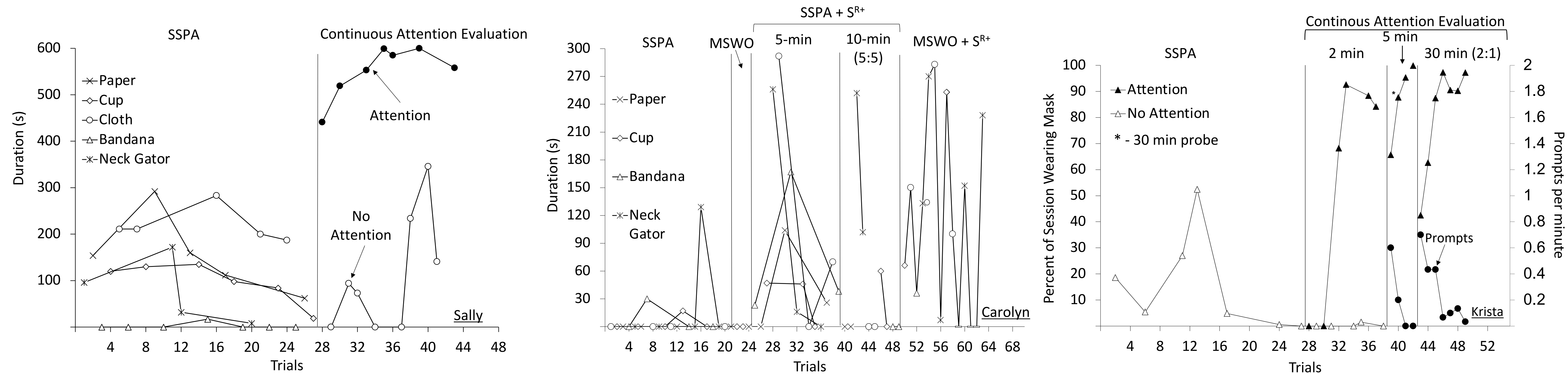




Background & Aims

- People with intellectual and developmental disabilities (IDD) and autism spectrum disorders (ASD) often have difficulty in tolerating new or infrequently contacted stimuli (e.g., Fisher et al., 2019).
- During the COVID-19 pandemic, face masks are a new stimulus that may cause distress for many people, especially those who may not understand the need for a mask (Sivaraman, Virues-Ortega, & Roeyers, 2020).
- The purpose of this project was to demonstrate an evaluation of preference for types of face masks and to increase compliance with wearing a face mask for people with IDD and ASD.

Results



Method

Participants:

- Carolyn, 40-year-old female with ASD and ID
- Sally, 32-year-old female with ASD and ID
- Krista, 54-year-old female with ASD and ID
- All engage in forms of severe problem behavior

Setting:

- Apartment in a state-run residential facility.

Materials:

- Cup, cloth, paper, bandana, and neck-gator style face masks
- Electronic devices with data-collection application (Countee)
- Coloring pages and markers

Definitions

- Mask On – Mask covers mouth and nose
- Partial Mask On – Mask covers part of mouth or nose
- Therapist Prompt – Verbal prompts for the participant to put his/her mask back on

Interobserver Agreement:

% sessions with IOA	% Agreement
31.25 %	97.78%

Treatment Integrity

% sessions with TI	% Accuracy
30.56 %	99.32%

Preference Assessment Procedures:

1. **Single Stimulus:** One mask presented at start of trial
2. **Multiple Stimulus:** Multiple masks presented at start of trial and participant asked to choose one

Reinforcement Procedures:

1. **SSPA + Reinforcement:** One mask presented at start of trial and reinforcement delivered contingent on mask wearing
2. **MWSO + Reinforcement:** Multiple masks presented at start of trial, participant selects one mask, and reinforcement delivered contingent on mask wearing
3. **Continuous Attention:** Attention provided for the entire session
4. **30-min Continuous Attention (2:1):** 2-min period of attention alternated with 1-min periods of no attention
5. **10-min Mixed Schedule Tangible (5:5):** 5-min period of no coloring page available followed by 5-min period of coloring page available contingent on putting on mask

Discussion

- Identifying individual preferences could allow individuals with IDD and ASD safe access to public locations.
- For two of three participants, identifying a preferred mask was critical for increasing mask wearing.
- For one participant, a simple reinforcement system was needed to identify mask preference.
- This approach allowed us to develop individualized interventions for increasing the duration of mask wearing.

References

Fisher, W.W., Felber, J.M., Phillips, L.A., Craig, A.R. Paden, A.R., and Niemeier, J.J. (2019). Treatment of resistance to change in children with autism. *Journal of Applied Behavior Analysis*, 52(4), <https://doi.org/10.1002/jaba.588>

Sivaraman, M., Virues-Ortega, J. Roeyers, H. (2020). Telehealth mask wearing training for children with autism during the COVID-19 pandemic. *Journal of Applied Behavior Analysis*, 54(1), <https://doi.org/10.1002/jaba.802>