RBTUR
Revista Brasileira de Pesquisa em Turismo

ANPTUR
ASSOCIAÇÃO NACIONAL DE PESQUISA E PÓS-GRADUAÇÃO EM TURISMO

ISSN 1982-6125

Articles – Gestão do Turismo

Airport accessibility for neurodivergent passengers: a global survey of initiatives and its implications

Acessibilidade aeroportuária para passageiros neurodivergentes: uma pesquisa global sobre iniciativas e suas implicações

Accesibilidad en aeropuertos para pasajeros neurodivergentes: una encuesta global de iniciativas y sus implicaciones

Rafael Teixeira de Castro[1], Mariana Miranda Batista[1], Maria Eduarda Santos Andrada[1]

[1]Federal Center for Technological Education Celso Suckow da Fonseca (CEFET/RJ), Rio de Janeiro, RJ, Brazil.

Keywords:
Airports;
Air Transportation;
Neurodivergences people;
Tourism.

Abstract

This study examines the relationship between neurodivergence, tourism, air transportation, and social inclusion, with a particular focus on airport accessibility. Employing a bibliographic review and an exploratory qualitative-quantitative research methodology, the study investigates how airports are adapting to meet the needs of neurodivergent passengers. The primary aim is to analyze the strategies implemented by airports worldwide to enhance accessibility for individuals with various neurodivergences. To achieve this objective, a survey and subsequent analysis of accessibility practices targeting neurodivergent individuals were conducted across selected airports globally. The airports included in this research were chosen based on the criterion of officially adopting the sunflower lanyard as an accessibility measure. The findings reveal that while accessibility initiatives are present in airports of varying sizes, governance models, and locations, major airports often prioritize simpler, low-cost measures over more comprehensive structural adaptations. The study concludes by emphasizing the need for further research and the development of more inclusive strategies.

Palavras-chave:

Aeroportos;
Transporte Aéreo;
Pessoas Neurodivergentes;
Turismo.

Resumo

Este estudo investiga a relação entre neurodivergência, turismo, transporte aéreo e inclusão social, com foco na acessibilidade em aeroportos. Utilizando uma metodologia de revisão bibliográfica e pesquisa exploratória quali-quantitativa, o estudo examina como esses espaços estão se adaptando para atender às necessidades de passageiros neurodivergentes. O objetivo do estudo é analisar as estratégias adotadas por aeroportos em âmbito global para promover a acessibilidade para pessoas com neurodivergências. Para alcançar os objetivos propostos, foi realizada uma pesquisa e análise subsequente das práticas de acessibilidade direcionadas a indivíduos neurodivergentes em aeroportos ao redor do mundo. A seleção dos aeroportos incluídos na pesquisa baseou-se no critério de adoção oficial do cordão de girassol como uma medida de acessibilidade. A pesquisa indica que, embora existam iniciativas em aeroportos de diferentes portes, modelos de governança e localizações, os grandes aeroportos tendem a priorizar ações de acessibilidade mais simples e de baixo custo, em detrimento de mudanças estruturais mais abrangentes. O estudo conclui destacando a necessidade de pesquisas adicionais e de propostas mais inclusivas.

Palabras clave:

Aeropuertos;
Transporte Aereo;
Individuos Neurodivergentes;
Turismo.

Resumen

Este estudio investiga la relación entre la neurodivergencia, el turismo, el transporte aéreo y la inclusión social, con un enfoque en la accesibilidad en aeropuertos. Utilizando una metodología de revisión bibliográfica y una investigación exploratoria cualitativa-cuantitativa, el estudio examina cómo estos espacios están adaptándose para satisfacer las necesidades de pasajeros neurodivergentes. El propósito de este trabajo es analizar las estrategias adoptadas por aeropuertos a nivel global para promover la accesibilidad para personas con diversas neurodivergencias. Para alcanzar los objetivos

Revisado em pares.
Recebido em: 05/12/2024.
Aprovado em: 23/01/2025.
Editora: Verônica Feder Mayer.

propuestos, se llevó a cabo una encuesta y un análisis posterior de las prácticas de accesibilidad dirigidas a individuos neurodivergentes en aeropuertos de todo el mundo. La selección de aeropuertos incluidos en esta investigación se basó en el criterio de que adoptaran oficialmente el cordón de girasol como medida de accesibilidad. La investigación indica que, aunque existen iniciativas en aeropuertos de todo el mundo, independientemente de su tamaño, modelo de gobernanza y ubicación, los aeropuertos principales tienden a priorizar acciones de accesibilidad más simples y de bajo costo en lugar de realizar cambios estructurales más integrales. El estudio concluye destacando la necesidad de más investigaciones y propuestas inclusivas.

How to cite: Castro, R.; Batista, M. M., & Andrada, M. E. S. (2025). Acessibilidade aeroportuária para passageiros neurodivergentes: uma pesquisa global sobre iniciativas e suas implicações. *Revista Brasileira de Pesquisa em Turismo, São Paulo,* 19, e-3077, 2025. https://doi.org/10.7784/rbtur.v19.3077

1 INTRODUÇÃO

It is estimated that between 15% and 20% of the global population is neurodiverse (Doyle, 2020), including individuals such as those with autism, dyslexia, dyspraxia, attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), Tourette syndrome, among other conditions. The use of the term neurodivergent person (NDP), coined by Judy Singer (Doyle, 2020; Doyle, 2019), seeks to promote a positive and inclusive perspective on neurodivergence, advocating for the appreciation and natural integration of these individuals into society, thereby contributing to more inclusive and harmonious environments.

The sensory processing of neurodivergent individuals is often affected, manifesting as heightened sensitivity to the environment, especially noticeable in places like airports, where intense stimuli may trigger reactions that are often misinterpreted as rudeness or inattentiveness. However, these reactions reflect a need for support in dealing with sensory and communication challenges (Napoli, 2022; Mendonça, 2022).

The air transport sector plays a crucial role in the social inclusion of NDPs, as it offers a faster and more convenient means of travel. For individuals with disabilities, of any kind - whether visible or not - long journeys by land or sea can be challenging and less feasible (Yau et al., 2004), making air transport essential for facilitating mobility and overcoming the limitations associated with prolonged travel.

Castro (2010) highlights that accessibility to air transport represents an essential act of social inclusion and equality for people with disabilities. For these individuals to fully enjoy the resources available in society, various adaptations must be made to meet their specific needs. Accessibility in airports goes beyond physical infrastructure, encompassing policies and practices aimed at providing a more inclusive and welcoming travel experience for all passengers, regardless of their individual characteristics.

Air travel can be stressful for anyone, but for travelers with autism spectrum disorder (ASD), for example, there is an additional layer of anxiety that accompanies flights (Rowello, 2021). Thus, awareness and accessibility for NDPs have been increasingly prioritized at the airport environment. Over time, more sensory and easy-to-understand approaches have been developed, but there is a lack in the literature on disabilities and discrimination in the context of the aeromobilities (Adey et al., 2024).

Currently, there has been a significant increase in initiatives to improve accessibility in airports, with the aim of creating environments that welcome and include all passengers. These efforts involve various strategies, such as: training staff to recognize and support NDPs, implementing sensory rooms and maps, adapting infrastructure to minimize sensory stimuli, and developing policies that ensure clear and accessible communication at all points of interaction, respecting human rights. Thus, this study aims to investigate the strategies used by airports worldwide to promote accessibility for neurodivergent individuals, through a literature review and quali-quantitative research based on descriptive and exploratory study.

The study highlights the challenges faced by these individuals in airport environments, emphasizing the need to recognize and understand their specific needs, whether visible or hidden. Adapting airport services and procedures to meet the needs of neurodivergent individuals not only enhances their travel experience but also promotes a more inclusive and empathetic society.

2 LITERATURE REVIEW

Tourism is a social experience that involves people moving through time and space in search of pleasure and enjoyment, which cater not only to their immediate physical needs but also to their imagination (Barros, 2015). Although addressing tourism and travel involves understanding air travel as a 'space of flows' under the umbrella of the mobilities paradigm — and, in this specific case, the aeromobilities — it is also essential to recognize that for mobility to occur, immobile elements, such as airports, are indispensable (Sheller & Urry, 2006).

Airports are precisely the key elements for various global processes, enabling travelers to meet people and experience places face-to-face worldwide (Sheller & Urry, 2006), a right that should be guaranteed to everyone, regardless of any condition or disability. In this sense, not all airports provide the necessary support, and quite often individuals with disabilities travel less or even choose not to travel to avoid embarrassment and risky situations (Mora, 2022). It is worth noting that the social model of disability, created by the sociologist Paul Hunt in 1966 (Foresti & Bousfield, 2022), asserts that individuals are disabled by the barriers imposed by society, not by their differences. Therefore, changing the environment and how these individuals are treated is key to reducing the impact of disabilities on their daily lives (Peterson et al., 2024).

Social inclusion is understood as the refined process of harmonizing diverse individuals with society, adapting and evolving to embrace this diversity across all social spheres (Kushano & Almeida, 2008). According to Sassaki (2003), there are two types of activities: those in which individuals with disabilities can participate without adaptations and those modified for inclusion. Yau et al. (2004) state that living with a disability presents unique challenges that can affect participation in various activities, including tourism. For many, the experience of traveling becomes a more complex task due to the need to coordinate physical, mental, and social skills, which may be compromised by the disability.

Accessibility in aviation is essential for social development and allows individuals with any disability the freedom to move. Accessibility is the condition for ensuring safety and autonomy, whether total or assisted, within spaces, urban equipment, and transportation services for individuals with disabilities (Brazil, 2016). It creates opportunities, including the ability to travel for business meetings, job interviews, conferences, and important events. Furthermore, learning to travel by airplane can be considered a behavioral cusp, as this set of skills provides access to new environments where there will be even more learning and enrichment for these individuals (Dempsey et al., 2021).

Numerous studies have already addressed the experiences and accessibility strategies in air transportation for people with physical disabilities (Qing et al., 2020; Major & Hubbard, 2019; Chang & Chen, 2011; 2012). There are also studies that group all types of disabilities together and address the challenges faced by these individuals in airports in a generalized manner (Poria et al., 2009; Davies & Christie, 2018l; Gotti et al., 2024). It is known, however, that each type of disability gives rise to very specific needs, and therefore, they should be addressed individually (Castro, 2010).

Some studies have addressed accessibility for neurodivergent individuals in airports, with a particular focus on autism spectrum disorder (Dempsey et al., 2021; Chiscano, 2021; Peterson et al., 2024). Silva et al. (2024) conducted a literature review focused on studies that provided recommendations for enhancing accessibility for individuals with hidden disabilities in air transportation. After applying filters with relevant keywords and systematically reviewing the selected works, the authors included 37 papers in their analysis. The earliest papers were published in 1999; however, an increased interest in the topic was observed starting in 2019, with a notable peak in publications in 2021 and 2023, which marked the highest numbers of studies to date.

There is a significant gap, thus, when it comes to the experiences of neurodivergent individuals or those with hidden disabilities (hearing and visual, for instance). Neurodivergence, a term coined by Australian sociologist Judy Singer in 1999, encompasses all individuals who fall outside of what is considered neurotypical patterns. This term has also been used positively to describe individuals with autism spectrum disorder (ASD) and, subsequently, to include those with dyslexia, dyspraxia, attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), and Tourette syndrome. The use of the term aims to promote the social inclusion of individuals identified as neurodiverse (Doyle, 2019).

The neurodiversity perspective advocates for the inclusion of NDPs in society, emphasizing the importance of recognizing differences as non-problematic aspects, specificities to be identified and normalized in our daily lives, which can lead to more inclusive environments. The movement is led by individuals with autism who argue that their condition should not be treated as a disease to be cured but rather as a human variation comparable to gender or race, deserving equal respect (Ortega, 2009).

Some neurodivergences are also known as hidden disabilities as they are not perceptible to others through mere observation. These conditions affect the functioning of a person's nervous system, presenting distinct ways of processing sensory information such as light, sound, colors, smells, and textures compared to neurotypical individuals (Napoli, 2022). Non-linear information processing and divergent thinking can result in difficulties in reading facial expressions and interpreting social cues, which may hinder understanding of intentions, emotions, and social interactions, requiring alternative communication and comprehension strategies.

Research by the World Health Organization (2023) estimates that about 1 in 100 children have autism, affecting the way these individuals communicate and interact. Table 1 provides a summary of the main neurodivergences and their characteristics:

Table 1 - Main neurodivergences and its characteristics

Neurodivergence	Characteristics
Autism Spectrum Disorder (ASD)	Difficulty in social interaction; unusual communication patterns or repetitive speech patterns; difficulty in understanding or expressing others' feelings; discomfort with deviations from routine or resistance to changes in habits; selective eating.
Attention Deficit Hyperactivity Disorder (ADHD)	Impulsivity, restlessness, inattention, difficulty with organization, and problems completing tasks.
Dyslexia	Slowness in learning; difficulty with concentration; difficulty in spelling; confusion of letters with similar sounds and/or spellings.
Tourette Syndrome	Frequent and rapid blinking; uncontrollable repetition of words; use of varying vocal tones; engagement in repetitive movements.
Dyspraxia	Difficulty maintaining balance; problems with body posture; difficulty with spatial awareness; confusion in organizing one's own thoughts.

Source: Teixeira et al. (2011).

A study conducted by Heathrow Airport (2021) found that 67% of passengers reported experiencing at least one personal circumstance (either temporary or permanent) that negatively affected their airport experience. Among these, 49% cited psychological needs (such as insomnia, anxiety, stress, depression, etc.), while 36% reported having distinct cognitive needs (including autism, ADHD, dyslexia, dyspraxia, etc.).

Many issues faced by NDPs can be identified and addressed, but this requires understanding and listening to this population. There are both complex problems and more basic or comfort-related issues to consider. Quite often, the solutions do not necessarily involve high costs or complex procedures; they can be straightforward, aiming at improving the quality of life for these individuals in a simple manner, allowing them to feel welcomed by both institutions and society at large (Cruz, 2019).

Yau et al. (2004) conducted interviews and discussed individuals with visible disabilities, who frequently experience ambivalent travel experiences. In some cases, the visibility of the disability can attract positive attention from the public, leading people to offer help and show compassion. However, at other times, this visibility may result in curious stares, discrimination, or exclusion when receiving services. Conversely, those with less obvious disabilities often face the expectation to behave as if they do not have a disability, which can lead to a dilemma between revealing their condition to receive favorable treatment, sometimes with embarrassment, or concealing it to avoid potential negative reactions from others.

Tata et al. (2024a) conducted a netnographic study based on the analysis of airline reviews posted on TripAdvisor by individuals with invisible disabilities, mostly in the UK. They identified that the main challenges these individuals face in navigating the airport are related to interactions with staff (e.g., discourtesy and lack of experience), the provision of the service itself (e.g., separation of individuals with invisible disabilities from their companions during check-in), and the design of the airport terminal (e.g., crowding, queues, and noise). When it comes specifically to individuals on the autism spectrum, particularly children and young travelers, Dempsey et al. (2021) had already shown that the main stressors in airports are long waiting periods, crowds, and sensory stimuli.

Most NDPs have heightened sensitivity to their environment due to challenges in sensory processing. These challenges may manifest through heightened sensitivity in senses such as vision and hearing, turning the environment into something disturbing or even frightening. In an airport context, it is important to note that such environments can trigger NDPs, causing them to become highly agitated or, sometimes, immobile. These reactions may be mistakenly interpreted as rudeness, tantrums, lack of attention, or disinterest in collective well-being. However, it is

crucial to understand that such reactions stem from the need for support to cope with the communicational and sensory challenges associated with such environments (Mendonça, 2022).

Therefore, the importance of both open and closed rooms as alternatives to shared spaces in airports, the inclusion of lighting options including natural light, and the design of environments that promote comfort must be emphasized. It is possible to adapt the architecture and interior spaces to positively impact the behavior commonly observed in NDPs. This can be achieved by adjusting aspects such as colors, textures, spatial sensations, window positioning, acoustics, and ventilation (Gaines et al., 2016).

For individuals with autism, for instance, specialized literature indicates that difficulties encountered in transportation and mobility are major factors in their lack of social inclusion (Kersten et al., 2020; Pfeiffer et al., 2024). Chiscano (2021) identifies communication, service provision, and the environment in which the service is delivered as primary barriers.

Kersten et al. (2020) suggested that training for professionals in transportation settings, whether institutionalized or not, is an important measure to enhance autonomy for individuals with ASD. According to the authors, and corroborated by Small et al. (2023), one of the most crucial aspects is assisting them in handling unpredictable situations and their own functioning when faced with environments or situations that generate higher levels of anxiety and/or stress. In this regard, actions involving familiarization, whether through training or other strategies, are essential for enabling these individuals to travel with greater autonomy and ease (Pfeiffer et al., 2024).

It is important to emphasize the importance of the social inclusion of NDPs in airport environments and on airplanes, considering their specificities such as difficulties with social interaction and communication, atypical activity patterns and behaviors, challenges in transitioning from one activity to another, focus on details, and unusual reactions to sensations (Dos Santos et al., 2024). These factors should be considered, even though stress and anxiety inherent to travel may lead to self-regulation crisis[1]. Attention to the specific needs of NDPs enables them to maintain their autonomy and continue their travel without hustles.

4 METHODS

The methodology employed for this study is a bibliographic review and qualitative-quantitative research through descriptive and exploratory study methods. The literature review supporting the theoretical framework of this study covered topics such as tourism, air transport, social inclusion, and issues related to neurodivergent individuals, using terms such as “airport + hidden disabilities,” “airport + autism,” “airport + neurodivergence,” and their variations.

To achieve the aims of this study, a survey was conducted on accessibility strategies for NDPs at airports around the world. The airports included in this research were selected based on the criterion of officially adopting the Sunflower lanyard as one of their accessibility strategies. Other symbols, such as the puzzle piece and the infinity symbol, are recognized as specific references to autism. However, due to the sunflower's broader association with neurodivergence and other invisible disabilities, as well as its widespread adoption in airports through the sunflower lanyard, the authors chose to focus on this particular symbol.

In this regard, the website of “The Hidden Disabilities Sunflower,” an American company holding the rights to the Sunflower lanyard product, was consulted. This search identified 231 airports globally, excluding those listed as “coming soon.”. This criterion was chosen since the lanyard is often the first, and sometimes the only, strategy adopted by airports, as it is crucial to provide visibility for disabilities considered invisible (further details on the lanyard will be provided in the following section). Additionally, four Brazilian airports not listed on the website were included, bringing the total to 235 airports.

Once the airports were defined, the investigation focused on whether they had additional accessibility strategies for NDPs beyond the Sunflower lanyard. The research was conducted through consultations of their websites, resulting in a spreadsheet with all the strategies identified. Based on the studies by Kersten et al. (2020), Chiscano (2021), Small et al. (2023) and Pfeiffer et al. (2024), these strategies were categorized as follows on Table 2:

[1]Self-regulation is understood as the ability to monitor and modulate emotions, cognition, and behavior to achieve a goal and/or adapt to cognitive and social demands in specific situations. Therefore, a self-regulation crisis occurs when an individual is unable to manage their emotions and/or behaviors, impacting their ability to think, organize themselves, and interact (Linhares & Martins, 2015).

Table 2 - Categorization of Accessibility Strategies Developed by the Analyzed Airports

Category	Definition	Examples
Attitudinal	Strategies aimed at generating visibility, as well as changing attitudes and behaviors that hinder individuals' equal participation.	Sunflower lanyard and general training.
Structural	Accessibility strategies that rely on structural modifications at airports.	Quiet or multisensory rooms.
Communicational	Strategies aimed at facilitating communication for NDPs in airports.	Communication boards.
Familiarization	Strategies aimed at familiarizing NDPs with airport spaces and processes.	Familiarization tours and social stories.
Service	Services provided by airports to NDPs and/or their families and companions.	Personal assistance and animal therapy programs.
Informative	Strategies that inform passengers about the accessibility measures adopted by airports.	A specific page on the airport's website.

Source: Elaborated by the authors.

Additionally, to identify possible correlations between aspects related to airport management and operations and the adoption of accessibility measures for NDPs, the airports were classified as follows:

- Airport size: < 5 million passengers/year; 5 to 19.99 million passengers/year; 20 to 39.99 million passengers/year; > 40 million passengers/year. Data are based on reports published individually by the airports for the year 2023.
- Location: North America, South America, The Caribbean, Europe, Asia-Pacific, Middle East. No airports from Africa were included in the analysis, as they were not listed on the Sunflower lanyard website.
- Airport ownership and governance (based on Gillen, 2011):
  - Public: Airports operated directly by public authorities, such as municipalities, states, or counties.
  - Privatized: Airports operated and owned by private companies.
  - Public-Private Partnership (PPP): Airports operated through partnerships between private companies and public authorities, with each party holding a percentage of the business.
  - Airport Authority: Public agencies created by municipalities or counties to manage and operate airports, prevalent in the United States and Canada.
  - Concession: Airports leased by the public sector to private entities for operation during a specified period as defined in the concession agreement.

The sample of airports surveyed (n=235) is, thus, distributed as follows:

Table 3 - Characterization of the Sample of Airports Studied (n = 235) (continue)

Number of Passengers	Number of Airports
< 5 million/year	125
5 – 19,99 million/year	60
20 – 39,99 million/year	26
> 40 million/year	24
Ownership and Governance	**Number of Airports**
Public	89
Airport Authority	51
Privatized	44
PPP	31
Concession	20

Table 3 - Characterization of the Sample of Airports Studied (n = 235) (conclusion)

Location	Number of Airports
North America	103
South America	09
The Caribbean	02
Europe	91
Middle East	02
Asia-Pacific	28

Source: Elaborated by the authors.

Based on the methodology presented here, the results will be subsequently presented and discussed. Both the basic descriptive analysis and the data cross-referencing were conducted using the free statistical analysis software jamovi Desktop version 2.5.3.

5 RESULTS AND DISCUSSION

After compiling and standardizing the names of the strategies based on their practical application, a total of 37 distinct strategies used by the airports were identified and will be presented below.

5.1 Accessibility initiatives in airports around the world

Table 4 lists all the initiatives that were identified at least twice among the airports along with their frequency and percentage and the 10 most used strategies will be detailed and described afterwards.

5.1.1 Sunflower Lanyard

The Sunflower Lanyard is the most widely used strategy by airports worldwide, having appeared 232 times (98.7% of airports). It was created to promote inclusion and accessibility for individuals with hidden disabilities with the aim of identifying them and signaling the need for priority and differentiated assistance to address their needs, provide support, and even foster greater empathy from other passengers, thereby making the invisible visible. It is, therefore, considered an "attitudinal" strategy.

Coincidently, the Hidden Disabilities Sunflower (HD Sunflower) Program was created at Gatwick Airport in London, United Kingdom, in 2016. Since its launch, various companies across different sectors, such as retail, tourism, transportation, education, healthcare, public spaces, and financial institutions, have joined this global network, including more than 200 airports, universities, schools, colleges, football stadiums, parks, and theaters (HD Sunflower, 2024).

By wearing the Sunflower Lanyard, individuals are signaling to others that they may need additional assistance, understanding, or simply more time. The sunflower was chosen for being discreet and distinctive, yet visible even

Table 4 - Accessibility strategies for NDPs found in airports

NDP Accessibility Strategies in Airports	n
Sunflower Lanyard	232
Written Social Story	40
Personal Assistance	33
Specialized Webpage	32
Familiarization Tour	21
Quiet Room	22
Air Travel Checklist	21
Multisensory Room	17
Visual Social Story	17
Animal Therapy Program	13
Airport Guide for Hidden Disabilities	10
Airport Activity Book	7
Training Program	6
Visual Communication Board	5
Virtual Tour	5
Sensory Kit	4
Sensory Map	3
Medical Service	3
Friendly Route	3
Identification	2
Accessible Map	2
Transport Trolley	2
Familiarization Video	2
Step-by-step Guide	2
I Can Fly Program	2
Quiet Area	2

Source: Elaborated by the authors.

from a distance. It is globally recognized and can symbolize happiness, strength, confidence, and growth (HD Sunflower, 2024).

5.1.2 Written Social Stories

Social Stories are brief, personalized narratives designed to assist NDPs in interpreting and understanding complex, new, or confusing social situations. These stories describe situations where the individual may struggle to recognize social cues and expected behaviors and help in understanding the consequences of different behaviors. According to Bozkurt et al. (2017), the use of Social Stories, which are typically written or presented in video format, is financially accessible and less invasive compared to other interventions and has shown more effective outcomes (Lazzarini & Elias, 2022).

Written Social Stories are the second most used strategy among the airports (n=40). The airport itself provides a document on its website that describes and explains each process, creating familiarity and facilitating understanding of what might happen, allowing the individual to plan for the situation. These stories are usually divided according to the boarding and disembarking processes, as well as by the type of travel, whether domestic or international, acknowledging that each process has its own specificities.

Visually appealing resources are used, primarily aimed at children, along with textual elements that explain each step and can even describe the types of sensations and sensory stimuli that may be experienced. Due to its ability to increase predictability regarding the processes, this strategy falls into the category of 'familiarization'. Some of

the airports that use this strategy include Gold Coast Airport (OOL), Vancouver International Airport (YVR), Singapore Changi Airport (SIN), Seattle-Tacoma International Airport (SEA), among others.

5.1.3 Personal Assistance

Personal Assistance is available at 33 of the airports. As the name suggests, it refers to direct assistance provided by an airport or airline agent prior to the flight, potentially helping with check-in, baggage drop-off, and other travel formalities. It is essential to have trained and experienced staff to provide this support and meet the requests for specialized service as previous studies have already demonstrated the importance of staff training for improved interaction with neurodivergent individuals (Quilty et at., 2003; Poria et al., 2009; Chang & Chen, 2012; Tata et al., 2024b). In this sense, this is a strategy within the 'attitudinal' category. Some of the airports that use this strategy include Madrid-Barajas International Airport (MAD), Edinburgh Airport (EDI), London Gatwick Airport (LGA), Vienna International Airport (VIE), among others.

5.1.4 Specialized Webpages

The webpages identified here are pages within the airports' own websites, designed to provide passengers with more information before or after their trip. These pages allow them to address questions regarding parking, restrooms, assistance, as well as to inform about all specialized services and resources offered for people with disabilities. In our sample, 32 airports employ this strategy, which has been classified under the 'informational' category. Some of the airports that use this strategy include Melbourne International Airport (MEL), Sydney Kingsford Smith Airport (SYD), Singapore Changi Airport (SIN), Josep Tarradellas Barcelona-El Prat Airport (BCN), among others.

5.1.5 Familiarization Tours

Familiarization Tours, included in the category of the same name, were found in 21 airports within our sample. This service, which is usually offered free of charge, allows the airport to host pre-planned family visits that provide the opportunity to experience the airport environment and the processes they will go through when traveling, such as check-in, security, and boarding. Each airport defines the itinerary of the visit, as well as the necessary procedures for registration and the dates available for this type of activity. Some of the airports that use this strategy include Glasgow Airport (GLA), Liverpool John Lennon Airport (LPL), Venice Marco Polo International Airport (VCE), among others.

5.1.6 Quiet Room

The quiet room, available at 22 of the airports is one of the structural strategies of the airport itself and is among the most important for providing NDPs a more tranquil experience with minimal sensory stimulation. Passengers can wait in this area until boarding time, without having to be in the bustling check-in area or the departure lounges. Many of the benefits of this type of facility are like those that will be presented in the following section on "Multisensory Room". Some of the airports that use this strategy include Málaga-Costa del Sol Airport (AGP), Newark Liberty International Airport (EWR), Tulsa International Airport (TUL), London Luton Airport (LTN), among others.

5.1.7 Air Travel Checklist

The air travel checklist, available at 21 airports, is an essential preparatory tool as it facilitates the understanding and execution of tasks at the airport. It provides a detailed list of steps to be followed within the airport, allowing travelers to know what to expect and to adequately prepare for boarding, serving as a familiarization strategy. This step-by-step guide aids in the identification of procedures from arrival at the airport to boarding the aircraft and reaching the destination. Many airports provide the checklist in PDF format for printing, enabling travelers to mark off completed steps throughout their journey, thereby offering a sense of control and security during their travel. Some of the airports that use this strategy include Vancouver International Airport (YVR), Paphos Airport (PFO), Gran Canaria Airport (LPA), among others.

5.1.8 Multisensory Rooms

Airports are highly dynamic environments, characterized by intense noise levels, pronounced visual stimuli, and large crowds. For NDPs, these conditions can act as triggers and result in sensory overload, making the travel experience particularly challenging (Rissato, 2023). It is crucial to have a space designed to provide a calm, attractive, and inclusive environment so that they can experience travel in a positive, serene, and comfortable manner.

Multisensory rooms are safe and controlled environments aimed at increasing the inclusion of NDPs in airport settings, making them more welcoming. They offer individuals the opportunity to enjoy the freedom to explore and interact with the elements according to their personal needs, promoting autonomy and self-care, which helps them feel more comfortable and at ease during their travels. Such spaces provide comfort through adjustable lighting, soft sounds, soothing textures, and controlled stimuli, helping to reduce stress and anxiety during the journey and promoting the emotional and mental well-being of travelers, enabling them to face their flights with greater calmness (Rissato, 2023).

In addition to assisting NDPs, these sensory rooms also support their families by addressing the challenges they face when planning travel due to the limited support they receive. The availability of a multisensory room at the airport can make it more attractive and could influence families to prefer an airport with this feature when planning their trips. In the surveyed sample, multisensory rooms were found in 17 airports. Some of the airports that use this strategy include Floripa Airport (FLN), Vitória Airport (VIX), Seattle-Tacoma International Airport (SEA), London Gatwick Airport (LGA), among others.

5.1.9 Visual Social Story

Some airports (n = 17) provide Social Stories in a video format, which detail each stage of the journey with information on what to expect and why, allowing the viewer to experience the sights and sounds of the airport before traveling. These videos help individuals understand how they should behave in airport situations, aiding in reducing anxiety and improving the travel experience. The concept is analogous to written social stories but presented in a video format. Some of the airports that use this strategy include Denver International Airport (DEN), El Paso International Airport (ELP), Belfast International Airport (BFS), among others.

5.1.10 Animal-Assisted Therapy Programs

The animal-assisted therapy programs aim to reduce stress while people wait for their flights. Animal therapy is an effective method for the well-being of NDPs, as interactions with trained animals provide emotional and physical support, helping to alleviate anxiety, as noted by Marinho and Zamo (2017).

In most cases, the animals used are dogs of various breeds. However, for example, San Francisco International Airport in the United States offers a team of animals that includes dogs, a rabbit, and a pig. The program is developed through a partnership with the San Francisco Society for the Prevention of Cruelty to Animals (SPCA) and involves a process of training and certification for performing this assistance at the airport. Some of the airports that use this strategy include Vancouver International Airport (YVR), Gold Coast Airport (OOL), Adelaide Airport (ADL), Seattle-Tacoma International Airport (SEA), among others.

5.2 Airport sizes and their accessibility initiatives for NDPs

The Sunflower Lanyard is the most widely strategy adopted by airports, utilized by 232 of them (98.7%). The second most employed initiative is Written Social Stories, present in 40 airports (17.02%), with greater representation in airports handling 5-15 million passengers annually, where 50% of these actions are concentrated. Familiarization tours, on the other hand, are particularly significant in small airports with fewer than 5 million passengers per year, accounting for 76.2% of these actions. Interestingly, no airport with more than 40 million passengers adopts this practice. Despite the greater need for familiarization for NDPs in larger airports, the operational complexity seems to hinder the implementation of these visits.

Quiet rooms, which are more numerous (22) compared to multisensory rooms (17), are likely more common due to their simpler implementation. Both types of rooms are more frequently found in smaller airports, with up to 19.99 million passengers, possibly due to the lack of available space in larger airports. Notably, among the Brazilian airports analyzed, four out of the seven have multisensory rooms.

5.3 Airport governance models and their accessibility initiatives for NDPs

The Sunflower Lanyard is present across all governance models. Written social stories are more frequently found in airports operated by public-private partnerships (PPPs) (n=17) and privatized airports (n=14), suggesting that airports managed wholly or partially by the private sector are more inclined to develop this strategy. In contrast, multisensory rooms are more common in public airports (n=6 or 35.3% of these actions), as are quiet rooms (n=10 or 45.5% of these actions). Familiarization tours predominantly occur in privatized airports (n=12 or 57.1%). Personal Assistance is widely used in PPP-managed airports (n=18 or 54.5% of these actions), and air travel checklists are more frequent in these airports (n=17 or 81% of these actions).

The production of social stories in video format tends to require a greater financial investment than written stories. Perhaps for this reason, these actions are more frequently found in privatized airports (n=11 or 64.7% of these actions). In contrast, animal-assisted therapy programs are more common in public airports (n=8 or 61.5% of these actions). It was observed that many of these programs are made possible through partnerships between airport administrations and non-profit organizations, which may or may not be affiliated with local governments.

5.4 Airport locations and their accessibility initiatives for NDPs

The analysis reveals that the Sunflower Lanyard is widely used in North America and Europe, reflecting an increasing awareness of accessibility in these regions. In Europe, written social stories stand out, highlighting a focus on accessible communication strategies. Personal assistance, limited to Europe and the Asia-Pacific region, indicates a more localized and specific approach in these areas.

Websites and Familiarization Visits are widely adopted in Europe, as is the air travel checklist, which is also more common in this region, suggesting a commitment to preparing and guiding travelers. Quiet rooms, frequent in Europe and the Asia-Pacific, and Multisensory Rooms, prevalent in North America and Europe, indicate the importance of adapted spaces for NDPs.

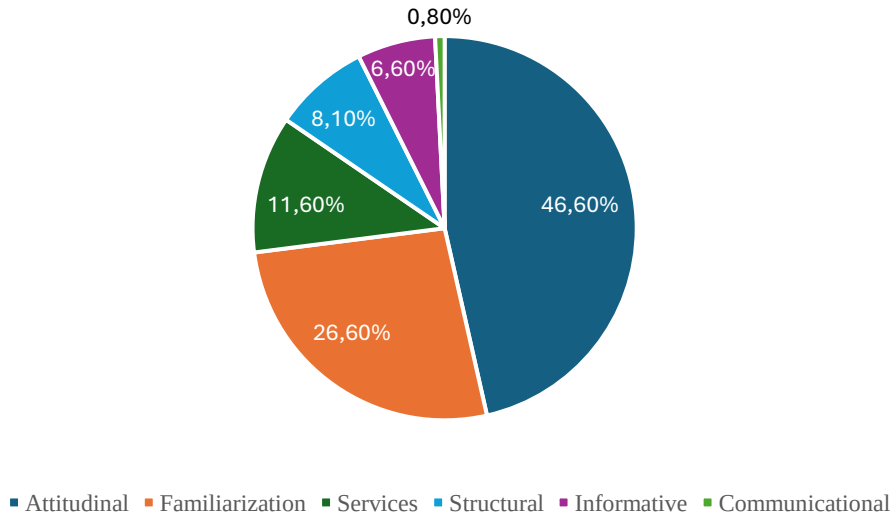
North America excels in the implementation of structural and familiarization actions, emphasizing the creation of welcoming and stimulating environments, such as visual social stories and animal-assisted therapy programs, which are more common in this region. Conversely, Europe stands out in actions such as personal assistance, websites, familiarization tours, written social stories and checklists, reflecting a substantial investment in accessibility resources.

These data highlight that North America and Europe lead in implementing accessibility initiatives, with various practices being exclusive to or more concentrated in these regions. However, other regions show still quite limited inclusive measures, suggesting an uneven development of accessibility practices globally, with a greater number of actions and resources in the aforementioned regions.

5.5 Strategies Categorization

It became evident that a single airport might implement multiple strategies simultaneously. Consequently, after categorization, it was found that nearly half of the identified actions (46.4%) were categorized as “Attitudinal,” as shown in Fig. 1. Following this, “Familiarization” actions accounted for 26.6%. The categories “Services” and “Structural” represented 11.6% and 8.1%, respectively. “Informative” actions made up 6.6%, while “Communicational” strategies were the least frequent, at only 0.8%.

Figure 1 - Strategies categorization

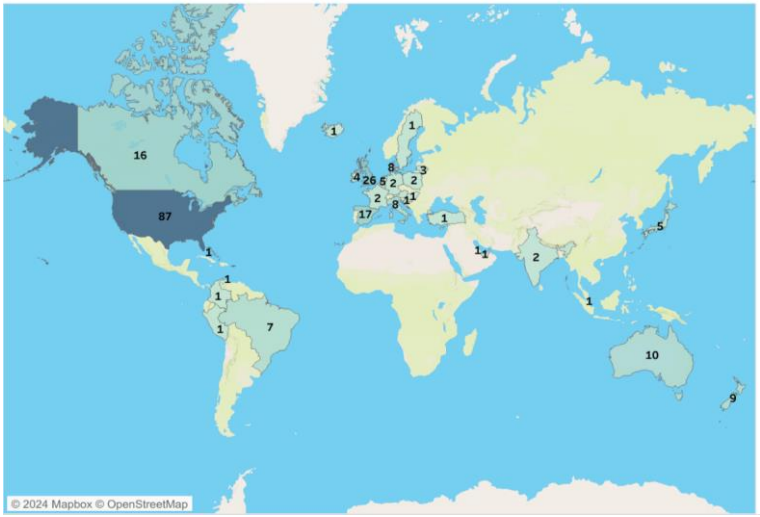


Source: Elaborated by the authors.

5.2.1 Location of airports and the categories of accessibility initiatives.

The geographical distribution of airports that have implemented accessibility strategies for NDPs is quite uneven. Based on the data gathered in this study, the United States has the largest number of airports (n=87), followed by the United Kingdom (n=26), Spain (n=17), Canada (n=16), and Australia (n=10). All other countries have fewer than 10 airports with any form of initiative as shown in Fig. 2.

Figure 2 - Number of airports with accessibility initiatives in each country



Source: Generated by Tableau Public with data provided by the authors.

Caribbean airports exclusively implement attitudinal actions (100%), with no record of other types of initiatives. This suggests a very limited approach, focused solely on attitudinal aspects, without addressing other important needs. North American airports exhibit a higher frequency of attitudinal (43.6%) and structural actions (38.1%). Familiarization actions are also relatively common (15.3%). However, communicational and informational actions are almost nonexistent, with only 2% and 1.2%, respectively.

South America stands out for a higher percentage of attitudinal (55.6%) and structural (44.4%) initiatives. There is no record of communicational, familiarization, or informational strategies in this region. Europe shows the greatest diversity of initiatives, with informational strategies being most prevalent in this region — 70.6% of them are in Europe. There is also a significant presence of attitudinal actions (56.5%).

Communicational strategies are concentrated in Asia-Pacific airports, with 75% of them located in this region. The remaining 25% were identified in North America, while such strategies were not observed in other regions. Airports in the Middle East show low implementation of all types of initiatives, with only attitudinal (3.3%) and structural (4.8%) actions being notable.

5.2.2 Airport sizes and categories of accessibility initiatives.

Attitudinal initiatives stand out across airports of all sizes, with 54.3% implemented in airports handling fewer than 5 million passengers, 36.5% in those with 5 to 19.99 million passengers, 47.5% in airports with 20 to 39.99 million passengers, and 43.3% in airports handling more than 40 million passengers.

Airports with fewer than 5 million passengers deploy 42.9% of the structural and 43.5% of the familiarization strategies. In comparison, larger airports carry out only 14.3% and 8.7% of these actions, respectively. Attitudinal are also more prevalent in airports with fewer than 5 million passengers (51.9%).

Overall, structural and familiarization initiatives are more common in airports handling fewer than 5 million passengers. This may suggest that smaller airports, with lower passenger flow and financial resources, are more focused on adapting their facilities and attitudes to better accommodate NDPs, while larger airports prioritize attitudinal strategies, which are less costly. It was expected that larger airports would invest more in familiarization actions, as the larger scale of these airports increases the likelihood that NDPs would encounter difficulties with orientation, communication, and other challenges, compared to smaller airports.

5.2.3 Airport governance model and categories of accessibility initiatives.

It was observed that most of the structural initiatives (40.5%) are present in airports managed by public authorities. In contrast, 38.5% of familiarization actions occur in privatized airports, while another 24.6% are in airports managed through public-private partnerships (PPP). Only 6.7% of privatized airports have structural actions, which is surprising given that these are generally more expensive and were, therefore, expected to be more common in privately operated airports. Additionally, 52.9% of informational actions are found in PPP-managed airports.

6 FINAL REMARKS

An airport is a transportation hub designed to facilitate air travel. It requires a well-developed infrastructure to provide ground services for passengers, necessitating careful preparation to meet the current and future needs of travelers. The primary goal of this study was to investigate the relationship between neurodivergence, tourism, and social inclusion, with a focus on the importance of air transportation. The research aimed to identify actions aimed at enhancing accessibility for neurodivergent individuals in airports, highlighting the relevance of air travel and tourism as promoters of social inclusion.

Accessibility strategies implemented in airports around the world were analyzed in detail to understand how these practices meet the specific needs of neurodivergent individuals. The study demonstrated how access to transportation and tourism can provide significant benefits by evaluating concepts of accessibility and proposing a more welcoming and adapted environments for all.

Notably, larger airports, which handle a greater number of passengers and possess more financial resources, tend to implement primarily attitudinal accessibility actions, which are less costly and simpler to execute. Considering the scale of these airports, a greater quantity of familiarization and structural initiative was expected, as they are busier, and the likelihood of individuals with diverse needs facing orientation and communication challenges is significantly higher compared to smaller airports.

This research faced limitations due to the scarcity of data and studies related to tourism and neurodivergence, particularly in Brazil, where only seven airports have documented accessibility actions. The lack of a centralized platform to access information about airport accessibility further complicated data collection, as this information is

scattered across various pages on airports websites. The lack of studies and the fragmentation of available information pose significant challenges for investigation and advancement in this field.

Neurodivergences encompass distinct characteristics, with each individual facing unique challenges. The concept of neurodiversity promotes a positive view that values differences, encouraging the natural and respectful integration of these individuals into society. This concept can guide the creation of more inclusive environments, not only in airports but also in other areas of transportation and tourism. This research underscores the ongoing need for studies, highlighting the obstacles preventing tourism from becoming an inclusive factor for neurodivergent individuals, while capitalizing on the diverse and enriching relationships this activity can foster.

There is a vast field for exploration in academic and consulting work on the topics discussed here, especially given the increasing prominence of the subject throughout the world. Future studies are urgently needed to propose new training methodologies for accommodating NDPs in air transportation, as well as research that includes the perspectives of neurodivergent individuals in their air travel experiences.

REFERENCES

Adey, P., Lin, W., Barry, K., Harris, T., Frétigny, J.-B., & Budd, L. (2024). Now boarding: Towards new geographies of aeromobility. *Progress in Human Geography*, *48*(6). https://doi.org/10.1177/03091325241257535

Barros, L. E. dos S. (2015). *Turismo e inclusão: a viagem de um autista.* (Master's Dissertation). Universidade de Brasília.

Bozkurt, S. S., Vuran, S., & Akbulut, Y. (2017). Design and Use of Interactive Social Stories for Children with Autism Spectrum Disorder (ASD). *Contemporary Educational Technology*, *8*(1). https://doi.org/10.30935/cedtech/6184

Brazil. (2016). *Turismo Acessível: MTur apresenta ações para viajantes com deficiência*. Retrieved August 24, 2024, from Brazilian Ministry of Tourism website: https://www.gov.br/turismo/pt-br/assuntos/noticias/turismo-acessivel-ministerio-apresenta-acoes-para-viajantes-com-deficiencia

Castro, R. (2010). *Acessibilidade de turistas com necessidades especiais ao transporte aéreo.* (Master's Dissertation). Universidade Federal do Rio de Janeiro.

Chang, Y.-C., & Chen, C.-F. (2011). Identifying mobility service needs for disabled air passengers. *Tourism Management*, *32*(5), 1214–1217. https://doi.org/10.1016/j.tourman.2010.11.001

Chang, Y.-C., & Chen, C.-F. (2012). Meeting the needs of disabled air passengers: Factors that facilitate help from airlines and airports. *Tourism Management*, *33*(3), 529–536. https://doi.org/10.1016/j.tourman.2011.06.002

Chiscano, M. C. (2021). Autism Spectrum Disorder (ASD) and the Family Inclusive Airport Design Experience. *International Journal of Environmental Research and Public Health*, *18*(13), 7206. https://doi.org/10.3390/ijerph18137206

Cruz, A. A. de F. (2019). *Infraestrutura aeroportuária: acessibilidade no Aeroporto Santos Dumont* (Monography). Universidade do Sul de Santa Catarina.

Davies, A., & Christie, N. (2018). The experiences of parents with children with disabilities travelling on planes: An exploratory study. *Journal of Transport & Health*, *11*, 122–129. https://doi.org/10.1016/j.jth.2018.10.002

Dempsey, R., Healy, O., Lundy, E., Banks, J., & Lawler, M. (2021). Air travel experiences of autistic children/young people. *Annals of Tourism Research Empirical Insights*, *2*(2), 100026. https://doi.org/10.1016/j.annale.2021.100026

Dos Santos, I., Da Silva, S.L., Camarotto, J.A., & Vidotti, H.G.M. (2024). Accessibility for passengers with hidden disabilities in air transport: a literature review. *Journal of the Air Transport Research Society, 3*. https://doi.org/10.1016/j.jatrs.2024.100033

Doyle, N. (2019, October 30). Richard Branson Opens Door To Bigger Thinking On Neurodiversity. *Forbes*. Retrieved from https://www.forbes.com/sites/drnancydoyle/2019/10/22/richard-branson-opens-the-door-to-bigger-thinking-on-neurodiversity-/

Doyle, N. (2020). Neurodiversity at work: a biopsychosocial model and the impact on working adults. *British Medical Bulletin*, *135*(1), 108–125. https://doi.org/10.1093/bmb/ldaa021

Floripa Airport. (2024). Aeroporto para todos. Retrieved August 25, 2024, from Floripa Airport website: https://floripa-airport.com/aeroporto-todos

Foresti, T., & Bousfield, A. B. da S. (2022). A compreensão da deficiência a partir das teorias dos modelos médico e social. *Psicologia Política*, *22*(55), 654–667.

Gaines, K., Bourne, A., Pearson, M., & Kleibrink, M. (2016). *Designing for Autism Spectrum Disorders*. Routledge.

Gotti, D., Morales, E., Routhier, F., Riendeau, J., & Hadj Hassen, A. (2024). Dehumanizing air travel: a scoping review on accessibility and inclusion of people with disabilities in international airports. *Frontiers in Rehabilitation Sciences*, *5*. https://doi.org/10.3389/fresc.2024.1305191

Heathrow Airport. (2021). *Open to all: Improving air travel for passengers who require support*. London: Heathrow Airport.

Hidden Disabilities Sunflower. (n.d.). Aeroportos ao redor do mundo. Retrieved October 17, 2024, from https://hdsunflower.com/br/insights/post/airports-around-the-world?_gl=1

Kersten, M., Coxon, K., Lee, H., & Wilson, N. J. (2020). "In Their Own Time": Parents Gently Push Their Autistic Youth Towards Independent Community Mobility and Participation. *Journal of Autism and Developmental Disorders*, *50*(11). https://doi.org/10.1007/s10803-020-04384-9

Kushano, E. S., & Almeida, W. G. (2008). Inclusão social, cidadania e turismo – uma investigação sobre a existência de serviços adaptados às pessoas com necessidades especiais nos meios de hospedagem da região metropolitana de Curitiba. *Revista Brasileira de Pesquisa Em Turismo*, *2*(4), 88–101. https://doi.org/10.7784/rbtur.v2i4.119

Lazzarini, F. S., & Elias, N. C. (2022). História Social e Autismo: uma Revisão de Literatura. *Rev. Bras. Ed. Esp*, *22*, 349–364. https://doi.org/10.1590/1980-54702022v28e0017 x`

Linhares, M. B. M., & Martins, C. B. S. (2015). O processo de autorregulação no desenvolvimento de crianças. *Estudos de Psicologia, 32*(2), 281-293. http://dx.doi.org/10.1590/0103-166X2015000200012

Major, W. L., & Hubbard, S. M. (2019). An examination of disability-related complaints in the United States commercial aviation sector. *Journal of Air Transport Management*, *78*, 43–53. https://doi.org/10.1016/j.jairtraman.2019.04.006

Marinho, J. R. S., & Zamo, R. D. S. (2018). Terapia assistida por animais e transtornos do neurodesenvolvimento. *Estudos e Pesquisas Em Psicologia*, *17*(3), 1063–1083. https://doi.org/10.12957/epp.2017.37702

Mendonça, S. (2022). *A interseccionalidade entre autismo e transgeneridade: diálogos afetivos no Twitter.* (Master's Dissertation). Universidade Federal de Minas Gerais.

Mora, M. L. A. (2022). *Turismo e acessibilidade: análise dos obstáculos enfrentados por pessoas autistas durante a prática turística* (Monography).

Napoli, P. (2022, July 27). Neurodiversidade: qual sua contribuição para o tema da inclusão? | Politize! Retrieved December 14, 2024, from Politize.com.br website: https://www.politize.com.br/neurodiversidade

Ortega, F. (2009). Deficiência, autismo e neurodiversidade. *Ciência & Saúde Coletiva*, *14*(1), 67–77.

Peterson, C. M., Birkeland, R. W., Barsel, S., Statz, T. L., Gaugler, J. E., & Finlay, J. M. (2022). "Sick with stress": perspectives on airport travel from persons living with dementia and their travel companions. *Disability & Society*, *39*(1), 1–21. https://doi.org/10.1080/09687599.2022.2070060

Pfeiffer, B., Davidson, A. P., Brusilovskiy, E., Feeley, C., Kinnealey, M., & Salzer, M. (2024). Effectiveness of a peer-mediated travel training intervention for adults with autism spectrum disorders. *Journal of Transport & Health*, *35*, 101781–101781. https://doi.org/10.1016/j.jth.2024.101781

Poria, Y., Reichel, A., & Brandt, Y. (2009). The Flight Experiences of People with Disabilities: An Exploratory Study. *Journal of Travel Research*, *49*(2), 216–227. https://doi.org/10.1177/0047287509336477

Qing, Z., Sun, C., & Reneker, J. (2020). Evaluation of Airport Wayfinding Accessibility with the Use of a Wheelchair Simulator. *Transportation Research Record: Journal of the Transportation Research Board*, *2675*(4), 52–60. https://doi.org/10.1177/0361198120980445

Quilty, S. M. (2003). Achieving recognition as a world class airport through education and training. *Journal of Air Transportation*, *8*(1).

Rissato, H. (2023). A importância do ambiente terapêutico para pessoas autistas. Retrieved December 14, 2024, from Genial Care website: https://genialcare.com.br/blog/ambiente-terapeutico-inclusivo/

Rowello, L. (2021). National Geographic Portugal. Retrieved December 14, 2024, from National Geographic Portugal website: https://www.natgeo.pt/viagem-e-aventuras/2021/12/como-as-companhias-aereas-estao-a-facilitar-as-viagens-para-os-passageiros-autistas

Sassaki, R. K. (2003). *Inclusão no lazer e turismo – em busca da qualidade de vida.* São Paulo, Brazil: Áurea.

Sheller, M., & Urry, J. (2006). The New Mobilities Paradigm. *Environment and Planning A: Economy and Space*, *38*(2), 207–226. https://doi.org/10.1068/a37268

Silva, T. N. R. da, Guarda, J. B. de S., Silva, L. L. G. da, Figueiredo, J. P., & Menegon, N. L. (2016). Passageiros com deficiência no transporte aéreo brasileiro: diferentes atores, perspectivas semelhantes. *Gestão & Produção*, *24*(1), 136–147. https://doi.org/10.1590/0104-530x1681-15

Singer, J. (1999). "Why can't you be normal for once in your life?" From a problem with no name to the emergence of a new category of difference. In M. Corker & S. French (Eds.), *Disability Discourse* (pp. 59–67). Buckingham, UK: Open University Press.

Small, J., McIntosh, A., Almond, B., & Darcy, S. (2023). Flying into Uncertainty: Part 2 – Flying with Non-Mobility Disabilities. In J. Small (Ed.), *The passenger experience of air travel: a critical approach* (pp. 139–161). Bristol, UK: Channel View Publications.

Tata, A., Ebbatson, D. M., & Fluke, C. (2024a). Exploring airport navigation challenges faced by airline travelers with hidden disabilities. *International Journal of Aviation, Aeronautics, and Aerospace*, *11*(1). https://doi.org/10.58940/2374-6793.1871

Tata, A., Ebbatson, D. M., & Fluke, P. C. (2024b). Exploring the Implementations of Hidden Disability Assistance Program in Australian Airports. *International Journal of Aviation, Aeronautics, and Aerospace*, *11*(2). https://doi.org/10.58940/2374-6793.1904

Teixeira, L. L. C., Pantoja Júnior, J. M. S., Neto, F. X. P., Targino, M. N., Palheta, A. C. P., & Silva, F. A. da. (2011). Síndrome de La Tourette: revisão de literatura. *Arquivos Internacionais de Otorrinolaringologia*, *15*, 492–500. https://doi.org/10.1590/S1809-48722011000400014

World Health Organization. (2023). Disability and Health. Retrieved December 2, 2024, from World Health Organization website: https://www.who.int/news-room/fact-sheets/detail/disability-and-health

Yau, M. K., McKercher, B., & Packer, T. L. (2004). Traveling with a disability: more than an access issue. *Annals of Tourism Research*, *31*(4), 946–960. https://doi.org/10.1016/j.annals.2004.03.007

Author information

Rafael Teixeira de Castro
Professor of the Bachelor's Degree in Tourism at the Celso Suckow da Fonseca Federal Center for Technological Education (CEFET/RJ) UnED Petrópolis. Bachelor in Tourism and PhD in Transportation Engineering.
Contributions: research design, data collection, data analysis and discussion.
E-mail: rafael.teixeira@cefet-rj.br
ORCID: https://orcid.org/0000-0002-7672-0800

Mariana Miranda Batista
Bachelor's Degree in Tourism from the Celso Suckow da Fonseca Federal Center for Technological Education (CEFET/RJ) UnED Petrópolis.
Contributions: literature review, data collection, data analysis and discussion.
E-mail: marianamiranda7@hotmail.com
ORCID: https://orcid.org/0009-0002-1511-1646

Maria Eduarda Santos Andrada
Bachelor's degree in Tourism from the Celso Suckow da Fonseca Federal Center for Technological Education (CEFET/RJ) UnED Petrópolis.
Contributions: literature review, data collection, data analysis and discussion.
E-mail: dudaandrada2000@gmail.com
ORCID: https://orcid.org/0009-0002-6800-6276