Interview Transcript
Team Roboto

**Introduction:** We interviewed an individual, who prefers anonymity, who we will name Individual A. She is a mother of a child with autism who is currently thirteen years old. We discuss benefits and advantages of robotic therapy like Milo and if she would consider using such technology with her child. We also discussed the concerns involving such implementation of technology, such as how children can get attached and dissociate themselves from the real world, and more.

**Biography:** Individual A is a mother of a thirteen year old child with autism. As she has seen the way technology has evolved in assisting children with autism, especially noticing how much children with autism benefit from utilizing technology, she has much insight and opinion in the use of robotic therapy efforts for children with autism.

**Transcript:**

Stephanie: Okay so there’s this robotic technology called Milo and it’s this 2 foot robot who is used to treat children with autism. It’s an interactive robot and people can play with it, there are screens of lessons to teach appropriate social behaviors. For kids from K-12. It’s not a replacement for a therapist, but it’s to help kids learn social behaviors and staying focused. This robot is used to help with those interactions. So what do you think about it? Would you ever use it for your child?

Individual A: Well for kids like Bryce, technology is something that comes very easy to kids on the spectrum. So I could definitely see a benefit, it’s a predictability. The hardest thing is for the kids on the spectrum they feel very uncomfortable with human behavior. Typical people and kids and adults are unpredictability. So I could definitely see benefit with that. Especially with kids younger. When Bryce was younger, he definitely had a desire to interact more so kids that are younger would definitely be a benefit.

Stephanie: Yeah?

Individual A: The only problem is that when kids get older, I could see Bryce wanting more social interaction because they are more socially aware so I don’t know how that’s going to serve older when they realize they are trying to navigate and fit in society. The unpredictability might be a limitation. There definitely is that too. There is a plus and minus and I could see age being a factor and the degree to the severity of autism. The only problem is looking at i-Pad, that’s all he wants to do. I could see how this kind of robot is not just like IPad or laptop or video console, there’s a little bit more interactions. I could see that as more of a plus over human interaction. But I think that for the training purpose initially it would go far depending on how you program it. That time where they can’t really socialize not quite socialize with a real live person, to bring that I think is important. Like Bryce looking at cartoons, it was much easier for him to
perceive how people talk to each other rather than when actual humans are trying to speak to each other. I could see looking at the robot can interact, that would be more 3D than looking at a carton. So yeah depending on how it programmed, the tactile and visual could be added on. The thing is that it emphasizes is making eye contact. He has a really difficult - you know like tactile the sensory, if you can get the sensory part that might be less for kids who have autism. Again I keep going back to it, but how you program could definitely benefit. Even to this day Bryce loves interacting with pets, he loves animals more so than humans. Because I just don't think he has the skillset, he can interact with babies and dogs and they don't need eye contact and you don't have to communicate with them. The companionship is huge.

Stephanie: I mean the nice thing about the most current, after the research I’ve done, version is that it has a screen on its chest and the child can use an iPad to interact with the lessons and they can move and they have facial expressions and stuff so it can react to visual stimulus and voice interaction. So the facial expression and they use exaggerated facial expression and body movement. Some of the lessons they have are how to be a good friend and how to be a good guest at a birthday party and the kid is supposed to mimic and interact with the robot itself. But they can also interact with the robot and the iPad itself. What else would you think is very beneficial? I know you mentioned eye contact-

Individual A: Uh-huh. And tactile-

Stephanie: Yeah the tactile.

Individual A: And I think the appropriate response I think that - or monitoring any kind of behavior. I know that some other things are trained for safety too. To kind of guide kids and to sense their voice volume and able to augment it. Robot can do the same thing, they can modulate voice and sense and intervene something to that extent. Or maybe just doing everyday chores. You know guide them to use restroom you know or open the door when doorbell rings kind of thing. Can be kind of their everyday developing independence and appropriate response, it would be really great. You know the lack of social interaction really motivates kids with autism to act, react appropriately. I think those things can definitely be a big help. You know when I text Bryce and ask him questions by email or text, he responds much more than when you ask him. He has to intake all these senses. It's a processing issue too so that could be eliminated. And that would be great and even for us we have Alexa and Siri. At some point, it doesn’t become so alien when you use it on a daily basis. In a very functional level it becomes a part of your everyday norm. There’s definitely utilizing technology. I don’t know how they could separate technology from the reality you know.

Stephanie: That's a big concern.

Individual A: Yeah if everything is predictable but it sounds like that program you are talking about has addresses some of those concerns. But I definitely think I am all for technology and I think that's the way it's going to go in the future. The benefit of kids on the autism spectrum is
that they are very technologically oriented and tech savvy. So I think it just comes really easy for them.

Stephanie: Yeah! So you were kind of talking about the reality, like the robot vs. reality aspect. What is a concern that you would have like let’s say your child was using this robotic therapy and stuff. Are there any concerns like loss of human contact or you know it’s not exactly translational privacy and it’s taking data about you.

Individual A: Right right that’s very true. The same thing about technology is that it comes with its set of issues, like they are very drawn to technology and that becomes a companion and entertainment source. So then they kind of dissociate themselves from the actual world they live in and makes them more comfortable. But you know you can’t just live in technology you got to be able to live in society. I think that’s one thing that as much as I love technology you don’t want to give them too much to rely on because that becomes their actual world you know you don’t think about it because you think you could always stop, but kids can’t really stop. They love that world. Think about it, like virtual reality. Anything can be possible! They have no desire to have human contact to begin with and that aspect and there’s no drive for them to leave that aspect of their life and join in. So it’s kind of that fine balance, you do need a balance. We all do. But especially for kids who have autism, their reality is very different from our reality.

Stephanie: Yeah definitely. Well thank you very much! I think that’s the end of my questions for you!

Individual A: Oh yeah! You are very welcome!