
Museums and Autistic Visitors: Accessibility and Inclusion

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Abstract: Museums are destinations that are made for all sectors of the society, and as a social entity they undergo evolution as time passes by. With their growing social image, functions and scope, museums are becoming rather diverse, inclusive and accessible for all segments of the society. Autistic visitors are considered to be one among the most marginalised groups when visiting museums. And so, they deserve to be given appropriate attention from the museum community. Autism is a neurodevelopmental disorder that leads to hindered physical and mental growth, reduced communication abilities, and social interaction and behavior are primarily affected. The purpose of this article is to discuss the importance and need of creating museums, that are socio-cultural spaces accessible to marginalised visitors, focusing on those with the autistic spectrum disorder. This paper discusses the role museums can play in providing opportunities to autistic visitors while making them feel included and accepted in the museum setting. To do so, this article elaborates upon some commonly used techniques for autistic visitors, such as art therapy, art-making activities, enactments like ventriloquism and hands-on sessions. The author's first-hand experiences gained by participating in ventriloquism and 'touch and feel' sessions are also discussed thereon.

Keywords: Museum, Social Institution, Autism Spectrum Disorder, Autistic Visitor, Marginalized Visitors, Art Therapy, ventriloquism

Introduction

Museums are extraordinary spaces wherein visitors can have a variety of experiences (Hein 1999). These socio-cultural spaces can impart knowledge about a range of different topics, that can include but are not limited to, history, culture, geography, science, movements that are deemed important in various contexts, and many others. For the commoner, the prime function of a museum is usually to preserve and display artefacts that are of archaeological and historical interest. However, most would also agree that museums have an impactful role in the society, one that is indeed worthwhile (Talboys 2005). Children on the other hand, seem to view museums as sites that are meant for exposition, and consider museums as repositories for preserving

valuable and/or antique objects of the past (Jeffers 2003). All these different viewpoints are seen to collectively reflect in, and shape, the preservation, exhibition and collection missions of various museums.

Museums, as Spalding (2002) calls it, are “living institutions” that are constantly changing, and are regularly revisiting their purposes. Weil (1990) states that museums are no longer measured, only by internal possessions such as collections, endowments, staff and facilities, but rather, are measured by ‘an external consideration of the benefits they provide to the individuals and communities they seek to serve’. Luke (2002) opines that, “Museums possess the power to shape collective values and social understandings in a decisively important fashion”. In the present day, the educational role of museums is of high priority, and the emphasis on education and learning varies from one country to another (Moffat 1996; Stoger and Stannett 2001) while offering service to society as lifelong learning spaces. All segments of the society, irrespective of their caste, creed, age, physical and/or mental challenges, minority and/or marginalization, can benefit from museums.

Of late, museums have become visitor-centered and scholars alike Tazi et.al. (2015) refer to the need of museums becoming more accessible to diverse audiences. This would in turn, promote learning, personal empowerment and social inclusion in all audiences. While museums are evolving as spaces meant for informal learning and enjoyment, considering the ‘inclusiveness’ dimension is momentous. As per the United Nations Economic Commission for Asia and the Pacific (ESCAP) report (2016), 15 percent of the total population of Asia and the Pacific include those who are disabled. This group of people stands as one of the most marginalised segments of the society. Moreover, marginalization of this minority group is seen across professional, educational, social, cultural and institutional sectors.

The World Health Organization (WHO 2011) states that, “disability is a part of the human condition” and temporary or permanent impairment will be faced by almost everyone at some point in life. While addressing the barriers that obstruct the inclusion of persons with disabilities in the social spectrum, it is essential to address issues such as, how can the disabled be catered for? And, are their needs and rights met? To promote the development of disability-inclusiveness, provisions such as the Convention on the Rights of Persons with Disabilities (CRPD) - a disability specific human rights treaty exists. Article 9 (on accessibility) of the CRPD, mandates state parties to take appropriate measures in order to ensure accessibility in the physical environment, transportation, information, communications and services (Agenda 2011).

A general comment of the committee on the Rights of persons with disabilities on Article 9, outlines issues and recommendations to improve accessibility needs that are to be considered by the state parties. They also call for accessibility to “be viewed as a disability specific reaffirmation of the social aspect of the right of access” in all aspects

of society and the sustainable agenda. The 2030 Agenda for Sustainable Development, refers to 17 universal Sustainable Development Goals which will aim to set the world on a sustainable and resilient path, including inclusion of all sectors of the world's population. "No one left behind", is an imperative that underscores the urgent global need to share the fruits of development equitably among all segments of the society, including those with disabilities. Member states are tasked to make educational facilities available, in order to improve accessibility of cities, public spaces and public transportation, which would in turn, lead to enhanced access to information for all. Here comes the role of museums as cultural institutions; it is to enable inclusive, social development of all those who visit, and to give due emphasis in facilitating services provided, especially, for the disabled. Thereby, museums being social organisations that work in service of the society, will be able to justify their role in the development of society, and those who constitute it.

Moving on, a small sub-sector of the group of people who have disabilities, are those who have the autistic spectrum disorder. Discussion on the inclusion of individuals with autism spectrum disorder in museum settings is scarce. So, the purpose of this article is to discuss, in connection with cultural sectors and museums, the importance, and need of, creating museums that are spaces which are accessible to those with disabilities, especially, those with autism spectrum disorder.

What is the Autism Spectrum Disorder (ASD)?

Even though scientists had identified the Autism Spectrum Disorder over sixty years ago, the everyday layperson had an inaccurate understanding of the same and majority of the people have started knowing about it only recently. Autism is largely misunderstood till date and therefore, people with autistic spectrum disorder and their families too, still feel marginalised. There are a significant number of people with autism spectrum disorder and so, taking measures for improving their lifestyles is highly imperative. So, what exactly is autism spectrum disorder? What are its indicators and symptoms? And, how do we interact with people who have ASD?

Autism is a neurodevelopmental disorder, which impairs the development of social and communication skills in an individual. It is a disorder that lasts for a lifetime. Autism spectrum disorder is a group of autistic disorders that includes Autism, mostly referred to as Autistic Disorder (AD), Asperger's Syndrome (AS) and Pervasive Developmental Disorder-not otherwise specified (PDD-NOS), (Sharma et al., 2018). Autism is marked by disabilities in various aspects of social functioning, repetitive stereotyped body movements and an unusual interest in objects/activities (Cherny & Seladi-Schulman, 2019). The extent of developmental impairment due to autism varies on a spectrum and not every individual suffering from it shows similar traits. Because Autism disorder is a spectrum disorder with a broad array of symptoms, it manifests in each individual differently (Frith 2003). Statistically, autism is found to be prevalent in as many as 1 in every 36 children as stated by the National Health Center for Health Statistics in 2016 (Sharma et al., 2018). Although a definite cause of autism is not yet

known, genetics and the individual's environment are presumed to play significant roles in the development of this disorder. Lastly, Autism is diagnosed based on the characteristics mentioned in the Diagnostic and Statistical Manual of Mental Disorders – V (DSM-5) that is used by most mental health professionals (Cherny and Seladi-Schulman, 2019; Government of Canada, 2018).

Symptoms of Autism Spectrum Disorder

Autism is a neurodevelopmental disorder and so, aspects of growth are hindered, and communication, social interaction and behaviour are all primarily affected. Although not all autistic patients show similar extent of symptoms, there are certain underpinnings of the disorder that remain consistent across most patients. To elaborate, most individuals that have autism are found to have linguistic difficulties, significantly reduced social interaction, minimal or null communication, repetitive behaviors (such as flapping) and have a loss of interest in social activities (Sharma et al., 2018). Symptoms that are subjective, and can vary based on individual differences are, impaired facial expressions, delayed comprehension of language, aggression, echolalia (repetition of words/phrases), an unusual reaction to sounds, smells and/or colors, inconsistent eye-to-eye gaze or avoiding eye contact and many others (Government of Canada, 2018). Some other behavioural symptoms shown by those with autism disorder include, hyperactivity, short attention span, impulsivity, aggressiveness, self-injurious behaviours and temper tantrums (APA 2000). Thus, symptoms vary across individuals, but are all based under three major domains of development – communication, interaction and behaviour.

Furthermore, infants with autism start showing symptoms in the initial months of their lives. Symptoms include no babbling, no response when being called and repetitive finger and hand movements. Older infants show symptoms such as repetition of words or phrases, self-harm, throwing tantrums, little or no social interaction with other children, etc., during 18 to 24 months after birth (Government of Canada, 2018). Almost 75 percent of individuals with autism also contract other comorbid disorders – these include, anxiety, depression, attention-deficit hyperactivity disorder (ADHD), schizophrenia and many others (Sharma et al., 2018).

Considering the neuroanatomy of individuals with autism, research has suggested that most children who have an early onset of autism (at 18 – 24 months of age), experience a 5-10 percent abnormal increase in brain volume, however it is unclear whether this enlargement persists past adolescence or not (Amaral et al., 2008). Amaral et al. (2008), also state that the anterior cingulate cortex (ACC) - located in the frontal lobe of the brain, shows an abnormally coarse appearance in the MRIs of many children with autism. Also, the cerebellum and amygdala are found to be abnormally larger in children with autism than in children of the control group. There is some evidence that suggests enlargement of the caudate nucleus as well; this finding can be linked to the stereotyped behavior that autistic individuals perform repeatedly. However, there is not much clarity regarding the neuroanatomy of autistic individuals as a definite cause

of the disorder has not been found. Further research is needed for a better understanding of cerebral underpinnings of the disorder.

Therapeutic Interventions for Autistic Segment of the Society

Autism spectrum disorder can manifest itself as having difficulties in sensory motor functions, communication, and maintaining social relationships too (Volkmar, Chawarska, and Klin, 2005). And although many clinical treatments for ASDs exist, it appears that the most effective intervention is early and intensive educational support that addresses behavioural, social, and communication deficits (Dempsey and Foreman, 2001). Durrani (2019) is of the opinion that caregivers who look after autistic children should opt for therapies that emphasize the crucial need of early intervention for skill building and modifying behaviours. Behavioural interventions are usually supplemented with speech and language therapy and occupational therapy. Moreover, one of the core symptoms of ASD, the sensory integration dysfunction (SID) can adversely affect the behavior and learning of the children experiencing it. SID refers to an individual's atypical response to external stimuli perceived through the senses of smell, taste, vision, hearing, kinesthetic, vestibular, or proprioception (Marco et al., 2011). Children with SID have a varied sensory profile and may suffer from a high degree of anxiety resulting in behavioral, psycho-social, and cognitive problems (Tomchek and Dunn, 2007). A child with SID might be hyposensitive or hypersensitive to sensory stimuli; for example, a child with tactile hypersensitivity might feel extreme pain at the slightest touch, whereas the hyposensitive child might seek extreme tactile stimulation. And so, working with children that have autism requires a detailed understanding of sensory challenges, and familiarity with varied sensory profiles is key for providing efficient therapeutic intervention (Durrani 2019). While there are various interventions and therapies available for autistic individuals, art therapy seems to be one that has the potential to address these complex issues as it is multisensory in nature and takes on a relational approach (Hass-Cohen and Findlay, 2015).

There are several health professionals, institutions and communities that work around the clock for the betterment of autistic individuals and are taking steps to provide complete support to them, whether it may be physically, emotionally or mentally. Museums being cultural institutions can also play a vital role in the lives of individuals with autism by including them in various museum programs.

Art Therapy, Autistic Visitors and Museums

Art-making activities have the ability to help autistic individuals develop imagination, sensory regulation, emotional self-expression, developmental growth, visual -spatial skills and the promotion of recreation skills (Martin 2009a, 2009b; Gerber and Kellman 2010). As cultural institutions that house various artsy entities, museums have the ability to facilitate the benefits of art-making by including activities that tap into meaningful experiences through the means of specialized programs (Woodruff 2019). Creating art within a museum setting opens up opportunities for inclusive arts, as creative collaborations between the disabled and the nondisabled increases knowledge,

skills and competence within the arts (Fox and Macpherson 2015). Also, a variety of textures, colors, smells and tastes of art have an inherent capacity to inhibit and/or induce emotional and sensory responses in those with autism (Hinz 2016).

Museums in the United States of America have been explicitly inclusive in adopting, incorporating and conducting autistic friendly programs through special equipment and tools, separate tours, sensory based art activities and providing special hours for families of children with ASDs. For instance, the Chicago Children Museum runs a program called "Play for All" designed for children with various physical and developmental disabilities (CCM 2020). The therapeutic play guide enables the children to build skills in many developmental areas including motor, sensory, language, literacy, social, cognitive and self care. A story book guide with exhibit pictures and pocket rule cards, along with online tips for visiting families provide a sense of routine to those with ASD. The DuPage Children's Museum of Naperville, Illinois conducts free monthly programs on every third Thursday of a month to exclusively serve children with disabilities. They do so, by keeping autistic children's special needs in mind, for example, avoiding crowds and noise disturbances during the quiet hours (when museums have a smaller number of visitors). Photobooks and augmentative communication devices are provided to foster language development, social skills and meaningful play in these children (Rodhegier 2010; DuPage Children Museum 2008).

Two different activities conducted for special needs children will be discussed here; in which the first author acted as a participant/research observer in the first event, and as the primary organizer in the second event.

Ventriloquism - a Tool and an Activity

As per the Cambridge dictionary, ventriloquism means, "the ability to speak without moving your lips so that your voice seems to be coming from someone or something else, usually as a way of entertaining people." The art and technique of puppetry can be made very interesting by a ventriloquist - a trained person who entertains visitors by changing their voice according to the character they are portraying. Ventriloquism is a technique that is specially implemented by various museums for the children with special needs. Trained ventriloquists are hired by museums for holding events with special needs visitors. At this point, the first author shares her experience of interacting with children who have special needs at the Museum of Childhood, London (MoC), UK, during her visiting fellowship in 2013. The author was able to participate in many ventriloquist sessions conducted by the Museum of Childhood, London, UK. Not only did these sessions aim at providing entertainment for those who visited the museum, but they also provided a learning experience to children with special needs (those with autism, down's syndrome and other learning disabilities).

Through these visitations, the author learnt that the MoC hires a ventriloquist for a specific number of shows for the special education need (SEN) programs, so as to

provide learning experiences to special children of different age groups. For instance, the historic theme titled "The Sailor's Story" narrates the life of a sailor and his family who hailed from the Victorian Era England. The story revolves around a sailor who is sailing to various parts of the world from England, and the story is set in the 18-19th century AD. The ventriloquist commences the act with the character of the sailor, who describes the various types of vessels (such as marine vessels), the types of materials transported from places such as Africa to Europe, sea routes covered by the vessel, ports visited in transits, emotional states of the sailor (in terms of missing their family), and so on (Patel 2016). Next, the ventriloquist takes up the character of the sailor's wife, and shows how she is nurturing her children and taking care of the family when her husband is away. During this part, the ventriloquist takes up two characters alternatively, that of the mother and of the child, whereby the two interact with each other through a series of questions and answers. The mother tries to answer as many of the child's questions related to aspects of seafaring, seafood, sailing, transport, life of sailor and interestingly, she takes examples from the sailor's life to further elaborate as well. In the last part when the sailor reaches home after months of seafaring, the act becomes quite dramatic and interesting as the ventriloquist now enacts three characters, one after the other, all participating in the conversation simultaneously (Figure 1).



Figure 1: After Ventriloquism Activity: Ventriloquist, Museum Education Officer for SEN and Author (Courtesy: MoC)

This historic narrative of the Victorian Era presented by the ventriloquist was aimed to enable the special needs children to enjoy the act and learn about the everyday life, and

homely affairs of a sailor simultaneously. This story telling method using ventriloquism, tried to highlight the significant role that a sailor played during the Victorian times. The most important message of this act was to understand the meaningful daily-life events of the sailor, his children and his wife. The wife and the children were eagerly looking forward for their husband and father respectively, to return from his expeditions so as to enjoy the nuances of daily life. The ventriloquist very efficiently played the characters of the children and the wife. This indeed enabled the special needs children to imbibe the roles, values and significance of a family, as a close-knit social structure. Also, the enactment of the story using characters was truly impactful for the children as they are relatively slow learners. During the event itself, some children started bonding with their parents. Their reactions indicated that they were able to relate to the parent-child relation being portrayed and that they were able to absorb the various dimensions of daily life, all through the simple means of watching an act of daily conversations occurring among family members.

Touch and Feel - an Activity

Moving on, the Department of Museology in the Faculty of Fine Arts of the Maharaja Sayajirao University of Baroda, Gujarat, India, has been collaborating with local organizations that work for specially abled and visually impaired children. Being an academic museum in the university setup, the museum has made efforts to enable postgraduate students in the museology department to understand the practical realities of accessibility and inclusion, by conducting workshops for the special children. The second event worthy of being mentioned is the '*Touch and Feel*', and the '*Colour the Sketch*' - an art-making session. This event was coordinated by A. Patel, the author, on 16th October 2019 in the gallery of the Museum of the Department of Museology, Faculty of Fine Arts, The Maharaja Sayajirao University of Baroda. Fifteen children, mainly diagnosed with autistic disorder and down's syndrome from the Disha Charitable Trust, Vadodara participated in this event. *Varahi*, one of the sculptures on display in the museum depicts the mythological character as the consort of Varaha (boar headed) god, an incarnation of the Hindu god Vishnu. The *Varahi* is a highly ornate sculpture depicting a mother holding a child in her hands and is a remarkable reflection of physical beauty and the joys of motherhood. And so, this sculpture was chosen as the object of communication and interpretation for this event. For the *Touch and Feel* session, an acrylic replica of the original sculpture was used (Figure 2). Each child was assisted with one post-graduate student who was meticulously observing behavioural patterns of these children. These post-graduate students assisted the children in touching the replica and feeling the various elements of embellishment on it, as they described to them, the significance of this sculpture. A brief discussion on the emotional dimensions of care, protection, love and affection that a mother provides to her child which is depicted in the sculpture *varahi*, as *matruka*, the mother goddess, was communicated with autistic children through storytelling.

Parallel to this activity, was an art-making and exploration activity *Colour the Sketch*, wherein line drawings of the *Varahi* image and colours were provided to every child.

The session was arranged in such a way that the children who were interested in touch and feel could participate in the *Touch and feel* session, but those interested in colouring could proceed with the second activity. Those who want to hear about the emotive aspects (for instance, stories on mother-child bonds, mother's love and care) reflected in the present sculpture, were allowed to do so as well. It was interesting to note that, some children preferred colouring the drawings, while some hesitated to do so. Many were interested in touch and feel, while two children were reluctant for all activities and were allowed to sit and observe the others. For an hour, the gallery was transformed into a space of differential experience and joy. As for the post-graduate students, who will likely be future museum curators and heritage caretakers, this opportunity turned out to be an effective experience in understanding the use of museums as a space that promotes inclusiveness and is accessible to all. The event was concluded by distributing gifts and chocolates as tokens for children to take home with them. The staff and students at the Department of Museology wish to serve them again in the future through other such museum inclusive activities. The Disha Charitable Foundation also expressed their interest in allowing special children to use the museum space again for similar sessions.



Figure 2: Touch and Feel, Varahi, Museum of Department of Museology, MSU, Baroda

Conclusion

In conclusion, visiting museums remains a stressful activity for families that have children with Autism Disorder Spectrum. Enabling them to use nonverbal expressions, and art therapy might build confidence in autistic visitors of museums. Museums and galleries can potentially consider developing a sensory room, a safe space where different materials associated with colour, sound, music and scents including light effects are provided for the autistic visitors to explore. Hoffbauer (2016) supports the idea of developing sensory rooms, and his case studies and survey findings indicate that museums and galleries need to do more to make their spaces accessible for people with autistic disorder. Special attention should be given to the reduction of unnecessary noises and calming sounds should be played instead. Moreover, museums should train their staff members to take help from specialists and generate apt tools and activities for autistic visitors. Accessibility and inclusion are key, and so, effective attempts should be made to achieve these goals in order to facilitate and support all sectors of the society.

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