

National Science Fund
Award #2005901

*Building Capacity for
Inclusive Learning
Opportunities for
People with Autism
Spectrum Disorder*

National Inventory Analysis & Findings

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Presentation Agenda

- Project background
- Definition of inclusion
- Research plan
- Methods
- Analysis plan
- Description of sample
- Discussion of results
- Conclusions
- Limitations
- Audience Q&A

Project Background

In support of NSF Award #2005901 *Building Capacity for Inclusive Learning Opportunities for People with Autism Spectrum Disorder*.

The National Inventory explored how to collect information from a subset of websites about the ways museums currently serve the ASD community.

Findings from this database will contribute to future phases of the project and inform partnering museum organizations of current practices.

Inclusion as defined by the project and used in this study is:

The process and practice of improving the terms for individuals and groups to participate in educational, economic, social, political, and cultural life.

Provides individuals and groups at a disadvantage the access, opportunity, and resources needed to participate fully to have a standard of living that is considered a norm for the society, community, or institution in which they are contacting.

Inclusion continues to evolve within our local and global community and is not a destination.

Organizational Research Purpose

Designed to capture information about available museum offerings that promote environments and experiences of inclusion.

The purpose of this study is to understand how museums currently serve individuals with autism spectrum disorders and act as a resource for community programmers.

Research Questions

What general admission accommodations do museums offer the ASD community?

What specific accommodations related to programs, events, or exhibits do museums offer the ASD community?

How are inclusive practices communicated on museum websites?

Instrument

Instrument Questions

1. What category best describes the museum offering?
 - a. General Admission
 - b. Event
 - c. Exhibition
 - d. Program
 - e. Camp
 - f. Other
2. What is the offering's name or title?
3. What are the main goals or themes of the offering? What experiences does the museum hope to create for the target audience of this offering?
4. What are the logistical details of the offering? How often is this offering available? Who (museum volunteers/staff/community partners) is involved in the operations of the offering?
5. Which inclusion categories are represented on the museum's website for this offering?
 - a. Social Access
 - b. Physical Access
 - c. Sensory Guide
 - d. Audience Inclusive Language
 - e. Professional Development
6. Who is the target audience of the offering?
(ex: Families, Individuals with disabilities, Everyone, Children")

Inventory

Offering Type	Offering Name	Offering Description	Offering Logistics	Inclusion Type	Inclusion Categories	Target Audience	Audience Description
General Admission	Sensory Packets	For visitors with sensory sensitivities, packets are provided by the Autism Society of Alabama.	Available upon request at both museum entrances, sensory packets include ear plugs, sunglasses, and fidgets.	Separate	Physical Access	Visitors with Sensory Sensitivities	Visitors with Sensory Sensitivities
General Admission	Tips for Visiting	Dedicated page on website for visitors to review prior to their visit, sets expectations for how to make the best of the experience and help keep artworks safe.	List of behavioral expectations such as "look, don't touch;" "take lots of pictures," "use pencils in the galleries," "eat food in certain areas." Suggested activities and accommodations for when visiting with kids, restroom locations, and information on strollers and wheelchairs.	Organization-Wide	Visitor Guide	All prospective visitors	All individuals who are planning a visit to the museum, regardless of their visiting group or needs.
Event	Sensory Sunday	Celebration of year-long partnership with KultureCity to better serve visitors with sensory sensitivities.	One-time, day-long event with IMAX screenings at 75% volume, a variety of workshops (design challenge, science), animal encounter, and slime demonstration station.	Integrated	Physical Access	Visitors with and without sensory processing needs	Visitors with and without sensory processing needs
General Admission	Re-entry into museum	Guests are welcome to leave the museum and re-enter for any reason within the same day of their visit.	All guests who wish to re-enter must have their hands stamped by a Guest Services or Retail Store Associate on their way out. Upon re-entry, guests must show both their original tickets and hand stamps at the entry station.	Organization-Wide	Physical Access	All visitors	All visitors who wish to leave the museum and return during the same day.
General Admission	Visitor Story Guides	Visitor story guides help visitors familiarize themselves with what to expect during a museum visit.	There are general public, school field trip, and sensory-friendly and access morning story guides. Guides are available on a first-come, first served basis from the front desk. Guides are also available to print at home on standard 8.5x11" paper.	Organization-Wide	Visitor Guide, Audience Inclusive Language	All visitors	General admission visitors, visitors on a museum field trip, and visitors who attend the Sensory-Friendly Access Morning program.

Qualifying Conditions

Must have contained information on at least a single offering or accommodation that serves the ASD community by:

- Employing audience-inclusive language,
- Enhancing physical or social access,
- Sharing visitor guides or tips that prepare individuals for museum experiences,
- And/or training staff and volunteers in inclusive best practices.

Analysis Plan

Qualitative and quantitative data from all sites was combined and analyzed holistically.

Values for each response to instrument questions were assigned then analyzed according to frequency. As each response could represent multiple codes, percentages reflected in the findings do not accumulate to equal 100%.

Cross-analysis between emergent coding and existing frameworks sought to address and elaborate on the project's expansive definition of inclusion.

Analysis also determined each museum offering's range of inclusion: separate autism-friendly, integrated autism-friendly, and organization-wide.

Project Inclusion Model

Separate Autism-Friendly		Integrated Autism-Friendly		Organization-Wide	
Inclusion Range Description		Inclusion Range Description		Inclusion Range Description	
General admission or program accommodations that are specifically designed for visitors with ASD and/or sensory processing needs. Language exclusively targets individuals and families with autism spectrum disorders or sensory processing needs. Language is not inclusive of other/compounding disabilities or visitors without ASD who may benefit from the same offerings.		General admission or program accommodations for individuals with ASD are available during typical operating hours and especially invite participants with disabilities and/or special needs such as Autism Spectrum Disorders to take advantage of the offering, but individuals without special needs are also welcome. Interaction between visitors of differing abilities and needs might be expected to happen in these shared spaces.		General admission and program accommodations are embedded into the work culture, curatorial design, and visitor experiences of the museum. All visitors (with or without disabilities) are actively encouraged to participate and utilize accommodations as needed during their visit. Language describing the offering's target audience refers to "all" or "any visitor" or does not specify any characteristics or level of ability.	
Inclusion Range Purpose		Inclusion Range Purpose		Inclusion Range Purpose	
Aims to reduce feelings of self-consciousness and isolation while building community.		Aims to empower visitors with ASD to navigate museum experiences by familiarizing them with regular operations.		Aims to communicate that all visitors are welcome to utilize any/all accommodations such that they experience the museum with confidence and comfort.	
Adaptive Strategies & Questions to Foster Inclusion		Adaptive Strategies & Questions to Foster Inclusion		Adaptive Strategies & Questions to Foster Inclusion	
	<p>Ex: Play Your Way program; Children's Discovery Museum of San Jose; San Jose, CA</p> <p>Target Audience: For children ages 2-15 years on the autism spectrum.</p> <p>Website Description: An evening event for relaxing and enjoying activities that encourage hands-on learning, where staff is prepared to ensure a successful experience, and families can connect with others while learning about local resources.</p>		<p>Ex: Multi-Sensory/Snoezelen Room; Miami Children's Museum; Miami, FL</p> <p>Target Audience: All visitors, but especially children with autism, sensory processing disorders, global developmental delays and other special needs and their families.</p> <p>Website Description: With incredible visuals presented in a reduced and comfortable lighting setting, this room is a relaxing space that can help reduce agitation and anxiety, but also engage and delight the user, stimulate reactions, and encourage communication.</p>		<p>Ex: Re-entrance Policy; Cook Museum of Natural Science; Huntsville, AL</p> <p>Target Audience: All visitors</p> <p>Website Description: All guests who wish to re-enter must have their hands stamped by a Guest Services or Retail Store Associate on their way out. Upon re-entry, guests must show both their original tickets and hand stamps at the entry station.</p>

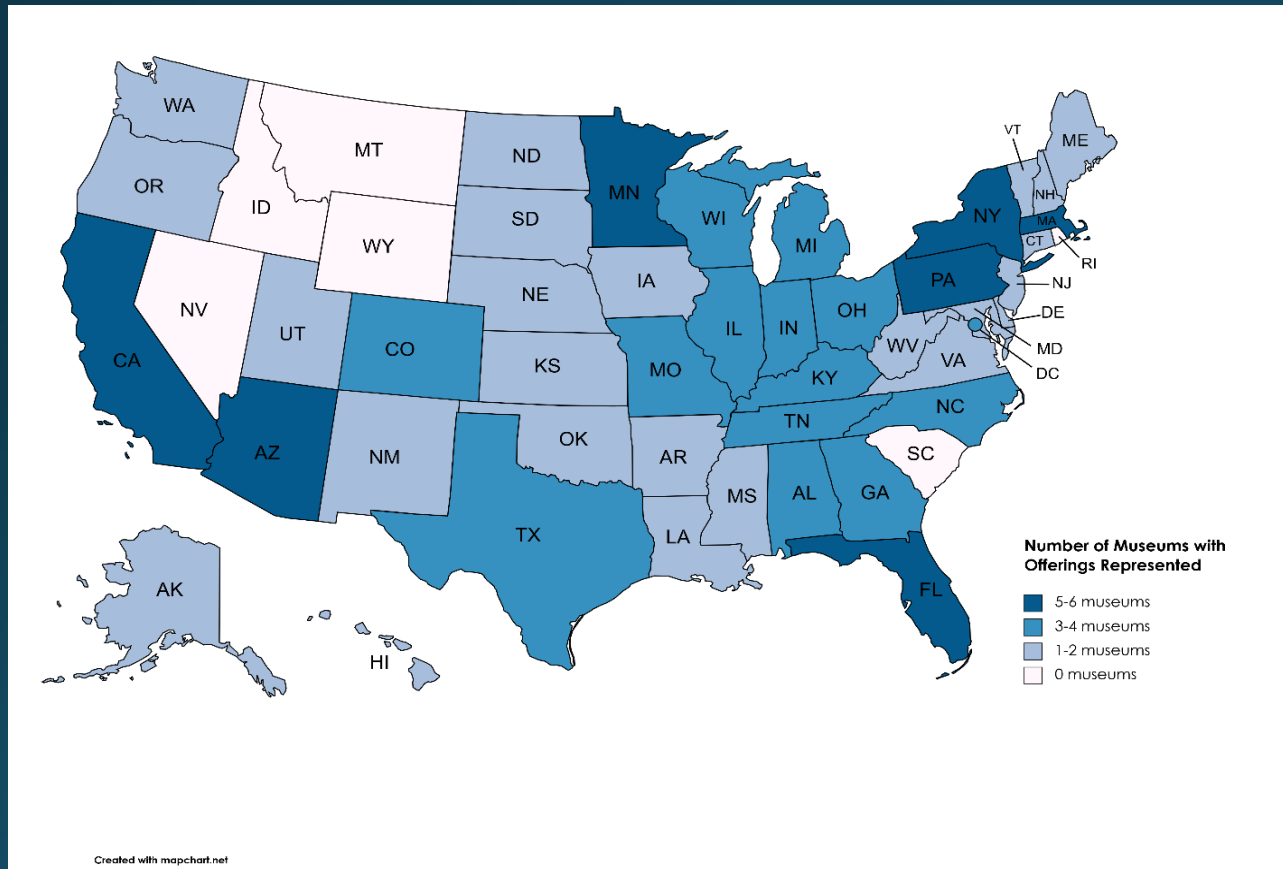
Project Inclusion Model

Audience Inclusive Language	Question(s) to consider: What benefits do you afford visitors by targeting only people with autism or sensory processing needs? Does current museum language respectfully and accurately describe the target audience?	Audience Inclusive Language	Question(s) to consider: What benefits do you afford visitors with or without ASD by offering this accommodation to their communities simultaneously? Does current museum language respectfully and accurately describe the target audiences?	Audience Inclusive Language	Question(s) to consider: What benefits do you afford visitors of all abilities and backgrounds by offering this accommodation to everyone simultaneously? Does current museum language respectfully and accurately describe the target audience? Are there ample museum supplies for this accommodation to support its availability to all visitors?
	Question(s) to consider: Are there instances when visitors with or without ASD or special needs can benefit from this accommodation or its components simultaneously or together?		Question(s) to consider: Are there instances when visitors with ASD can benefit from this accommodation or its components separately from visitors without ASD? Are there relevant benefits to spaces or times for people with ASD to exclusively participate with this accommodation?		Question(s) to consider: Are there instances when visitors with ASD can benefit from this accommodation or its components separately from visitors without ASD? Are there relevant benefits to adjusting this accommodation to better suit the needs of the ASD community specifically?
	Question(s) to consider: Are there benefits to making this accommodation available to all visitors during regular operating hours? What inclusive language can best describe the target audience of this accommodation?		Question(s) to consider: Are there relevant benefits to specifying the abilities and/or needs of target audiences for this accommodation? Are there instances when visitors of all abilities and backgrounds could benefit from this accommodation?		Question(s) to consider: Are there relevant benefits to adjusting this accommodation to better suit the needs of the ASD community while also being available to visitors without ASD? Are there instances when visitors with or without ASD can benefit from this accommodation or its components together during regular operating hours?

Description of Sample

Out of 268 museums of interest, researchers completed document analysis for 122 museums.

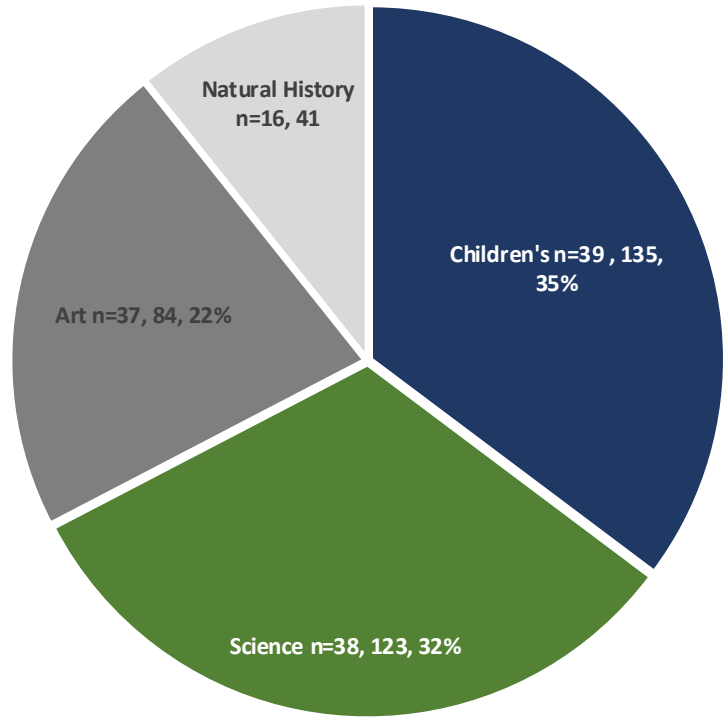
Children's, science, and art museums are equally represented in the study. n=122



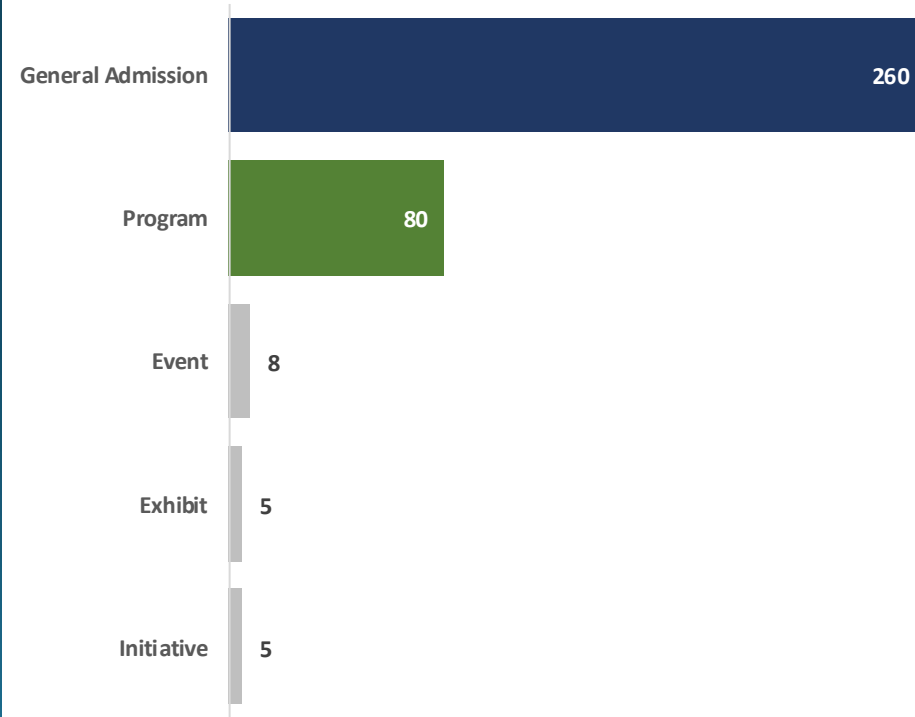
Children's	39	32%
Science	38	31%
Art	37	30%
Natural History	16	13%
Mixed	8	7%

Description of Sample

Children's and science museum websites detailed the most offerings available for the ASD community. n=358

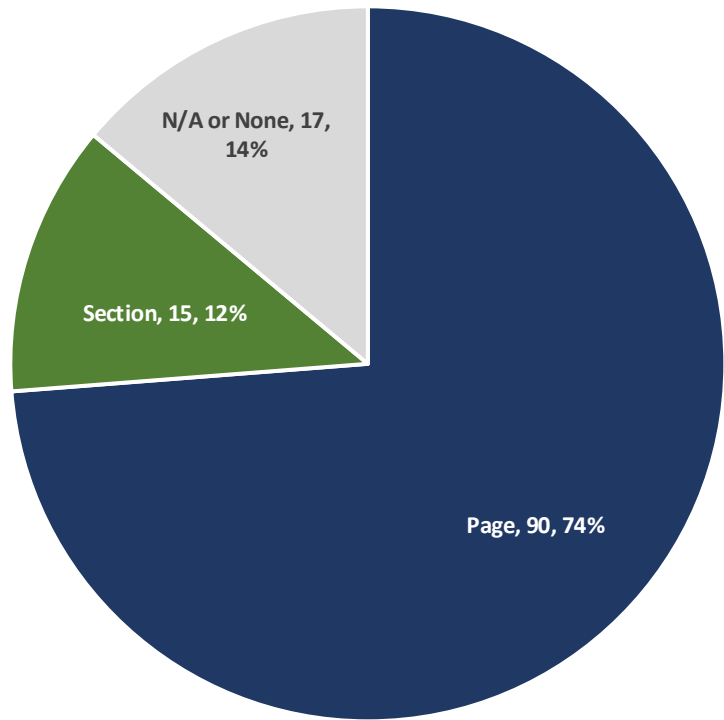


Most offerings available to the ASD community are general admission accommodations. n=358



Description of Sample

Most museums have a page or section dedicated to accessibility and/or inclusion on their websites. n=122

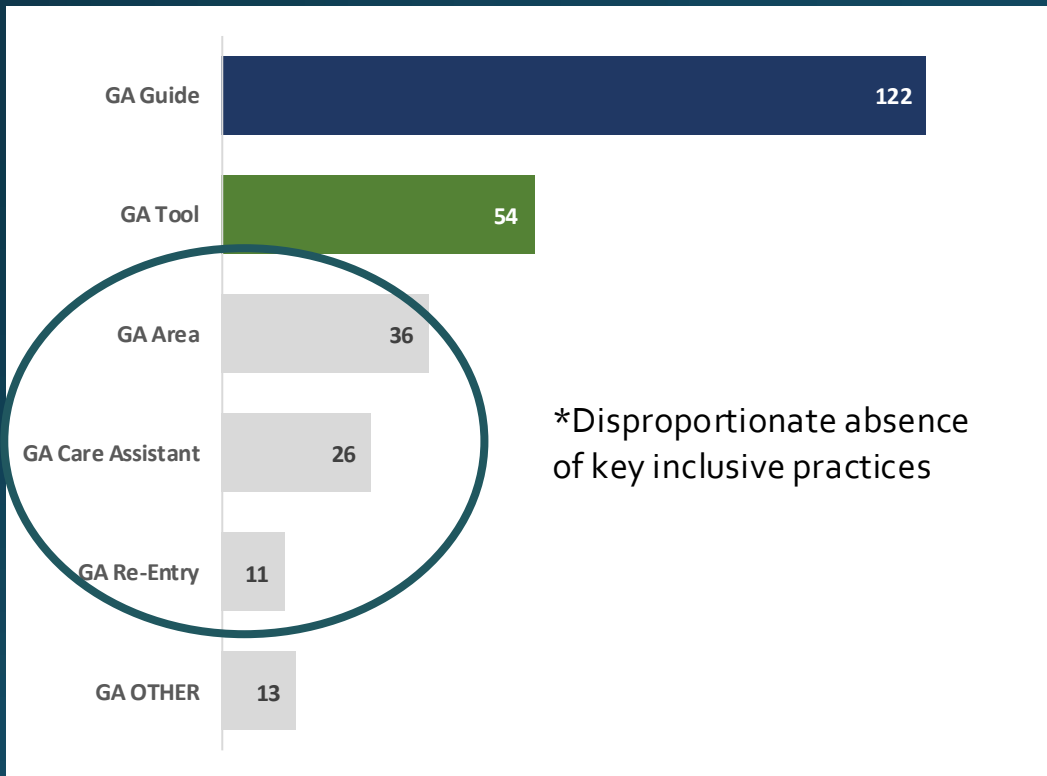


Most museums of all types have a specific page on their website dedicated to accessibility and/or inclusion information. n=122

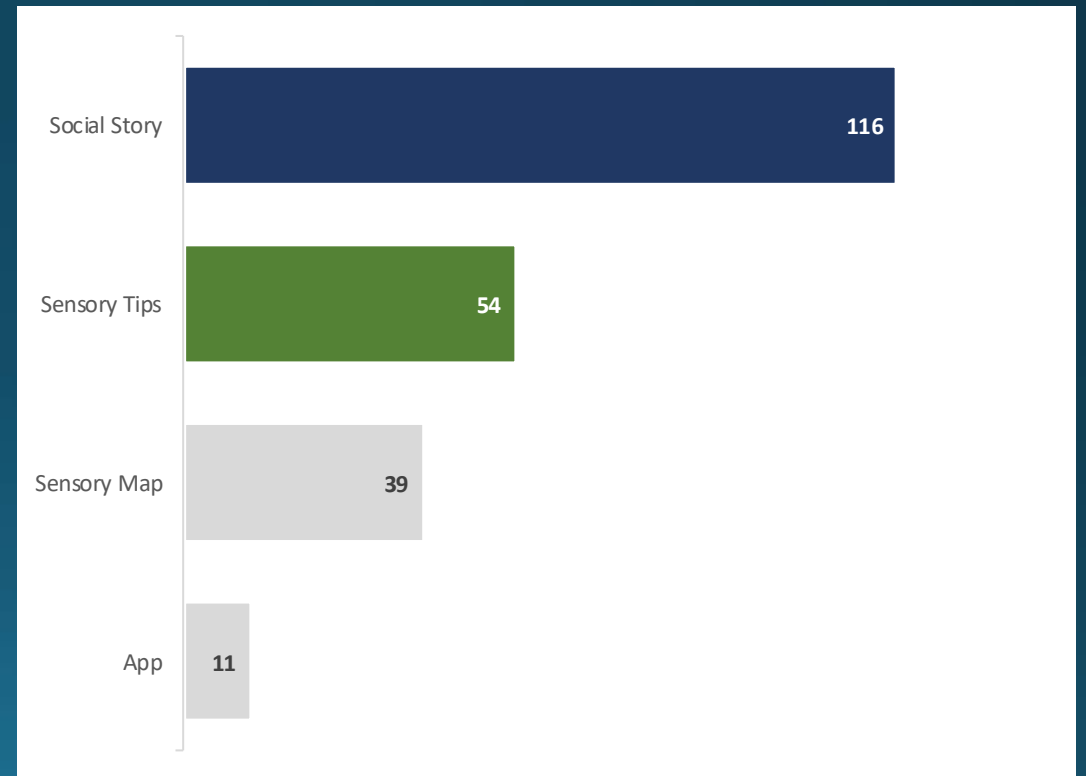
	Page	Section	N/A or None
Art n=37	68%	3%	8%
Science n=38	53%	16%	5%
Children's n=39	38%	5%	10%
Natural History n=16	50%	13%	31%

RQ1. What general admission (GA) accommodations do museums offer the ASD community?

Guides and visitor tips are the most offered general admission accommodations for the ASD community. n=260

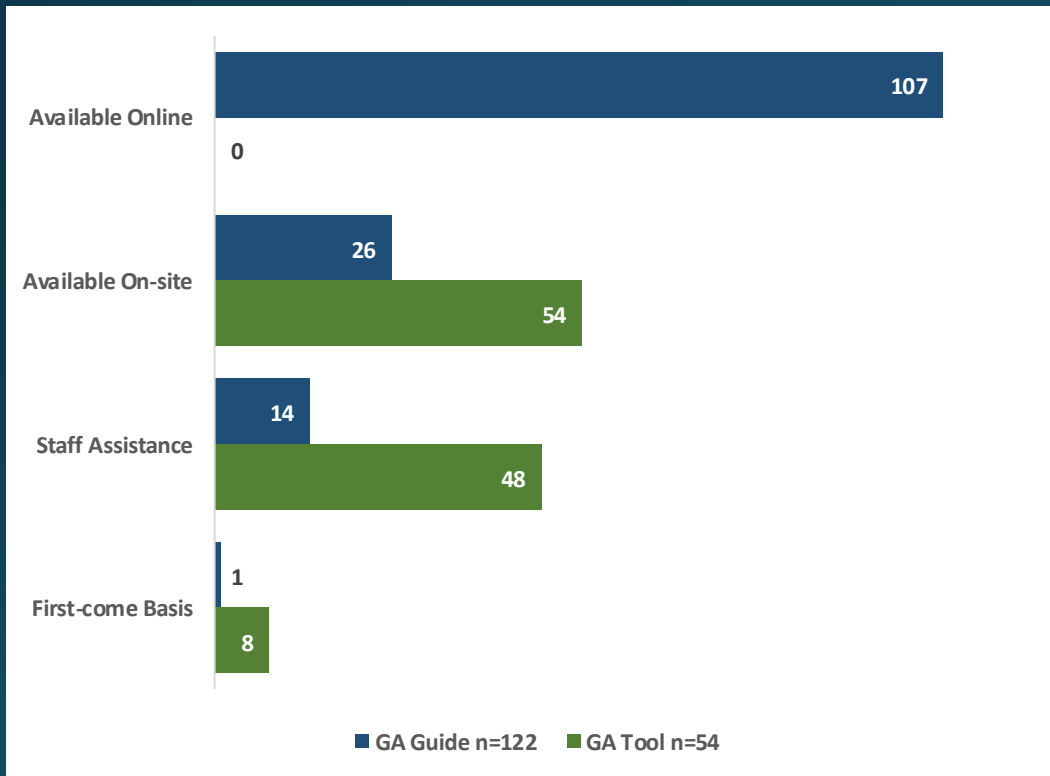


Most pre-visit materials are social stories and tips related to navigating sensory experiences while visiting museums n=145

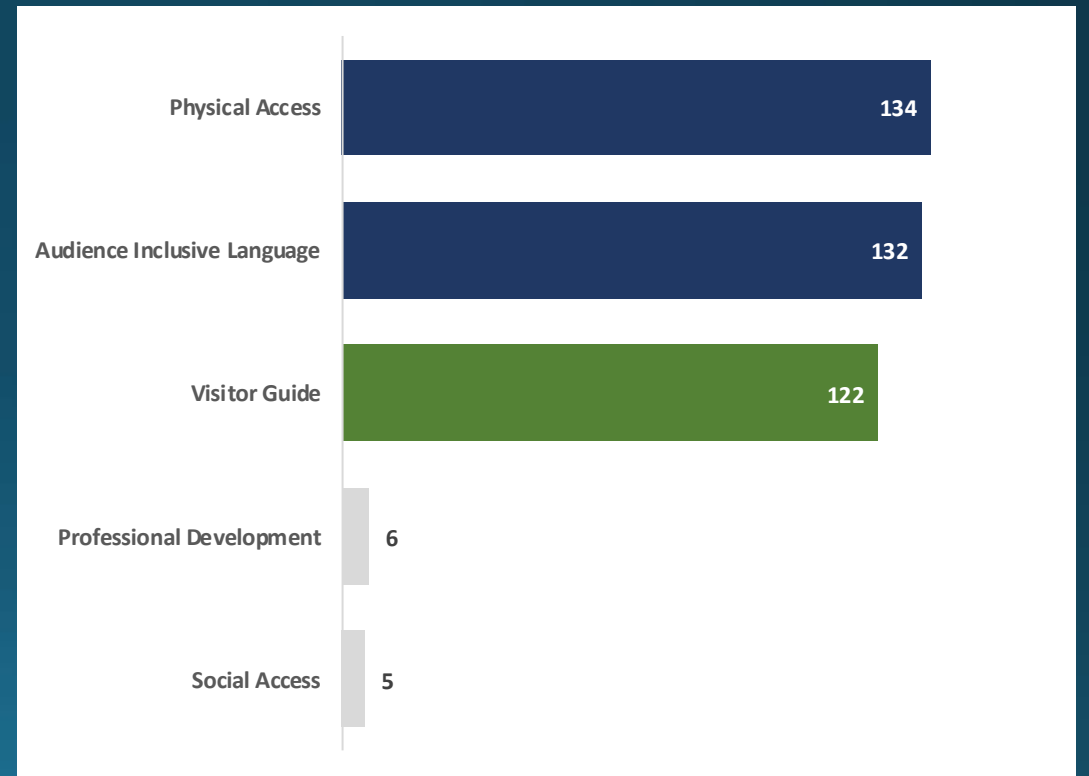


RQ1. What general admission (GA) accommodations do museums offer the ASD community?

Most GA guides are available online whereas most GA tools are available on-site alongside staff assistance. n=260



Most website descriptions of GA offerings contain information about physical access, employ audience inclusive language, and share visitor guides. n=260

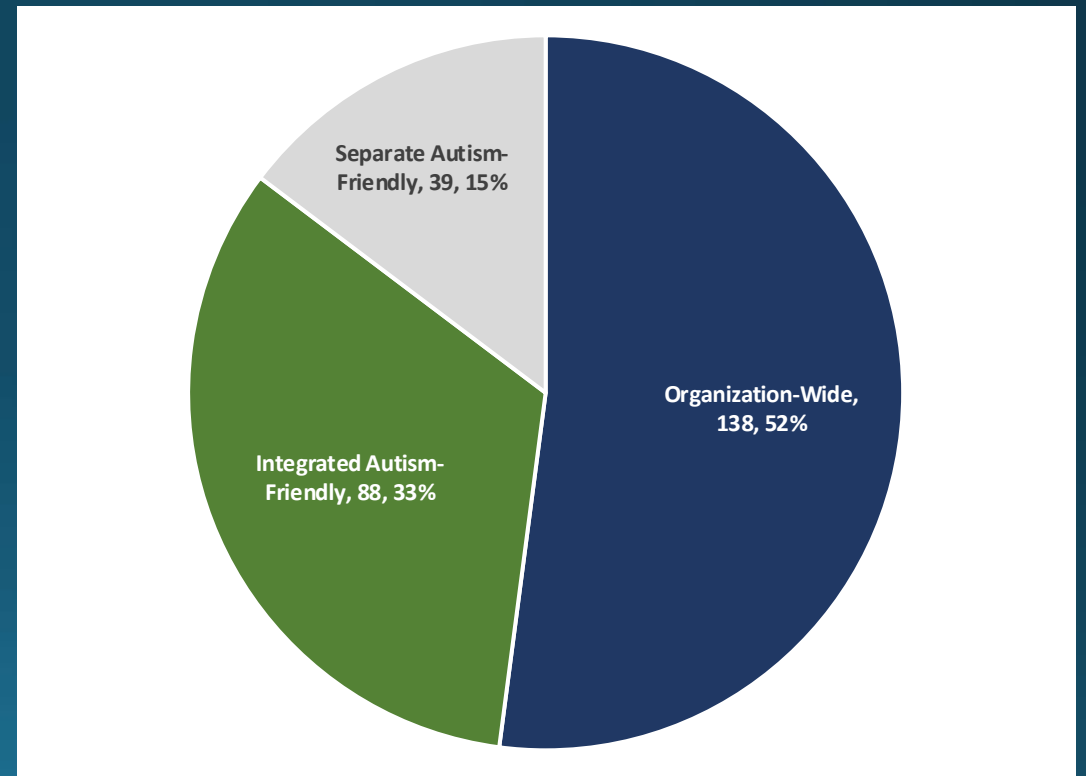


RQ1. What general admission (GA) accommodations do museums offer the ASD community?

Cross-analysis for range of inclusion found that GA offerings predominantly exhibit:

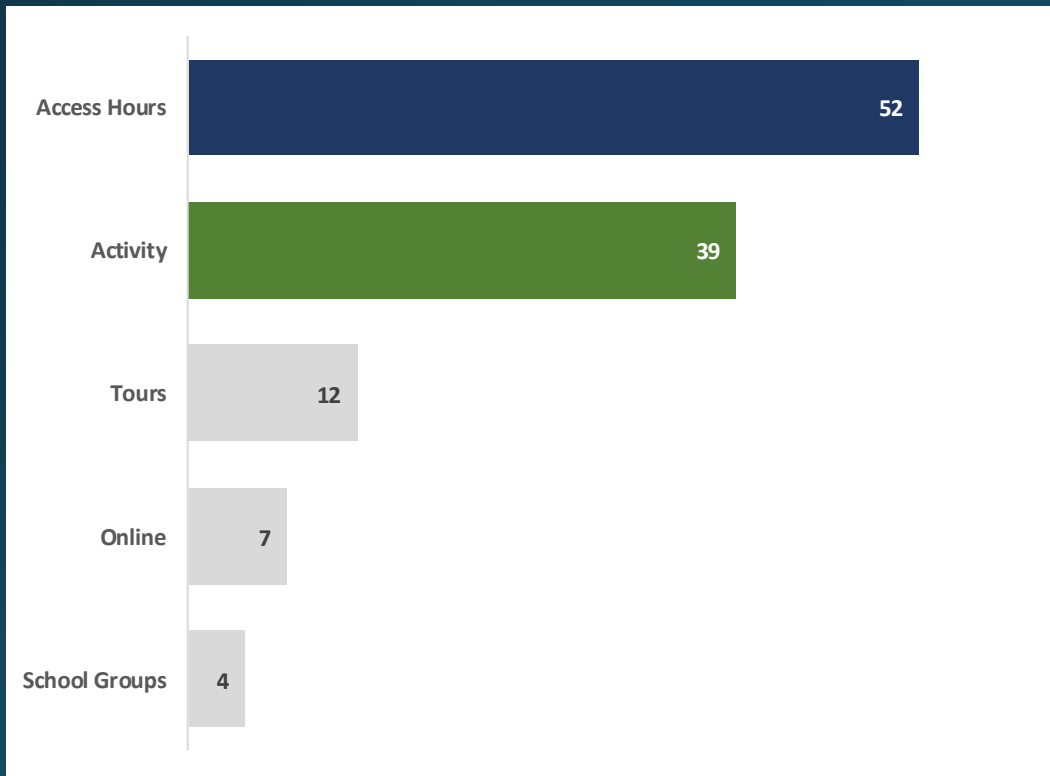
- Organization-wide (53%) and integrated autism-friendly (34%) types of inclusion.
- GA offerings are not typically described as separate autism-friendly (15%).
- These findings suggest that most GA offerings are available to serve people visitors with or without special needs, including those with autism spectrum disorders.

Most website descriptions indicate GA offerings demonstrate organization-wide inclusion. n=260



RQ2. What specific accommodations related to programs, events, or exhibits do museums offer the ASD community?

Most programs and events offer specific access hours and activities for the ASD community. n=88

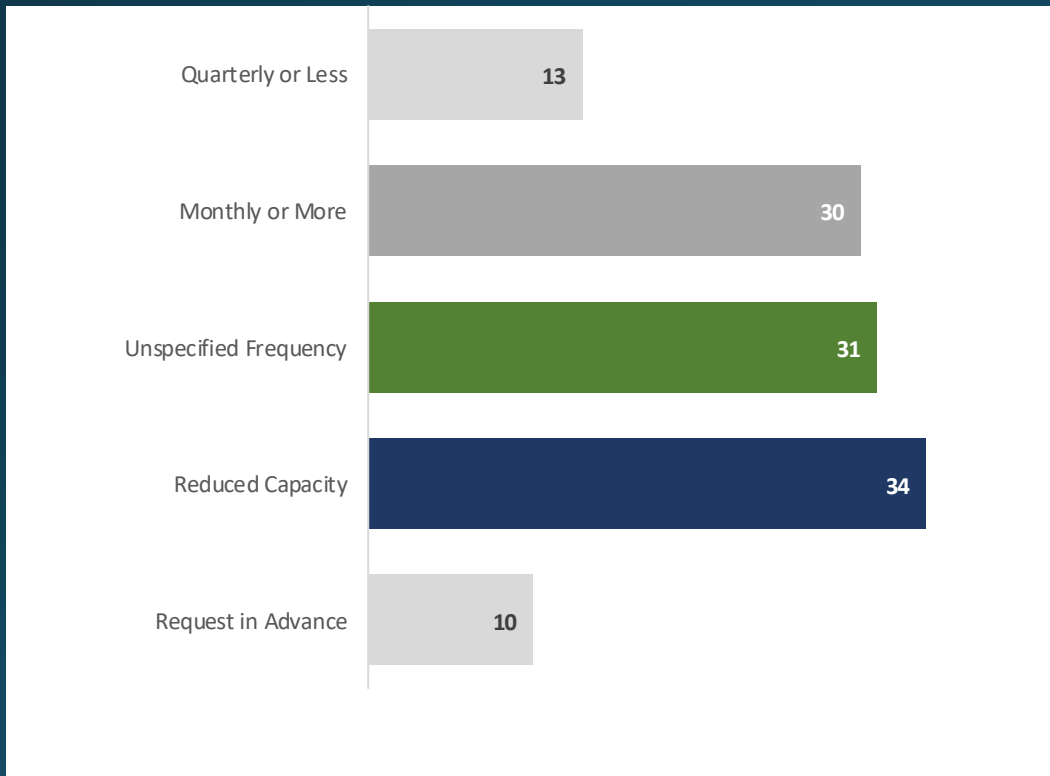


When program and event accommodations are offered, most operate with limited or reduced admission capacity. n=88

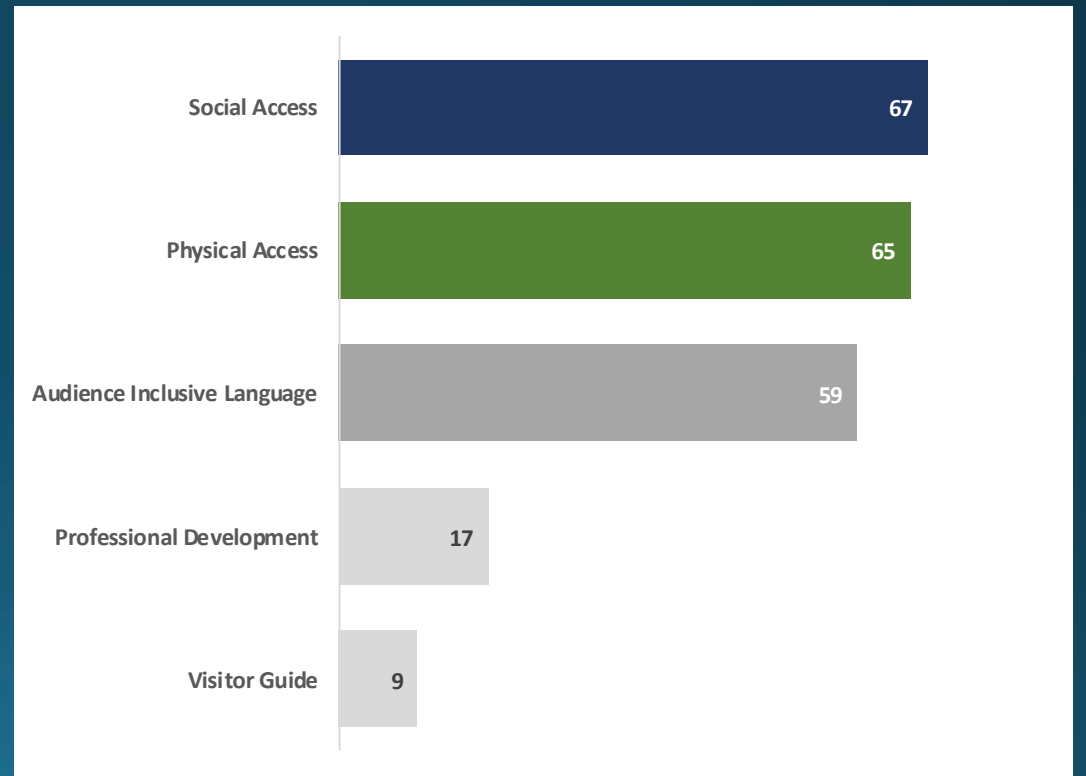
	Access Hours n=44	Activity n=32	Tours n=12	Online n=7
Quarterly or Less	13	9	0	0
Monthly or More	19	13	1	5
Unspecified Frequency	20	16	2	1
Reduced Admission	32	10	0	0
Request in Advance	0	0	8	1

RQ2. What specific accommodations related to programs, events, or exhibits do museums offer the ASD community?

Programs and events that offer access hours are almost equally likely to be held at least monthly (43%) or an unspecified frequency (45%). n=88



Most website descriptions of program offerings contain information about social and physical access. n=80

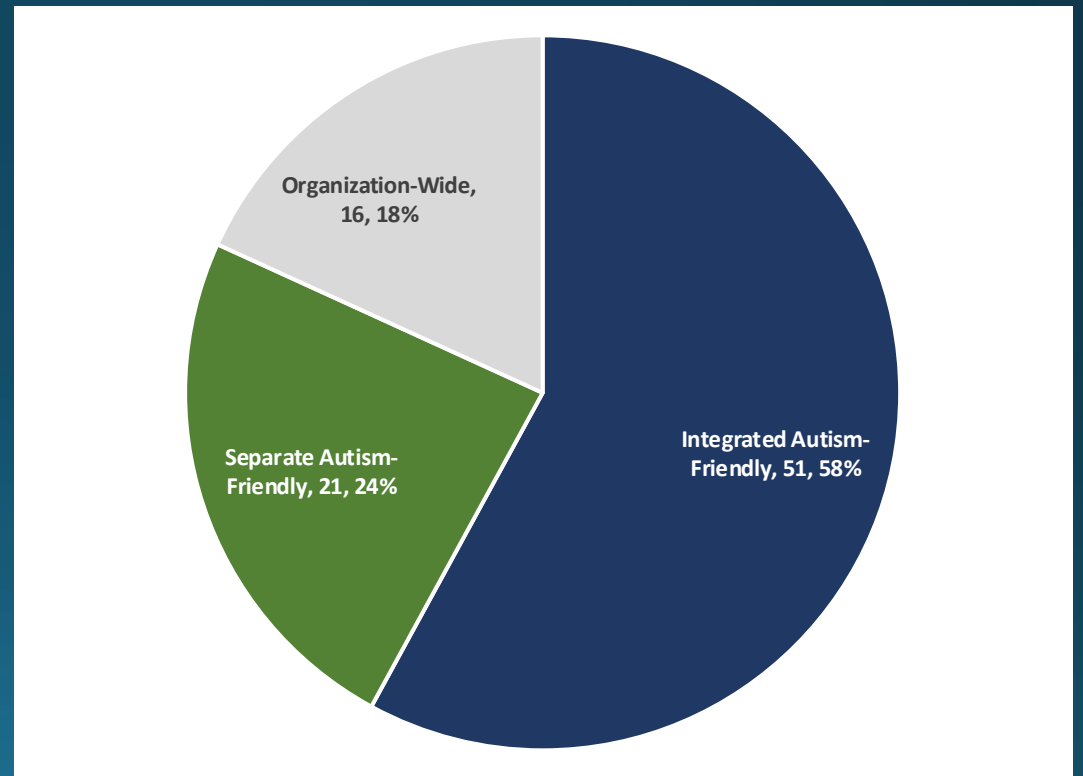


RQ2. What specific accommodations related to programs, events, or exhibits do museums offer the ASD community?

Cross-analysis for range of inclusion found that program and event offerings predominantly exhibit:

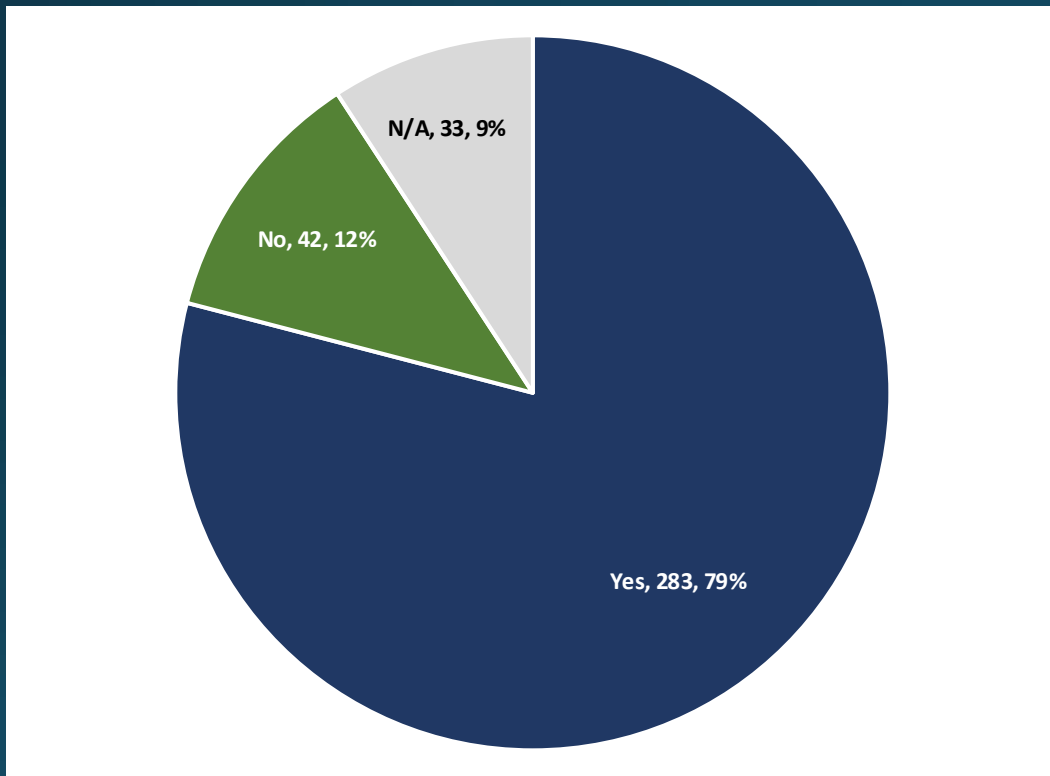
- Integrated autism-friendly types of inclusion (58%).
- Programmatic offerings are less likely to demonstrate both separate autism-friendly (24%) and organization-wide ranges of inclusion (18%).
- These findings suggest that most program and event offerings are available to especially serve people with autism spectrum disorders in ways that also invite others with or without special needs.

Most website descriptions indicate program and event offerings demonstrate integrated autism-friendly inclusion. n=88



RQ3. How are inclusive practices communicated on museum websites?

Most descriptions of inclusive offerings are found on accessibility pages or sections of museum websites. n=358

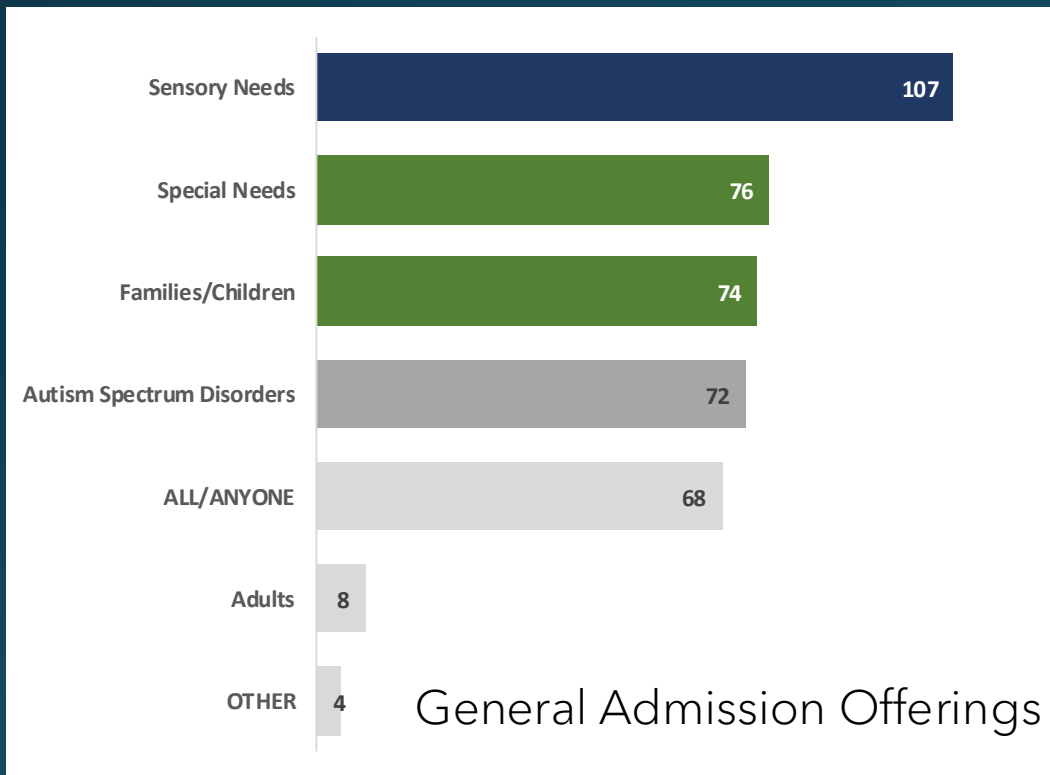


Regardless of museum type, most information about inclusive offerings is located or linked on accessibility pages or sections of websites. n=358

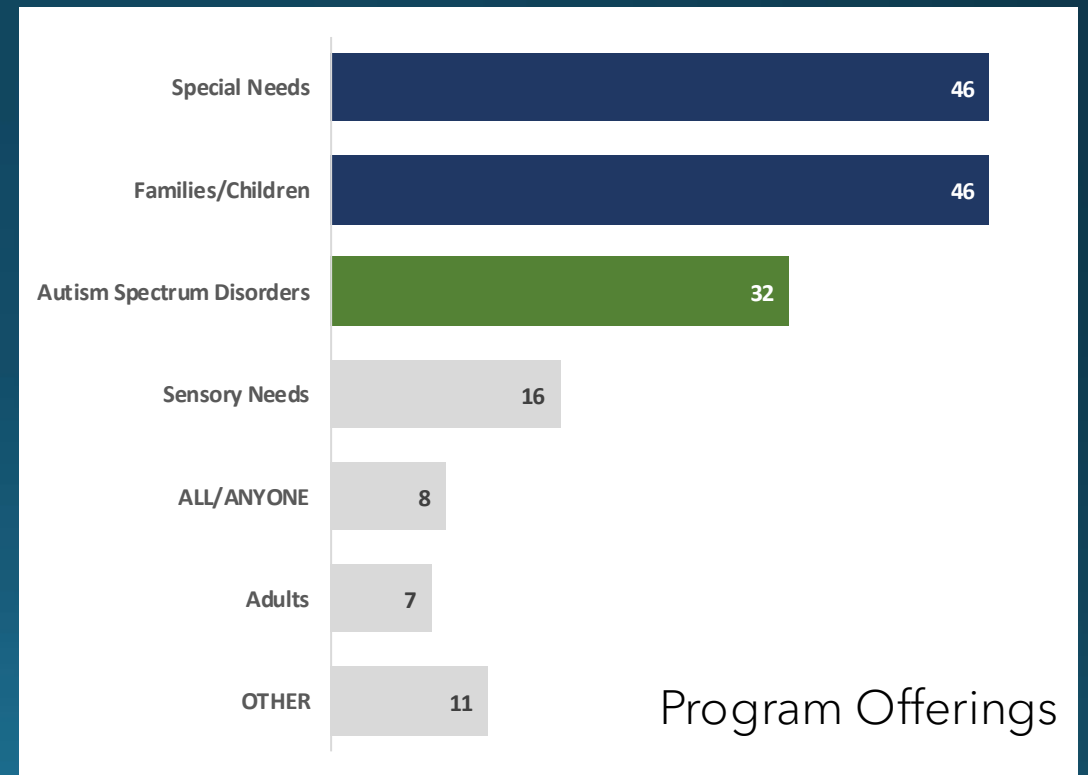
	Science n=123	Natural History n=41	Children's n=135	Art n=84
Yes	76%	88%	78%	85%
No	14%	5%	10%	11%
N/A	11%	7%	12%	5%

RQ3. How are inclusive practices communicated on museum websites?

Most target audiences for general admission accommodations are people with sensory needs. n=260



Most target audiences for program accommodations are people with special needs. n=80



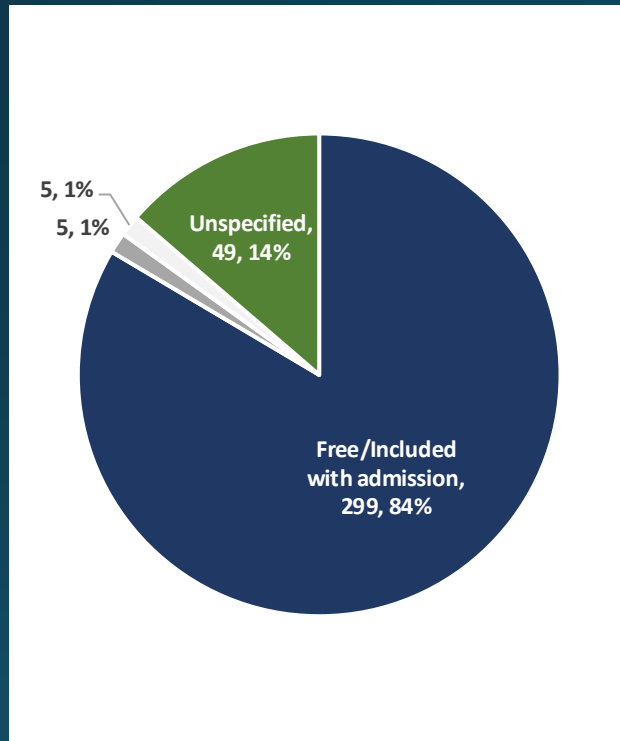
RQ3. How are inclusive practices communicated on museum websites?

Language used on museum websites to describe target audiences for inclusive offerings.

	Science n=123	Natural History n=41	Children's n=135	Art n=84
ALL/ANYONE	25%	24%	23%	14%
Autism Spectrum Disorders	38%	54%	19%	40%
Sensory Needs	40%	37%	40%	29%
Special Needs	33%	29%	27%	52%
Families/Children	19%	24%	55%	29%
Adults	2%	0%	0%	17%
OTHER	4%	2%	2%	8%

RQ3. How are inclusive practices communicated on museum websites?

Most inclusive offerings are available to target audiences at no cost or are considered complimentary with paid admission. n=358



	GA Guide n=122	GA Tool n=54	Access Hours n=52	Activity n=39	Tours n=12
Free or w/ Admission n=299	122	50	35	23	5
\$10 or less n=5	0	0	3	2	1
More than \$10 n=5	0	0	4	2	1
Unspecified n=49	0	4	10	14	6
Other n=6	0	0	5	1	0

RQ3. How are inclusive practices communicated on museum websites?

Availability of program offerings were more likely to have been affected by the COVID-19 pandemic.

	GA Guide n=122	GA Tool n=54	GA Area n=36	Access Hours n=52	Activity n=39	Tours n=12
Temporarily Closed n=61	19%	15%	14%	23%	18%	17%
Canceled or On Hold n=18	0%	2%	0%	19%	23%	0%
Limited Capacity n=67	17%	24%	14%	12%	15%	25%
Ticket Reservations n=135	20%	61%	64%	31%	18%	42%
N/A or No Change n=117	55%	19%	17%	19%	28%	33%
Other n=15	3%	4%	6%	0%	3%	0%



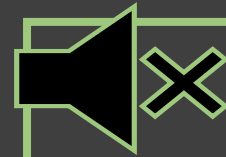
46%

Of GA offerings found were various types of visitor guide such as social stories, sensory guides, or maps.



20%

Of GA offerings in the sample were sensory tools such as weighted blankets, headphones, and fidget toys.



14%

Of GA offerings are dedicated spaces like quiet or sensory friendly rooms.

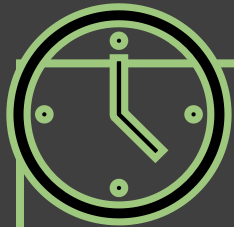


52%

Of GA offerings exemplified a form of physical access and 51% used audience-inclusive language.

Conclusions

RQ1. What general admission accommodations do museums offer the ASD community?



65%

Of program and event offerings are specific hours when museums are more accessible spaces.



49%

Of program and event offerings include additional activities such as live demonstrations and hands-on exploring.



39%

Of program and event offerings describe sharing an accompanying social story.



87%

Of program offerings enhance social access for people with ASD, with 81% enhancing physical access.

Conclusions

RQ2. What specific accommodations related to programs, events, or exhibits do museums offer the ASD community?



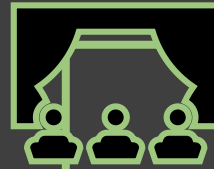
79%

Of offerings had their information listed on accessibility pages or sections of museum websites.



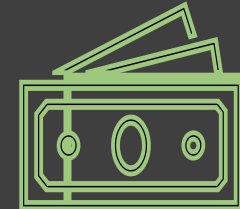
36%

Of all offerings describe their target audiences as having sensory needs and families with children.



40%

Of program offerings specify their audiences as having autism, 58% target those with special needs.



84%

Of offerings are described as free or included with admission.

Conclusions

RQ3. How are inclusive practices communicated on museum websites?

Limitations of Study

This research yields preliminary insight across the museum field regarding inclusive practices offered to the ASD community.

Researchers focused on museums in the largest metropolitan areas of each state as representatives of leading institutions in the nation.

Although scope allowed for eight institutions to represent each state, not every metropolitan area contained the variety of museums of interest to the study.

The small sample size of this study limited the depth of data analysis conducted.

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Thank you.
Are there any
questions?