# Inclusivity Overview: How Disability Friendly are Restaurants in Birmingham, AL?

**Wolfner[1], Sophie Yu[1], Fred Biasini[1], Bama Hager[2] and Susan Ellis[3]**

[1]Department of Psycnology, University of Alabama at Birmingham; [2]The Autism Society of Alabama, [3]People's First of Alabama

## BACKGROUND

- Individuals with developmental disabilities, such as Autism Spectrum Disorders (ASD), face many physical, social, and attitudinal barriers to inclusion in their communities. As a result, participation in key areas of society—such as employment, education, and entertainment—are limited (Askari et al., 2015)
- While the Americans with Disabilities Act of 1990 was created to address physical barriers, the ADA does not include sensory sensitivities such as sound and light levels (Fletcher, Parrish, & Sherman, 2018). Difficulty processing and integrating sensory information is associated with decreased social participation (Piller & Pfeiffer, 2016).
- Negative attitudinal barriers are among the most important environmental factor impacting participation of children with disabilities (Askari et al., 2014; Simplican, Leader, Kosciulek, & Leahy, 2015)
- Utilizing community based participatory research (CBPR) tactics helps enhance knowledge and awareness of autism across populations, which in turn can be effective in breaking down prejudices and discrimination (Lerner 2000; Wright et al. 2014).
- Collaboration between self-advocates, non-profit organizations, and scholars serves as filters to help merge both community and policy through reliable, high quality research endeavors (Silverman & Tyszka, 2017).

## OBJECTIVES

- Assess inclusivity of 6 upscale restaurants/bars and cafés within the community of Uptown Birmingham, Alabama.
- Engage community partnerships to help Identify specific barriers to and supports toward community participation of those with disabilities to inform future policy and research.
- Develop an informational brochure (e.g. Disability Friendly Guide) for individuals attending the Self Advocates Becoming Empowered (SABE) conference.

## METHODS

- Community Action Research (Krieger et al., 2018) was conducted, involving stakeholders from the Autism Society of Alabama and People First, self-advocates with sensory and/or physical disabilities, and researchers at UAB.
- Consumers (N=5) offered qualitative and quantitative reports of sensory stimulation, ease of movement, service quality, and impression of overall disability-friendliness of the establishments.
- At least one server and one manager from each establishments were asked about their awareness of ASD and whether they employed individuals who disclosed disabilities.
- ASD awareness was relevant as sensory sensitivities are commonly seen with ASD (Silverman & Tyszka, 2017).

## RESULTS

- To make our findings accessible to individuals, an informational pamphlet was created to provide a "disability guide" to individuals within the Birmingham community attending the SABE conference (see Table 1).

**Table 1** Informational Brochure Inside Layout

Sensory level for: Sound, Sight, & Smell; (*1* = *Low Stimulation*, *5* = *High Stimulation*)

| Restaurant 1 | Restaurant 2 | Restaurant 3 |
|---|---|---|
| 3 3 2<br>Environmental Characteristics<br>• Music playing in background<br>• Very Spacious, high ceilings and second floor seating<br>• Lacks automatic entryway<br>**Overall 'Disability Friendly' Rating**<br>*(1 = completely inclusive, 5 = not at all)*<br>**3** | 5 2 2<br>Environmental Characteristics<br>• Music & sports playing in background makes hard to hear others at table.<br>• Spacious, lots of high top chairs<br>• Big bar area, live music from stage<br>• Multiple flat screens, helpful staff<br>**Overall 'Disability Friendly' Rating**<br>*(1 = completely inclusive, 5 = not at all)*<br>**4.3** | 5 1 4<br>Environmental Characteristics<br>• Noise makes it hard to hear others at the table.<br>• Large bar area & stage for live music lots of visuals on the walls<br>**Overall 'Disability Friendly' Rating**<br>*(1 = completely inclusive, 5 = not at all)*<br>**2.6** |
| **Restaurant 4** | **Restaurant 5** | **Restaurant 6** |
| 4 3 3<br>Environmental Characteristics<br>• Not a lot of room to move around<br>• Small space, mostly high-top chairs.<br>• Music playing in background<br>• Lots of noise from the kitchen<br>**Overall 'Disability Friendly' Rating**<br>*(1 = completely inclusive, 5 = not at all)*<br>**4** | 2 2 3<br>Environmental Characteristics<br>• Light music playing in background<br>• Calming environment<br>• Bathroom is far from seating area<br>• Lots of windows, nice lighting<br>**Overall 'Disability Friendly' Rating**<br>*(1 = completely inclusive, 5 = not at all)*<br>**2.6** | 2 1 3<br>Environmental Characteristics<br>• Light music playing in background<br>• Large restaurant, variety of food with buffet, very nice staff<br>• Lighting appropriate, adjusts with time of day.<br>**Overall 'Disability Friendly' Rating**<br>*(1 = completely inclusive, 5 = not at all)*<br>**1.6** |

- Establishments were neutral with respect to overall disability friendliness (*M*=3.06, *SD*=.97).
- Noise represented the main barrier to inclusivity *(M*=3.61, *SD*=1.34).
- Only 17% of people asked at these establishments were aware of ASD.
- None of the establishments had employees who disclosed a disability.

**Table 2.** Descriptive Statistics

| ID | Variable | Minimum | Maximum | Mean | SD |
|---|---|---|---|---|---|
| 1 | NoiseRating | 2.00 | 5.00 | 3.61 | 1.34 |
| 2 | BrightnessRating | 1.00 | 3.00 | 2.06 | 0.90 |
| 3 | SmellRating | 1.67 | 3.67 | 2.72 | 0.68 |
| 4 | Music | 1.00 | 1.00 | 1.00 | 0.00 |
| 5 | TV | 0.00 | 0.67 | 0.45 | 0.35 |
| 6 | MenuPictures | 0.67 | 1.00 | 0.95 | 0.13 |
| 7 | WallClutter | 0.33 | 1.00 | 0.67 | 0.21 |
| 8 | Space | 0.33 | 1.00 | 0.67 | 0.30 |
| 9 | Crowded | 0.00 | 1.00 | 0.28 | 0.39 |
| 10 | MovingFurniture | 0.00 | 0.33 | 0.11 | 0.17 |
| 11 | Bathroom | 0.00 | 0.50 | 0.30 | 0.16 |
| 12 | DifficultWalk | 0.00 | 1.00 | 0.28 | 0.39 |
| 13 | Service | 1.00 | 1.67 | 1.20 | 0.31 |
| | **Overall** | **1.67** | **4.33** | **3.06** | **0.97** |

*Note: Scale of 0-1 for Var 1-3; Scale of 1-5 for rest; lower value=more inclusive*

## CONCLUSIONS

- Noise was identified as the main barrier to participation by individuals with disabilities in our project. This is consistent with current research that hearing is the most affected sensory modality in individuals with ASD (Sans-Cervera et al., 2017)
- Lighting and smell were not issues.
- Awareness of ASD is low, despite increasing prevalence of ASD diagnoses (currently 1 in 59 U.S. children; CDC, 2018).
- No individuals who disclosed disabilities were on staff; we infer this to be due to either lack of accommodations from employers, stigma towards disclosure, lack of applications from qualified prospective employees, and/or lack of training/interventions to prepare those with disabilities to enter the job market.
- Anecdotal evidence from SABE conference attendees illustrated high support for the "Disability Friendly Guide".
- This current project illustrates the need for collaborations among researchers, self advocates and service providers to address any barriers that may keep people with disabilities from obtaining equal opportunity and the social, economic, and health benefits that society offers.

## FUTURE DIRECTIONS

- This informational project was a trial run for the future development of a more systematic survey that will be used to determine "Autism Friendly" criteria for businesses in the state of Alabama.
- This information will aid in the expansion of the 'Autism Friendly Alabama' initiative, whose objective is to increase community education and acceptance of autism and to improve the number and quality of services available to families affected by autism in their community.
- As this project develops we hope to increase community inclusion through education and foster an increased understanding and sensitivity of the needs of individuals with autism and other disabilities.

## REFERENCES

-Askari, S., Anaby, D., Bergthorson, M., Majnemer, A., Elsabbagh, M., & Zwaigenbaum, L. (2015). Participation of children and youth with autism spectrum disorder: a scoping review. *Review Journal of Autism and Developmental Disorders*, *2*(1),103-114.
-Fletcher, T. S., Parrish, J. L., & Sherman, M. L. (2018). Exploring How Live Theaters Promote Participation for Children with Special Needs. *Physical & occupational therapy in pediatrics*, *38*(2), 157-167.
-Krieger, B., Piškur, B., Schulze, C., Jakobs, U., Beurskens, A., & Moser, A. (2018). Supporting and hindering environments for participation of adolescents diagnosed with autism spectrum disorder: A scoping review. *PloS one*, *13*(8),
- Lerner, R. M., Fisher, C. B., & Weinberg, R. A. (2000). Toward a science for and of the people: Promoting civil society through the application of developmental science. *Child development*, *71*(1), 11-20.
- Piller, A., & Pfeiffer, B. (2016). The sensory environment and participation of preschool children with autism spectrum disorder. *OTJR: occupation, participation and health*, *36*(3), 103-111.
- Sanz-Cervera, P., Pastor-Cerezuela, G., González-Sala, F., (2017). Sensory Processing in Children with Autism Spectrum Disorder and/or Attention Deficit Hyperactivity Disorder in the Home and Classroom Contexts. *Frontiers in psychology*, *8*, 1772.
-Silverman, F., & Tyszka, A. C. (2017). Supporting Participation for Children With Sensory Processing Needs and Their Families: Community-Based Action Research. *American Journal of Occupational Therapy*, *71*(4),
-Simplican, S. C., Leader, G., Kosciulek, J., & Leahy, M. (2015). Defining social inclusion of people with intellectual and developmental disabilities: An ecological model of social networks and community participation. *Research in Developmental Disabilities*, *38*, 1829.
-Wright, C. A., Wright, S. D., Diener, M. L., & Eaton, J. (2014). Autism spectrum disorder and the applied collaborative approach: A review of community based participatory research and participatory action research. *Journal of Autism*, *1*(1), 1.

**Acknowledgements**: *This research is supported in part by grants from Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCH) Leadership Education in Neurodevelopmental and Related Disabilities (LEND) and the Autism CARES Act, and the Autism Society of Alabama. The content is solely the responsibility of the authors and does not necessarily represent the official views of the sponsors. None of the authors have a financial conflict of interest. All questions should be addressed to Caro C. Wolfner at cwolfner@uab.edu.*

uab.edu