleep. And I also did a video blog that we'll link in the show notes. Anything I mentioned here, it'll be in the show notes under this episode, which is going to be 46.

Mary Barbera: And that is that I use a paper calendar system for Lucas for his medical issues, any sleep, any behavior problems. So we have like a calendar dedicated and I have years of calendars and this is really what helped me figure it out for Lucas in terms of... I still have more figuring out, but he needs allergy shots so we have, you know, five years of data of, normally people only get allergy shots for five years, but I have data to show that he continues to need allergy shots. So we don't want to stop those. I have data to suggest that he was on Enderol and it was working. And then we tried to put him on Enderol long acting. And so that's in my calendar. And then we saw a spike in behavior. So even if you're a parent out there listening and you're not a behavior analyst, you can learn how to keep data. For the medical professionals and the behavioral professionals to try to because unfortunately it's the parent standing with the empty bag of going, I don't know what to do. My kid's not sleeping. He's, you know... And I really think that like through what you're doing in terms of trying to build models for that and also just trying to help parents get through the day to day operations of trying to figure out if it is really a medical component to it. It's not always just medical or just behavioral. Oftentimes it's both. So that's great. For sure. Yeah.

Mary Barbera: So how can we do a better job of ruling out medical issues in kids with moderate severe autism? Besides like my calendar, you know, trying to have parents keep some track. So it's like not going through this maze because when you have a, you know, just say you see clients are patients one-to-one as a physician. I mean it's really hard to tell, especially if the kid is not conversational. I mean we're lucky that Lucas can say head hurts or neck hurts or knee hurts, but he can't give me like it's stabbing pain down here and it seems to be really sudden and really quick like goes way quickly too. But like how can we help physicians do a better job of ruling out medical issues?

Dr. Vollmer: Well, as you know, but maybe many parents in the audience might not know, it's actually an ethical requirement for behavior analysts to rule out the possibility of medical involvement with severe behavior. And I can't really imagine a case of let's say self-injurious behavior that doesn't have some level of medical involvement at the front end or at the back end as I mentioned earlier. So medical variables that make receiving instruction or versus perhaps or behavior that produces a medical outcome like self-injury that needs medical treatment. So I think it's incumbent of behavior analysts to always with that type of severe behavior interact in some way with medical personnel. And when I look at the history of our field and behavior analysis, I remember a time that behavior analytic services in general were not widely accepted. It was a

very niche approach and very few people had access to those kinds of services.

Dr. Vollmer: And with board certification and changes in insurance laws and things of that nature, over the last 20 or so years, we've seen a lot more accessibility, at least for children accessing behavior analytic services. What I would hope to see over the next decade or so is movement in the next direction where the accessibility is for those kind of integrated types of approaches and services, so that behavior analysts can work directly with medical personnel on those types of problems and in a safe way so that we can ensure that individuals are not getting hurt in a way that is irreparable or to make sure even that individuals working with the individual like teachers and parents and therapists are perhaps not getting hurt due to the behavior and medical variables that are contributing to it.

Mary Barbera: Yeah. So in your talk at Penn State, you talked a little bit more after my question, a little bit more about biting specifically as the behavior and you said that a lot of animals when they're stressed and or in pain, they bite and so can you elaborate a little bit more on that?

Dr. Vollmer: Yeah, the, the purpose of bringing that up at that point in the discussion was that I was talking about some possible impediments, behavioral treatment. And actually if I go back to that conference next year, I plan to elaborate on that a little bit more and maybe even have that as the full discussion. Not specifically about biting but about impediments to effective behavioral treatment. But what I have found to be interesting about that biting phenomenon is that there was basic laboratory research that was done prior to like the mid 1970s. It was with humans but animals and all kinds of different species showing that, as you said, in response to some kind of averse of stimulation. So a painful stimulus or a noise, averse some noise. Humans and other animals will bite down and they'll bite down on whatever is available. It might be if there's a bar in front of them, they'll bite on the bar. If there's nothing, maybe they'll bite their hand.

Dr. Vollmer: Before the days of anesthesiology, people would literally bite on a towel or bite on some object during surgical procedures or you know, when a bullet was being removed or something along those lines. So when you see that in the movies that's what people did. So biting down is a natural human response. So what I'm wondering and some of my doctoral students are starting to wonder is why we've ignored that literature for over 40 years now. Because when we do behavioral assessments of biting oneself or others, we often have a confound in our assessments. So for

example, if we present an instruction to someone and they bite their hand or maybe they bite us, we then in our assessment give them a break and say, okay, nevermind, we're testing out whether that escape is the reinforcer for the problem behavior or the biting.

Dr. Vollmer: But we've also presented that instructional demand. So maybe if that is averse the biting response is akin to what we saw in those early studies and I think, all of us who know individuals have seen other individuals with autism have seen something like the following example where an individual is sitting in a room, maybe even all by themselves, maybe they don't know you're watching, and some loud noise occurs like a fire alarm or a dump truck goes in reverse and they bring their hand to their mouth and bite down... For why is that? It appears to be automatically reinforcing in some way. It's not that somebody turns off the fire alarm, it's perhaps a natural response to biting.

Dr. Vollmer: I keep saying perhaps because we don't, we haven't ruled that out, but it's surprising to me that we haven't tested that over all of these years. So I was suggesting it to the audience you were and that maybe some of this resistance to treatment that we're seeing when the behavior is hand or arm biting or when the behavior is biting others relates to the fact that we don't have a complete handle on why the biting occurs.

Mary Barbera: Well and that's exactly what happened with Lucas. He would bite his hand or he would get aggressive and it was usually related to pain or startle and I spent four years as a registrar behavior analyst taking my data, you know, trying to find some, I thought who was it a seizure. Like I never heard of being startled and being aggressive or self-injurious. But that's when I went to Dr. Murray and he's doing a lot of work. He's at Hershey medical center and he's on podcast 28 and did a lot of work with individuals with autonomic nervous system dysfunction. We talk a lot about that in that episode and he put Lucas on our cardiac med. It beta blocker to settle his nervous system down.

Dr. Vollmer: And the way he explained it was like Lucas was up here, always kind of on edge. And so fire alarms, somebody just kicked the trashcan near him just suddenly, you know, startled him and he would either get self-injurious or aggressive and in pain at night when he wakes up and he's saying head hurts as he's biting his hand or his finger. Now we, with the Inderal dosage, we've managed to get aggression near zero and self-injurious, you know, once a month. So we've managed it through medication. I mean, but this is what I'm saying this like there's not going to be like University of Florida is not going to be able to catch that. It's the parents on the front lines who are like, wait a second. One of the teachers like,

hey, the fire alarm goes off. He bites his hand. And it's like, it's just a lot of confounding variables that for each individual I say like each individual has like a hundred levers. Some need to be up, some need to be down. And it's like a complicated situation.

Dr. Vollmer: Well, and I think in terms of the role of people like myself, the researchers, it's our job to start to explore the empirical basis for this type of information. So parents may be seeing this and noting the correlation between some physical illness or other medical problem, but we need to provide the research basis or set up models to demonstrate on a case by case basis what those variables are. Because in some cases it could be that a parent might believe, for example, it's related to sleep, but maybe it's not. Maybe it's that days of poor sleep, they also have a severe headache. Or maybe they've had other things happen in their morning that caused them to rush or something could, who knows? It could be any number of other variables, but we have to do the research on it. And so I'm projecting forward and saying we've learned what we've learned through the functional analysis of behavior. Now let's start to look at the interaction of some of these variables that we see or that parents see and report and work in a collaborative way with other professionals.

Mary Barbera: Yeah, I think that's excellent. So do you give different advice for self-injurious behavior versus aggression or different advice depending on the child's age or size?

Dr. Vollmer: Well, let me start with the first part. Sometimes the treatment that the behavioral intervention that we use for self-injury might look exactly like the behavioral intervention that we use for aggressive behavior. And sometimes two different functions of self-injurious behavior might have two completely different treatments. So we don't base the treatment on the type of behavior per se. It's more about the function of the behavior or why the behavior is occurring. Now due to safety reasons one has to take into account certain considerations related to the type of behavior, so if it is self-injurious behavior we have to have some kind of knowledge or medical support for the level of severity related to any single instance of the behavior. So people have detached their retina from self-injury. They've, they've developed concussions from a self-injury lost teeth, things like that. So we might have to block the behavior and in some cases even if blocking is an effective component of the intervention.

Dr. Vollmer: The second part of your question related to the age for my group is not necessarily so much related to the age as the ability or lack thereof to include a component of the treatment that involves withholding the

source of reinforcement maintaining the behavior. So for example, typically one way say if behavior is reinforced by attention from a parent or reaction from a teacher or something, one might say, Oh, just ignore that behavior. But when we're talking about self-injury or aggression, you really can't ignore that behavior most of the time. And if it's a very large individual and they're engaging in escape behavior, you can't necessarily force them to engage in whatever you're trying to get them to do. So one of the things I talked about with the group at AC this summer is that we have to develop behavioral interventions that work even when the behavior is still getting reinforced.

Dr. Vollmer: And the way that we have explored doing that, and we've published some studies on this already, is to make it so that some appropriate alternative behavior produces a better outcome than the dangerous behavior. So we are, we're always weighing those variables. What can we do to make it more likely that the appropriate behavior will occur and less likely that the problem behavior will occur? But we try not to say ignore because you can't ignore and sometimes it's dangerous to ignore.

Mary Barbera: Yeah. And in my experience I see behavior analysts sometimes, you know, just really treating escape with escape extinction and really there's a lot of behaviors I see, especially in schools and homes, where there's a lot of variables. And I really, you know, I'm really striving to train people online in the most simplistic, the easiest that the safest methods and I... My big goal is 95% of your time preventing problem behavior, it's not about whether the child can do double digit addition or can read or, or anything. It's like if there's problem behaviors, the mands are probably too high and or reinforcement's too low and there may be a medical component. So let's just go back to figuring it out. Pairing, being the spoiling grandma when we're having good behaviors and not being like, it's time to work and just, you know, being more like, this is fun.

Dr. Vollmer: We want children running to self-care, running to the learning area, making it fun. And then you're going to have to spend 5% of your time dealing with behaviors that are going to just come up. But I just feel like sometimes we get into this, it's an escape related, you know, may escape, maintain. So we've got to keep the demand on. It's like, eh, you don't know what exactly is happening in that moment. And I know we have to as a field study it and we have to have protocols, but sometimes those protocols I think can, can end up backfiring.

Dr. Vollmer: Well I think it's another example of where we're ready to move to the next step. So we know how to treat escape maintain behavior. But what you're suggesting is less ask the why question. So why is the demand,

why is the instructional activity immersive, and why would we want it to be immersive as parents to teachers. We want the individual to approach us and what we're finding in our research is even with escape maintained behavior, the use of high density positive reinforcement takes care of a lot of the problem even if the behavior is still producing escape. And there are several studies now published demonstrating that. That's part of what I presented at the conference that I think you'll provide a link to.

Mary Barbera: Yeah, we are going to link in the show notes that the whole three hour workshop that Dr. Vollmer did, which was excellent. So, okay. So in your long history in the ABA field, where have you seen we've made the most gains?

Dr. Vollmer: Well, I alluded to one earlier. I think that significant gain has been on a cultural level where with board certification and changes in insurance mandates, changes in educational practices, more people have access to behavior analytic services. So it's important to get the work translated to application with respect to severe problem behavior. Like what we're talking about today, self-injury and aggression. I think that there's no question that the functional analysis approach set the stage for all of the things that we're now talking about. So identifying why the behavior occurs to begin with has made treatment more effective. And now we're ready to start asking all kinds of other questions. Like how do medical variables interact? Why is instructional activity averse? Why is attention from a parent so powerfully reinforcing that someone would engage in some severe self-injury to obtain? That level of why question is now ready to be addressed. So that functional analysis approach really set the stage for that, I think.

Dr. Vollmer: And then all of the research and skill acquisition that has really supported use of the behavior analytic approach in general. So as we talked about at the beginning, if there's only so much time in someone's day and you fill it up with important activity, like taking care of themselves, learning new things, communicating socially, then there's less time available to contact reinforcement through dangerous behavior and our field has gotten so at teaching those skills and allowing a lot of people to come into contact with that type of approach.

Dr. Vollmer: When I was first in the field, I visited schools and residential facilities where no one was getting any real service. It was all very superficial. People were left to do nothing really for long periods of time. And not surprisingly, they developed a lot of dangerous behavior. And I see that problem has not kind of a way, because there's all kinds of other

variables as you suggested, but it's less true to this day or in this day because of the accessibility of good sound and evidence based practice.

Mary Barbera: Yeah. What do you see as the main struggles of professionals in the field and the chop challenges to the ABA field as a whole?

Dr. Vollmer: Exactly what we've talked about today. Like most behavior analysts are providing in home services or in a clinic service. Maybe they're a lone ranger in a school district but they don't have the availability of the integrated approach. And again, if it's something like self-injury, I can't imagine that there is not some need for medical collaboration at some level with that behavior. And most behavior analysts do not have access to that. And when they tried to translate from our literature, they'll see, Oh well this group of researchers did a functional analysis of self-injury and then they did treatment and I'm a board certified behavior analyst so I should be able to do that. Well you can't necessarily in a school if somebody is going to crack their head open, you can't just do a functional analysis and treatment, and you need the medical support to do that. And many of the studies that have taken place with severe self-injury are in settings where the medical consultation was available or the collaboration was there. So we're not ready for 100% translation yet. And I think inadvertently too many people are forced into a situation where they feel that it's their job to do that type of assessment when they don't have the resources available to that.

Mary Barbera: Yeah. And just because something, you know, the child went to the doctor and they ruled out medical problems, like if that was a week ago, a month ago, a day ago, if the child isn't unable to communicate fully, the chances of them really ruling out, I mean, I'm a nurse, my husband's a physician, I'm a behavioral analyst. It took us four years to figure out why Lucas was having problem behaviors related to a medical issue as one of the components. So it's not like a once and done, you figured it out; now we're good. It's an ongoing process where we're always having to consider the medical issues that may be going on, may never be found, but we have to be aware that there's, there's a lot of variables. So I totally agree.

Mary Barbera: So part of my podcast goal is for parents and professionals to be less stressed and lead happier lives, not just about getting techniques to help the kids, but you know, we only have one life ourselves. So do you have any advice for parents and professionals to be less stressed?

Dr. Vollmer: Well, what I find that is helpful for families I work with and in my own life with my students and with my family is to apply differential

reinforcement. And in fact, a couple of years ago at that same conference you attended, I gave a talk on differential reinforcement as a way of life. And what I mean by that is that if we can give each other, and those people we work with, those family members we're involved with friends, whatever. And if we can give them more reinforcement for the things that they're doing well, the things that we would like to see out of them, that behavior that is not dangerous and minimize the reinforcement for dangerous behavior or behavior that hurts us in some way, whether it's emotionally or physically, then we're more likely to see the emergence of that behavior that is desirable. And if you just kind of move through the world in that way, thinking about that was an important and safe behavior. I'm going to load on the positive reinforcement for that behavior and that behavior was dangerous. So I'm going to minimize my reaction and make sure everyone is safe but not make a big deal out of it. I'm not going to change a lot about what I was doing other than to make sure people were saying then the approach to the home life, the friendships, the work life becomes I would say happier and less stressful. And so applying that to families who have individuals in their family with severe behavior hopefully if that works to reduce that problem, then they have more time in their life to enjoy the, the interactions with their loved ones and other hobbies that they might have and their life becomes happier and less stressful.

Mary Barbera: Yeah, I love that advice. And it makes me think of two resources. One is the book, what sham mu taught me about life, love and marriage, something like that. And it's a really good book. And like, she went to study animals at like a SeaWorld type place and then she wrote a book about how like she stopped nagging her husband and all that stuff. So we can link that in the show notes as well. And then Glen Latham's advice, he wrote positive parenting and behind the schoolhouse door of giving five positives, five to eight positives to every negative. And I've done a lot of work about more around that too because it's not just the kids who need positive reinforcement, like you're saying, you know, our spouses or students or teachers are, if you're a teacher, the paraprofessionals in your room, everybody needs five to eight positives to every negative. And it's like, that'll just make the world a happier place and it'll make you happier too. So I love that advice.

Mary Barbera: So how can people follow your work? And we're going to put a ton in the show notes so we can put you a link to your website maybe, or anything, any way for people to contact you?

Dr. Vollmer: Well, mainly I'm teacher and researcher, so I don't write books or anything like that. But I have published a lot of research articles on the

topics that we've been talking about. And really what I've been talking about today is where we're kind of moving in our future directions. But my research publications are listed on my website through my department at the University of Florida. I have it memorized so I can tell you what that is. It's people.cas.ufl.edu. And that website describes our clinic and describes projects doctoral students and postdoctoral associates are working on. It describes activities within our lab, conference presentations, journal articles we've published and things like that.

Mary Barbera: Well, we'll put that in the show notes as well. The show notes and this whole episode is at Marybarbera.com/46. Thank you so much for your time, Dr. Vollmer. It's been a pleasure getting to know you better. I'm going to continue to follow your work. I'm a big fan, so thank you so much.

Dr. Vollmer: Thank you. Hope to see you soon.

Thanks for listening to the Turn Autism Around podcast with Dr. Mary Barbera. For more information, visit Marybarbera.com.