

<sup>1</sup>Department of Audiology, Nationwide Children's Hospital

### BACKGROUND

As COVID-19 continues to impact routine social interactions and development, more young children are coming into audiology appointments with increased anxiety. Many children have had minimal social contact with outside parties for over a year, escalating their separation anxiety and "stranger danger" responses.<sup>1</sup> Some of these children are experiencing delays in cognitive, emotional, and psychosocial skill development due to the closure of community-based mitigation programs such as schools, parks and playgrounds.<sup>2,3</sup>

One way to help abate anxiety experienced in unfamiliar settings is to provide patients with context and positive foreshadowing of what will take place in their appointments.<sup>1</sup> Families can be provided with a generalized social story that outlines each activity that will happen during their visit with their audiologist.

A social story is a short, personalized story aimed at helping a child successfully handle a specific situation.<sup>4</sup> Social stories accurately describe a context, skill, achievement, or concept, and are designed to provide a safe and meaningful exchange of information between all parties.<sup>5</sup>

In a systematic review of 22 research articles assessing the effectiveness of social stories in children with autism spectrum disorder (ASD), 15 studies reported a significant increase (effect size of >0.77) in participants' social skills from baseline to intervention.<sup>4</sup> However, the most notable conclusion is that there are no negative side effects associated with using a social story.<sup>4</sup>

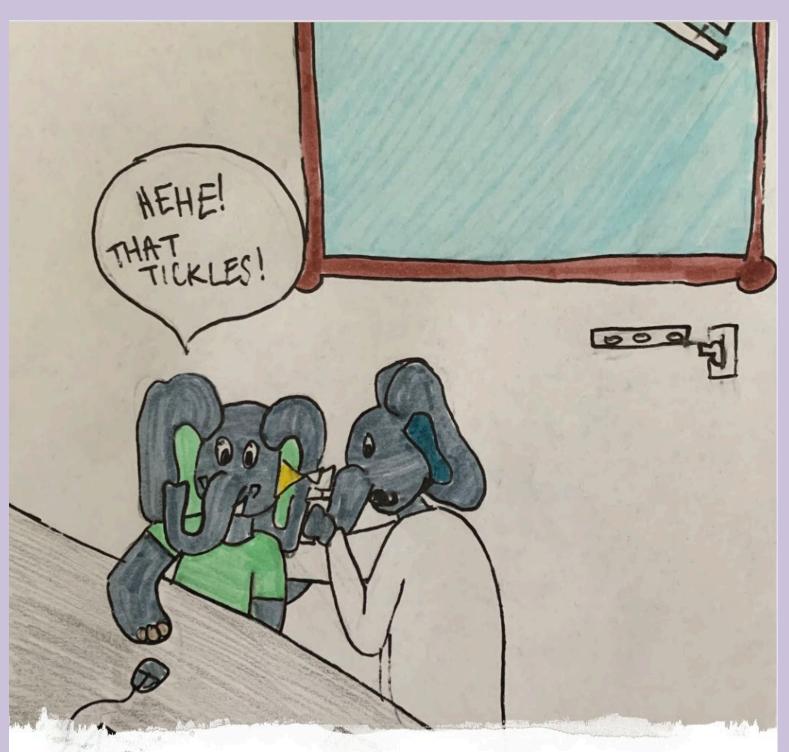
Traditionally, social stories have been used when working with individuals with ASD; however, the framework here has been broadened to support all children. This project proposes a generalized social story for audiology appointments, as well as multiple distribution platforms.

#### METHODS

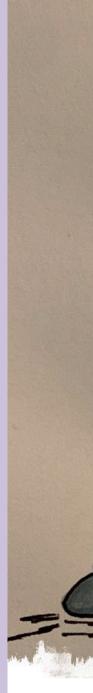
A series of audiologic evaluations were observed. Appointment flow and areas of increased patient anxiety were documented. Character sketches were created and assessed for child-friendliness, interest, and cultural sensitivity. A social story was then written to accompany illustrations of each change in activity throughout a typical appointment. Following completion of a hard copy of the story, a recording was produced and published on YouTube. A QR code was generated, allowing ease of access for families. Business cards were printed and placed in the clinic waiting area, encouraging families to watch the video prior to being seen for their audiology appointment.

# **USING SOCIAL STORIES TO REDUCE APPOINTMENT-RELATED ANXIETY IN CHILDREN** Courtney Kasin, BA<sup>1</sup> and Riley Kasin, NREMT<sup>2</sup>

## SAMPLE PAGES



After the questions, the audiologist looks in my ears with a special flashlight. At first, I'm a little scared, but it doesn't hurt one bit! I think it tickles. The audiologist says that I'm super brave!

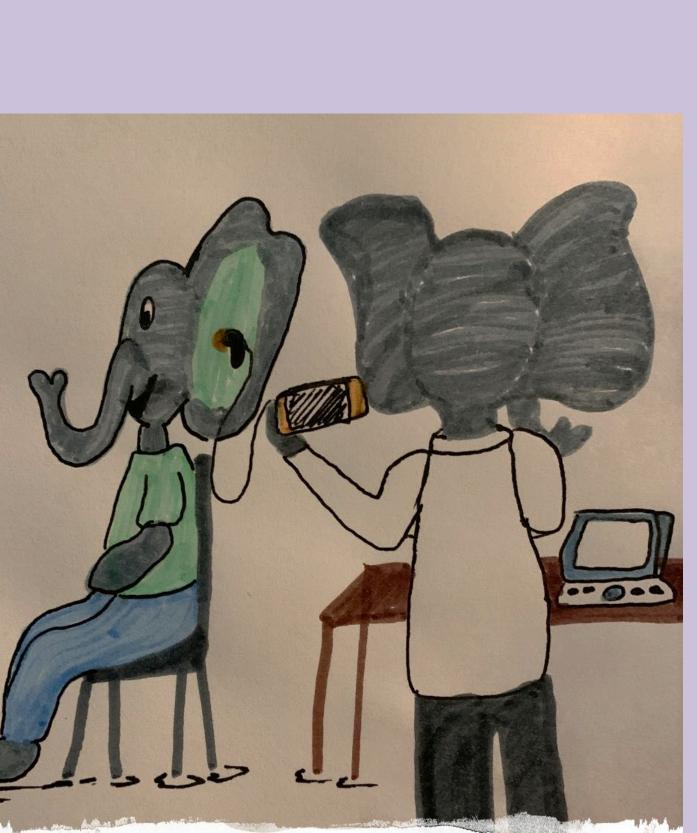




"This next part sounds like aliens," the audiologist says. He's right! He puts another squishy thing in my ear. He tells my mom that this will help determine how well my ears are working. It looks like a tiny pillow and is very soft. It plays funny alien sounds for a few seconds while I sit nice and still. Beep boop beep!



<sup>2</sup>Crafton Hills College



Next, the audiologist puts a squishy thing in my ear. This test lets him know if there's any fluid hiding behind my ear drums. The squishy part looks like a mushroom. It makes a funny humming noise and feels like it's giving my ear a hug. I get a little scared again, but it doesn't hurt one bit! The audiologist gives me a high five!

# **CONCLUSIONS AND NEXT STEPS**

For approximately two years, children have had non-traditional contact with individuals outside of their home settings, resulting in increased anxiety surrounding medical appointments. In appointments requiring patient participation and cooperation, this anxiety and "stranger danger" response can thwart the opportunity to obtain results, sometimes necessitating rescheduling the appointment altogether. This particular story aims to describe the context and activities that will take place in the audiology appointment, helping to reduce appointment-related anxiety in the child. Okada and Ohtake found that in addition to the positive effects found on patients' social skills, social stories can also benefit children with limited language skills, another population that audiologists commonly work with.<sup>6</sup> Research has shown that social stories increase social cooperation, social interaction, and social independence in children.<sup>7</sup>

Next steps include expanding distribution platforms, including sending the URL and/or QR code to families alongside appointment confirmations, displaying the QR code in the patient waiting area, and having business cards on hand for families that will be seen in clinic again. Additional stories/videos may be made for VRA and ABR appointments, providing information to parents of these patients.



Now I get to play with some special listening toys. Every time I hear a beep, I put a cookie in the cookie jar. The beeps get super quiet, but I'm pretty good at this game. The cookie jar gets really full!

Pandemic | Stony Brook Medicine. Retrieved August 7, 2021, from https://www.stonybrookmedicine.edu/SeparationAnxietyCOVID19\_keluskar\_reicher\_crowell Pediatrica 72(3): 226-235. Doi: 10.23736/S0026-4946.20.05887-9 Doi: 10.3233/TAD-180218

5. Gray, C. (2015, November 2). Social Stories. Carol Gray - Social Stories. Retrieved August 7, 2021, from https://carolgraysocialstories.com/social-stories/ 6. Okada S, Ohtake Y, Yanagihara M. Improving the manners of a student with autism: The effects of manipulating perspective holders in social storiesTM – a pilot study. International Journal of Disability, Development and Education. 2010; 57(2): 207-19. doi: 10.1080/10349121003750927

7. Soliman Hasanin, H. A. (2014). The Effect Of Social Stories Intervention On Social Skills Of Children With Autism Spectrum Disorder. Psycho-Educational Research Reviews, 3(2), 33–41. Retrieved from https://www.journals.lapub.co.uk/index.php/perr/article/view/234

#### REFERENCES

1. Keluskar, J., Reicher, D., & Crowell, J. (n.d.). Separation anxiety during the COVID-19 pandemic. Separation Anxiety during the COVID-19

2. Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Dubey, M. J., Chatterjee, S., Lahiri, D., & Lavie, C. J. (2020). Psychosocial impact of COVID-19. Diabetes & metabolic syndrome, 14(5), 779–788. <u>https://doi.org/10.1016/j.dsx.2020.05.035</u> 3. Ghosh, R., Dubey, M., Chatterjee, S., Dubey, S., (2020). Impact of COVID-19 on children: special focus on the psychosocial aspect. Minerva

4. Aldabas, Rashed (2019). Effectiveness of social storied for children with autism: A comprehensive review . Technology and Disability (31).