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Constraints and travel facilitators for tourists with disabilities

Limitaciones y factores que facilitan los viajes de los turistas con discapacidad

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Resumen

Las personas con discapacidad enfrentan barreras funcionales y sociales que dificultan su acceso a los servicios turísticos. Planificar un viaje para turistas con discapacidad (TWD) implica superar múltiples desafíos. Este estudio identifica los principales problemas de accesibilidad y restricciones de viaje que enfrentan los TWD. Se empleó un enfoque cualitativo, recopilando datos de dos grupos focales: uno con miembros de una asociación de personas sordas que viajaban con frecuencia y otro con turistas con discapacidades motoras, intelectuales, visuales y sensoriales, apoyados por la Fundación ONCE. Además, se realizaron entrevistas a informantes clave para complementar los hallazgos. El análisis de datos siguió cuatro fases: recopilación, codificación, sistematización e incorporación al software Iramuteq. Los resultados destacan los principales desafíos, incluyendo la movilidad en el transporte público, el manejo del equipaje y las barreras de comunicación. Los principales facilitadores de accesibilidad fueron viajar en grupos organizados con personas con discapacidades similares, la asistencia de otras personas y la organización de viajes en grupos pequeños. Esta investigación es relevante para profesionales del turismo, grupos de defensa de la discapacidad e investigadores, ya que proporciona información sobre las barreras que enfrentan los TWD y resalta las adaptaciones necesarias en los servicios turísticos para promover la inclusión. También fomenta la reflexión en la industria sobre cómo ofrecer servicios más funcionales y accesibles

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Abstract

People with disabilities face functional and societal barriers that hinder their access to tourism services. Planning a trip for tourists with disabilities (TWD) involves overcoming multiple challenges. This study identifies key accessibility issues and travel restrictions TWD encounter. A qualitative approach was used, collecting data from two focus groups: one with members of a deaf association who frequently traveled and another with tourists with motor, intellectual, visual, and sensory disabilities supported by the ONCE Foundation. Additionally, key informants were interviewed to complement the findings. Data analysis followed four phases: collation, coding, systematization, and input into the Iramuteq software. The results highlight major challenges, including mobility on public transport, luggage handling, and communication barriers. The main accessibility facilitators were traveling in organized groups with similar disabilities, assistance from others, and small-group travel organization. This research is relevant for tourism professionals, disability advocacy groups, and researchers, as it provides insights into barriers faced by TWD and highlights necessary service adaptations. It also encourages industry professionals to enhance inclusivity, ensuring more functional and accessible tourism services.

Key words: accessible tourism; tourists with disabilities (TWD); tourism services; travel planning; constraints; social barriers.

1 Introduction

According to the World Health Organization (WHO, 2011), disability affects hundreds of millions of families worldwide. Around 10% of the world's population, about 650 million, live with a disability (Disable World, 2022). Furthermore, this number is expected to increase in the coming years, primarily due to the increasing proportion of aging citizens. In the European Union (EU), in 2018, about 24.5 % of people aged 16 and over declared a disability. About 7.0% declare a severe disability (strongly limited), and about 17.5% have a moderate disability. The European Commission estimates that approximately 87 million people have a disability and are often prevented from participating in society and the economy due to structural and attitudinal barriers in Europe (European Commission, 2021).

The Americans with Disabilities Act (ADA) was the first step in implementing guidelines for hotels, travel agencies, and other businesses to make facilities more accessible for people with disabilities,

thus recognizing them as consumers (Burnett and Baker, 2001). Similarly, Australia was a leader in human rights and accessibility and introduced the Disability Discrimination Act in 1992. Along with the United Kingdom and other countries, it was at the forefront of establishing the United Nations Convention on the Rights of Persons with Disabilities (Vila et al., 2015).

In Spain, the Declaration of Madrid in 2002 agreed on the inclusion of people with disabilities in society, emphasizing human rights as a factor for inclusion, social opportunities such as employment, and eliminating any barriers that would generate exclusion. Additionally, the Congreso Ocio, Inclusión y Discapacidad (Congress of Leisure, Inclusion, and Disability) addressed the issue of accessible tourism, stating the conditions that must be met to ensure global infrastructure and tourist spaces. Also, it emphasizes the conditions that enable all people to participate in all kinds of tourism (Council of Europe Committee of Ministers, 2006).

The right to accessibility, recognized since the United Nations Convention on the Rights of Persons with Disabilities and its protocol in 2006, represents one of the most important advancements. Therefore, tourism must adapt to this reality with inclusive approaches to accomplish everyone's desires and travel rights (Stein et al., 2007).

However, despite the achievements made through these legal marks and events worldwide discussing and guaranteeing that everyone can travel, negative attitudes like discrimination and social exclusion remain. Brittain, Biscaia, and Gerard (2020) identify ableism as a key barrier, as stakeholders design and provide daily experiences mainly for people without disabilities. Ableism promotes a system of prejudiced attitudes and discriminatory behaviors toward people with disabilities in which populations and societies can be socialized. These attitudes and behaviors can lead to social stigma and hostile behavior toward people with disabilities, as well as inadequate physical facilities to meet their needs. These attitudes reinforce interpersonal and structural constraints (Yau et al., 2004; Mckercher and Darcy, 2018), making many people feel out of place (Darcy and Taylor, 2009; Shaw and Coles, 2004).

Accessible tourism is an important growing market, representing around 15% of the world's population (WHO, 2011). It is understood that, in general, all spaces and any barrier that prevents tourists with disabilities (TWD) from participating in tourist activities should be eliminated, not only for legal and social responsibility obligations but also for representing a significant business opportunity.

In this study, constraints are any hindrance, obstacle, attitude, or behavior that limits or prevents the social participation of people with disabilities, as well as the enjoyment and exercise of their rights to accessibility, freedom of movement and expression, communication, access to information, understanding, safe circulation, among others. The classification is a) urban barriers, those existing

on roads and in public and private spaces open to the public or for collective use; b) architectural constraints, those existing in public and private buildings; c) constraints in transport: those existing in systems and means of transport; d) constraints in communications and information: any obstacle, attitude, or behavior that makes it difficult or impossible to express or receive messages through communication and information technology systems; e) attitudinal constraints: attitudes or behaviors that prevent or hinder the social participation of people with disabilities on equal terms and opportunities with other people; f) technological constraints: those that hinder or impede the access of people with disabilities to technologies (Turco et al., 1998; Cameron et al., 2003; Buhalis and Darcy, 2010; Lima, 2020).

Regarding attitudinal constraints, ignorance can lead to a series of negative attitudes and overt or covert discrimination, and some people with disabilities choose either to hide their disabilities from tourism service providers (McKercher et al., 2003).

Tourists with disabilities face functional and social constraints that, most of the time, can negatively impact travel and tourism and the consumption of tourism services. Going on a trip for TWD goes beyond buying a plane ticket or booking an apartment in a hotel, considering many other challenging aspects to be faced before and during the trip (Yau et al., 2004; Darcy, 2010).

Based on the literature review, there is a gap in the constraints and restrictions faced by TWD during their travels. Considering this scenario, the research questions are: What are the main limitations and needs of tourists with disabilities during their travels? What are the central adaptations (travel facilities) for TWD before and during their trips?

Considering these issues, the research aims to identify travel accessibility and constraints experienced by TWD while traveling. To this end, we investigated the real needs of TWD, their challenges during trips, and their main difficulties in transportation, accommodation, and visiting tourist attractions. Thus, we focus only on factors of greater importance in the context of the social model of disability, which supports the United Nations (UN, 2006) Convention on the Rights of Persons with Disabilities (CRPD).

2 Tourism Consumption Experiences

When discussing travel barriers for people with disabilities, contextual challenges arise. Initial research focused on interpersonal and intrapersonal barriers, such as physical, cognitive, or psychological limitations (Smith, 1980). These barriers can be linked to specific disabilities or lack of knowledge, social skills, and dependence (Kennedy et al., 1991). Barriers to tourism encompass physical,

economic, governmental, industrial, and hospitality attitudes toward safety. However, barriers may not always be absolute and can vary. This paper defines those who travel despite facing societal and environmental barriers as "tourists with disabilities" (Darcy and Daruwalla, 1999).

The social model further highlights linguistic, subjective, and emotive challenges when developing a framework to assess barriers. The concept of barriers in tourism has evolved, and early studies have laid the foundation for current research. However, it is critical to note that these early works may have had limitations in their conceptual understanding. One example is Smith's (1980) original work, which was built on leisure studies research with little discussion of the conceptualizations of disability. In addition, the focus, along with other early studies by Muloin (1992) and Murray and Sproats (1990), was disproportionately on people with mobility disabilities with high or very high support needs.

Three types of tourism constraints exist: structural (environmental), interpersonal, and intrapersonal. Structural constraints are associated with the individual's broader external context, including the lack of available time, financial constraints, transportation difficulties, and lack of suitable infrastructure (Crawford & Godbey, 1987). According to Nyaupane and Andereck (2008), the main structural constraints identified in tourism literature may be classified into three sub-dimensions: time, financial resources, and destination attributes.

Interpersonal constraints can occur during interactions with an individual's social network, service providers, or strangers or because an individual lacks a partner to engage in leisure activities. Research indicates that many interpersonal factors can prevent people from participating in tourism activities. The most often cited include no companion and the influence of family and friends (Devile & Kastenholz, 2018).

Concerning intrapersonal constraints, the literature emphasizes the following factors: personality, motivations, emotions, personal fears, self-esteem, individual beliefs, perception of results from participation, and previous tourist experiences. The most common intrapersonal constraints found in the literature review include health condition (Bialeschki & Henderson, 1988; Hung & Petrick, 2010; Nyaupane & Andereck, 2008), age (Bialeschki & Henderson, 1988; Fleischer & Pizam, 2002; Nyaupane & Andereck, 2008), personal fears (Gilbert & Hung & Petrick, 2010; Nyaupane & Andereck, 2008) personal skills (Daniels et al., 2005) and lack of interest (Nyaupane & Andereck, 2008).

In addition to the above-mentioned constraints, people with disabilities are affected by many other factors that can influence their tourism decisions and experiences (Darcy and Buhalis,2010).

In the tourism industry, studies have shown that TWD faces constraints when consuming tourism products and services in areas such as travel agencies, transportation, accommodation, and

restaurants (McKercher et al., 2003; Yau et al., 2004; Darcy, 2010; Hoyo and Valiente, 2010; Olya et al., 2018; Lima et al., 2021). However, relatively few studies (Kennedy et al., 1991; Cameron et al., 2003; Lima et al., 2014; Lima, 2016; Agovino et al., 2017) have examined the accessibility of facilities and opportunities at tourism destinations.

Studies emphasize the Web Content Accessibility Guidelines (WCAG) 2.0 recommended by the World Wide Web Consortium (W3C, 2014) to make web content accessible for people with disabilities. Examples of such studies include those by Eusébio et al. (2020), Fernandes and Torres (2021), Carneiro et al. (2021), and Fernández-Villarán et al. (2021).

Fernández-Villarán et al. Fernández-Villarán et al. (2021) conclude that there is a significant shortage of digital information on accessibility available on tourist destinations' official websites and apps. The research highlights the need to improve destinations' digital platforms to meet the specific demands of this audience and promote more inclusive tourism.

Zajadacz (2015) argues that there is no universal solution for creating models of tourism offerings based on various disability models. According to the researcher, diverse and personalized tourism offerings are needed due to constant changes in the tourism market. Studies on the evolution of disability models, including social and medical models, require a synthesis of paradigms at the core of conceptualization.

McKercher and Darcy (2018) propose a four-level framework to understand the needs of tourists with disabilities (TWD). The first level reflects general tourist issues, while the second level identifies constraints faced by all people with disabilities (PWD). The last two levels focus on individual disabilities. Agovino et al. (2017) reinforce previous studies on constraints in accessible tourism, including environmental, economic, and information barriers. Their survey of Italy's tourism demand for TWD revealed weaknesses in services such as metro stations, accommodation, food, awareness, and staff training.

Darcy and Ravinder (2012) studied barriers faced by passengers with disabilities in air travel. Economic barriers, such as high ticket prices, were found to be significant. However, prices have improved over time, and low-cost airlines have increased services for cost savings. Nonetheless, these services may not meet the specific needs of passengers with disabilities. Other constraints include limitations during check-in, baggage delivery, in-flight services, boarding, and disembarking. Many airlines worldwide, particularly in Asia, do not accommodate passengers with disabilities due to low-cost flight service elements. Additionally, online ticket purchasing is complicated by document restrictions (Yau and Packer, 2004).

Darcy and Ravinder's (2008) study also brings reflections about information. The authors cite Bad Mouthing: The Language Of Special Needs by Corbett (2013), arguing that language significantly influences attitudinal constraints such as perceptions, policies, and practices. Finally, Darcy and Ravinder (2012) conclude that improving air travel infrastructure, services, restroom access, aircraft, better preparation of employees, and accurate information is necessary.

Other information barriers are noted in social media. For example, Eichhorn et al. (2008) researched accessible tourism on social media. This study showed that despite fulfilling the function of reliability at regional and national levels, social media only partially meet the international requirements to make them accessible.

Regarding the consumption of food and beverage spaces, Lima et al. (2021) investigated the satisfaction of consumers with visual impairments and the services provided by restaurants in a shopping mall in Brazil. None of the 19 surveyed restaurants presented an updated Braille menu, and all consumers with disabilities reported dissatisfaction with the service and physical spaces of the mall's restaurants.

Devile, E., and Moura, A. (2021) identified different mechanisms to reduce or eliminate constraints to participation in tourist activities. A set of negotiation strategies was identified regarding the trip's organization, enabling effective participation in tourist activities. As a source of information, communication, and attraction, the Internet, social media, and mobile technology allow new solutions, approaches, and practices that facilitate travel for everyone, especially tourists with disabilities.

2.1 Spain in the Context of Accessible Tourism

In 2016, Spain surpassed 76.6 million tourists (Observatory of Universal Accessibility for Tourism in Spain – ONCE, 2017). Therefore, Spain is considered one of the countries where accessibility is an attribute of tourist opportunity. Furthermore, due to its privileged location and pleasant climate, it is a well-established destination with a long tourist tradition, making it a desirable destination for accessible tourism (Fundacion ONCE, 2017).

Another critical aspect to consider when discussing the accessibility of destinations is that Spain has an aging population. Also, around 3.8 million people have some disability, representing an average of 8.5% of the population.

According to Vila et al. (2015), geographic aspects and population densities are relevant, as Spain has a firm social policy. For example, it was one of the first countries to defend the rights of people with

disabilities through the Social Integration Laws of Persons with Disabilities in 1982 and the Equal Opportunities and Universal Access for Persons with Disabilities Act (Vila et al., 2015).

According to ONCE (2017), the key criteria for selecting a destination include proper customer treatment and service, accessible information regarding the destination's accessibility, tourist resources, and mobility within venues and establishments.

Another critical data from the ONCE is that 94% of respondents (out of 412) spent at least one night away from their usual residence for leisure or business reasons in the last two years. Furthermore, 51% reported having traveled 1 to 5 times, 28% 6 to 10 times, and 15% claimed to have traveled more than 10 times in Spain during this period (Observatory of Universal Accessibility for Tourism in Spain, 2017). Although there is a consensus among tourism service providers that accessible tourism is a segment that needs better attention in the market, there is still a lack of awareness about the growing demand for accessibility, which affects the development of new accessible tourism products (Bowtell, 2015).

Comparing these data with travel frequency data for people without disabilities, it appears that TWD from Spain travels with almost the same frequency as tourists without disabilities, with an average of eight trips in two years—Vila et al. (2015) state that one of Spain's main challenges is accessibility. Many resources and services are in a poor state due to being built in the 1970s without accessibility in mind.

To ensure a competitive market, Vila et al. (2015) suggest that Spanish tourism planners study other accessible tourism destinations, analyze the supply of in-demand products for consumers with disabilities, and investigate possible individual factors and qualities that can help increase local tourism performance. In addition, the authors recommend renewing and adapting to tourist accessibility trends in response to the aging global population.

3 Methodology

This research is based on the qualitative method. As Creswell (2008) explains, one of the main reasons for conducting qualitative research is that the study is exploratory. In the qualitative approach, exploratory research - or exploratory study - aims to learn the phenomenon being studied as it appears or happens in the context in which it is inserted. For this type of research in the Humanities and Social Sciences, the qualitative approach allows for a better understanding of human behavior and the social context. In this process, exploratory research allows the researcher to look at qualitative data systematically, with a detailed understanding or interpretation of the analyzed phenomenon.

The sample selection criterion was people with disabilities who had experience traveling in and out of Spain, including trips to the Canary Islands, at any time. The consumption of various tourist facilities, transport, and support equipment, such as airplanes, accommodation, boats, trains, and metro, was also considered. The key informants named in this research as experts were selected by prioritizing community members according to the perspective of McKenna and Main (2013). Seven experts were integrated into the research.

The research participants were organized into two focus groups. The focus groups were separated due to each one's specific needs. The first was conducted at the Asociación de Personas Sordas de La Provincia de Las Palmas with two deaf individuals who had been previously selected because they frequently travel. The second focus group was held at the ONCE Foundation and was attended by five people with physical, intellectual, visual, and sensory disabilities. Associations in the Canary Islands were chosen because of their relationship of trust in scientific research with vulnerable groups led by the Universidad Las Palmas de Canarias. One of the second focus group participants is a board member of the ASPAYM (Association of Persons with Spinal Cord Injury and Other Physical Disability).

The procedures for collecting information in the focus groups were guided by Edmunds (2000). Each discussion group lasted around 3 hours. A moderator developed and conducted three scripts. In addition, an interpreter was added for the focus group with the deaf participants. Script 1 aimed to study the profile of TWD, script 2 addressed the planning and consumption habits of the trip, and script three was designed to detect information about the main facilities and difficulties that TWD faced during their journey. This information was further deepened through individual interviews with each participant with a disability.

After the focus group, two analysis categories were established: facilities and difficulties. Next, the comments made by tourists with disabilities were transcribed and analyzed, considering their semantic developments and implications or representations about the facilities and difficulties encountered during their trips.

For the processing and analysis of the interviews, this study adopted the content analysis method (CA) (Bardin, 2016). Data analysis was systematized in four stages:

1st stage: organization of material collected and other research-related materials.

2nd stage:

a. encoding: record units.

b. analysis of context units.

3rd stage: the systematization of answers to analyze the facilities and difficulties or limitations of TWD.

4th stage: preparation of the textual corpus and submission to the Iramuteq software version 0.7, Alpha 2 Laboratoire Lerass, which processed the data, counted the absolute frequency of words, generated graphic images of the most recurrent words, commented on the focus groups, and suggested words and terms more strongly related to one another.

Iramuteq is free software developed under open-source logic. It is anchored in the statistical software environment and allows general text analysis. Iramuteq represents an opportunity to undertake statistical analysis of qualitative texts produced through in-depth interviews, reports, and various documents (Camargo and Justo, 2013; Souza et al., 2018).

After systematizing the data collection, we organized the transcripts of the focus groups into a text corpus that presented the following:

(a) the Word Cloud, which graphically shows the words that stood out throughout the textual corpus.

(b) the similarity analysis allowed a greater understanding of how recurrent words are related to other words within the text.

(c) Dendrogram analysis visualizes the clustering process step by step and analyzes the similarity distance levels.

In addition to counting words, the similarity analysis creates clusters of entries most closely related to each other in our corpus. These clusters help determine the context in which participants used the most relevant words. We systematized the travel frequency results of TWD in an Excel sheet for map preparation using QGIS 3.0 to provide spatial information on the destinations visited by the survey's key informants (Table 2).

4 Results and Discussions

The main points of this discussion analyzed the constraints and limitations faced by TWD during their travels, which were deepened through 3 (three) analysis segments: word cloud, similarity, and dendrogram. These analyses were compiled from the interviews conducted with TWD experts. In this context, Table 1 shows the profile of the interviewed experts, divided as follows: type of disability, how they acquired the disability, age, living arrangements, occupation, and level of education. Table 2 was organized based on the travel experiences collected during the focus group. The travel destinations were recorded according to the spontaneous accounts of each key informant, not according to any standardization.

Table 1 - Profile of Experts TWD

TWD	Type of disability	Origin of disability	Age	Living with	Work	Education level
M.A	Physical (a)	Infancy illness	59	Family	No	Elementary
M.B.	Physical (b)	Congenital	60	Family	No	Graduate
L.O.	Physical, mental, and visual	Occupation, accident, illness, stress, and genetic	51	Alone	No	Graduate
A.B.	Visual impairment	Degenerative disease	42	Wife	No	Postgraduate
D.A.	Physical, visual, auditive, and sensorial	Stroke	46	Alone	No	Elementary
S.E.	Deaf (a)	Does not know	53	Wife	Yes	Graduate
J.V.	Deaf (b)	Degenerative disease	41	Family	Yes	Graduate

Source: authors (2023).

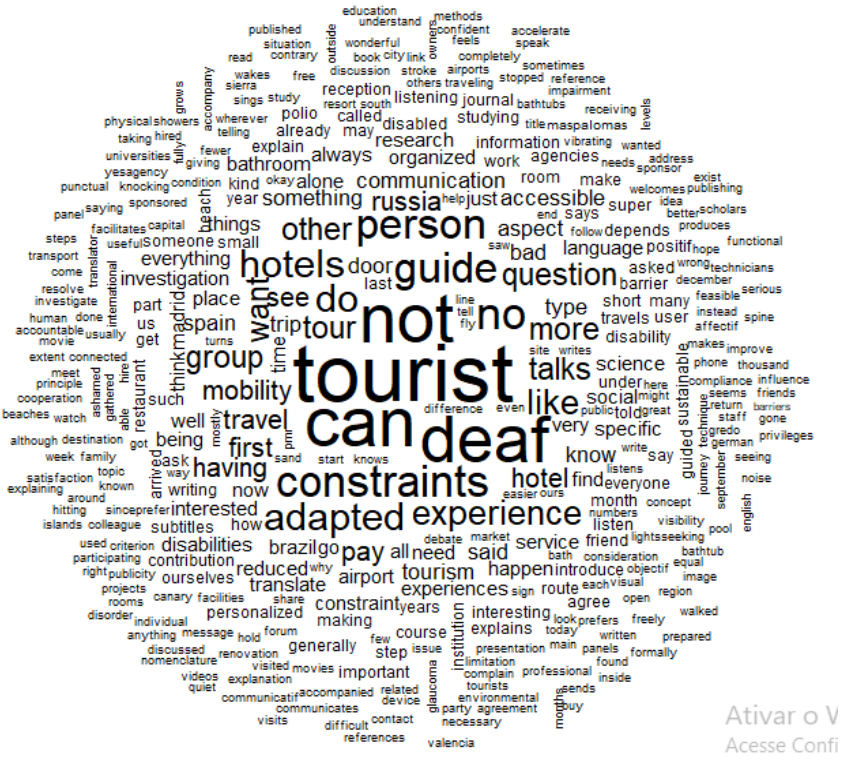
Table 2 - Travel experience of experts TWD

TWD	Planning the trip	An accessible travel agency requested?	Which destinations or traveled to	What types of assistance do you request the most?
M.A	Associations and organized groups	No	Spain, Canary Island, Europe	Equipment to facilitate mobility, usually an airport scooter, travel insurance
M.B.	Associations and family	No	Canary Island, Spain, London	Adapted cars, adapted buses, special equipment, airport (PMR), and travel insurance.
L.O.	Alone, family and friends	No	Canary Island, Madri, Europe	Travel insurance. Equipment to facilitate mobility (need help to carry equipment)
A.B.	Alone and family	No	Sierra de Gredos National Park, Castilla y Leon, Valencia, Canary Island	Travel insurance and guide dog.
D.A.	With companion	No	Spain, Madri, Tenerife (Arona)	Medical assistance
S.E.	Alone, in association, in groups, or with family	Yes	Spain,France, Portugal, Russia, Tailandia, Marrocos, Andalucia, Galicia, Catalunia	Travel Insurance
J.V.	Alone	No	Spain,Europe , Peru, Mumbai, Japan, Maroco, Regiões Galicia, Catalunya, Cantabria, Pais Vasco, Castilla y Leon, Castilla, Madri, Comunidad Valenciana, Murcia, Extremadura, Baleares Island , Canary Island.	Travel Insurance

Source: authors (2023).

In terms of residence, five respondents live with someone or in a family, and the others live alone. As for the education level of the respondents, two have primary education, four have high school graduation, and one has a postgraduate degree. To protect the identity of the interviewees, we changed their names and used abbreviations (name abbreviation followed by the kind of disability). All information recorded was obtained with the consent of the interviewees. After processing the data using the Iramuteq software, the first output to be analyzed is the word cloud (Figure 1).

Figure 1. Word cloud resulting from focus group transcripts.



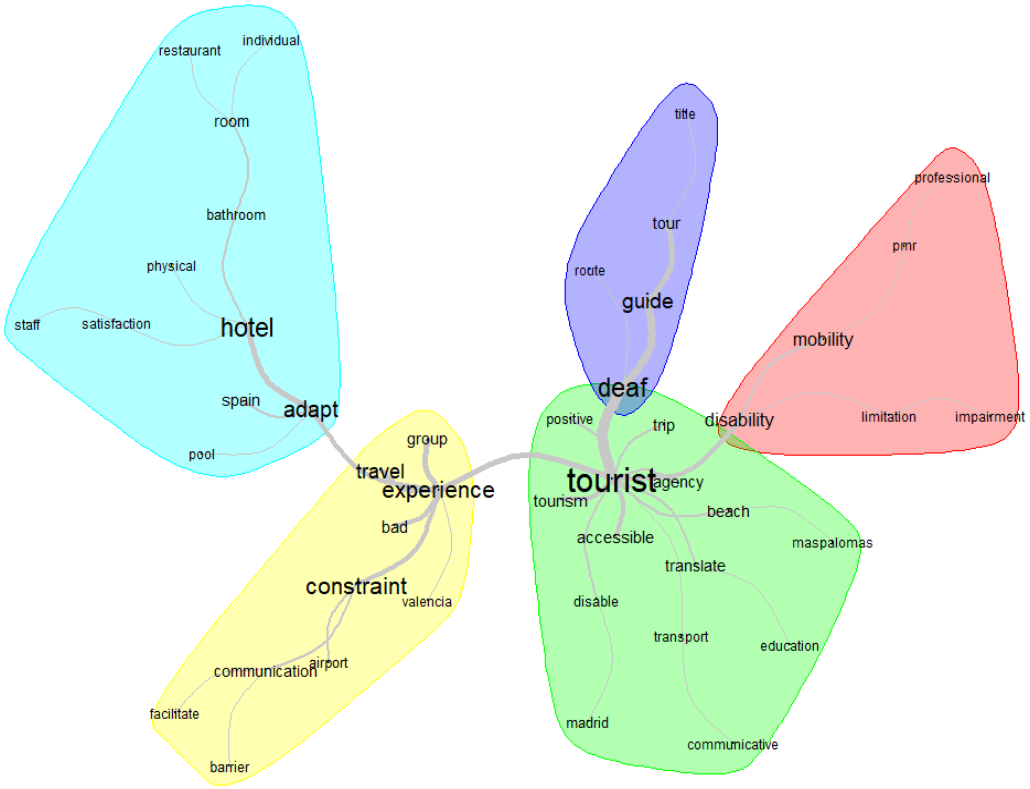
Subtitle: Generated using Iramuteq software version 0.7, Alpha 2 Laboratoire Lerass.

Source: authors (2023)

The word cloud prominently reveals the words 'tourist,' 'can,' 'deaf,' 'constraints,' 'adapted,' 'experience,' 'person,' and 'guide.' The words 'can' and 'not' at either end of the more significant highlighted word 'tourist' reveal that leisure activities include not only conditioning factors but also facilitating factors and how they combine to promote participation or non-participation and the experiences of people with disabilities. Structural facilitators refer to factors associated with the availability of accessible tourist services that can encourage individuals with disabilities to engage in tourism (Devile and Kastenholz, 2018).

The words 'experience,' 'person,' and 'guide' represent interpersonal constraints based on the social interactions of people with disabilities, whether with others, with guides, or even due to the absence of such guides. Although their impact and intensity may vary depending on the type of disability, the interpersonal constraints identified in the literature review appear to transcend different groups of people with disabilities (Devile and Kastenholz, 2018).

Figure 2. Similarity analysis of the most strongly related corpus in the texts



Subtitle: Generated using Iramuteq software version 0.7, Alpha 2 Laboratoire Lerass.

Source: authors (2023)

Similarity analysis can help assess the central experiences of travelers with disabilities (TWD). In summary, the similarity analysis chart (Figure 2) separates the clusters of words and even relates them. Furthermore, for visual reasons and a more accurate analysis of the most relevant attributes, terms that repeat less than 20 times were excluded, making the data visualization more intelligible.

The similarity analysis created five clusters—blue, yellow, purple, green, and red—in a dynamic where the most expressive ones revealed a strong relationship between the terms 'constraints,' 'travel experience,' and 'tourist.' Unlike the word cloud, the similarity analysis chart shows terms and their respective links to each other.

The purple cluster intersecting the green cluster refers to deaf tourists and their experiences with tour guides. As reported, the constraints encountered by deaf TWDs in travel are related to *TWD deaf (a)*.

In this context*, S.E Deaf* reports: "I did not have a good experience with a travel agency, which called itself accessible. The agency hired a guide who spoke into the microphone during the tour, deaf people did not understand". It was also addressed in the focus group reports, which included information about tour guides using only microphones and the fact that the movies and videos did not have subtitles.

Similar to constraints, facilitators may also belong to one of three dimensions: interpersonal, intrapersonal, or structural. They promote the formation of preferences and encourage participation.

S.E. Deaf advised not to request assistance, although he considers that companies should offer interpreter services for deaf people. *S.E. Deaf* related that he buys trips over the Internet but prefers to travel with the Association of the Deaf, of which he is a member, as he feels more secure among deaf people who already live and can communicate. Another advantage of trips organized by the association is small groups.

Regarding the accessibility for deaf tourists, *S.E. Deaf* mentioned that alarm clocks with vibration and brightness in hotel rooms are a feature. This equipment helps a deaf tourist wake up and not miss a flight; for example*, J.V. Deaf* reported that he travels more than three times a year alone, does not use an accessible travel agency, and prefers to plan the trip independently. This way, he needs assistive technology that provides his independence.

The term 'constraints' highlighted in the yellow cluster is related to the terms 'travel,' 'experience,' 'communication,' 'airport,' and the word 'Valencia.' This relation shows some limitations and difficulties that can occur in Valencia airport, which can also be related to the aspects of communication and some barriers since, at the end of the cluster, we find the word ease on one side and the word barrier on the other.

The challenge with transport is related to failures in providing assistance in air transport and the consequent dependence on professionals to assist, especially in air transport (Devile and Moura, 2021).

Regarding her experiences at airports, the interviewee, *M.A., who has a physical disability*, reports that she has never used any travel app during her trips. However, she frequently uses electric scooters at airports, which she considers a facilitator for moving around and for her comfort. Concerning this equipment, companies that rent scooters are increasingly available, carrying out accessible tours with trained guides.

Regarding communication, attention should be paid to the report of *J.V. Deaf*, who states that trips to Japan and Morocco were positively reported. In contrast, trips to Cuzco and Mumbai yielded the most negative comments regarding difficulties with attitudinal and communication constraints. *J.V. Deaf* organized the experiences reported in trips to other continents, including inter-island trips in the Canary Islands and Huelva. In his opinion, boat companies in the Canary Islands have not yet adequately addressed providing services for passengers with disabilities. For example, on the website of the largest boat company in the Canary Islands, there is no information about accessibility in maritime transport. The lack of adequate and accessible digital data hampers the decision-making of people with disabilities about their travels (Fernández-Villarán et al., 2021).

J.V. Deaf argues that companies that organize trips should be concerned with communication for deaf people, such as providing subtitles during excursions.

The green cluster shows the tourist as the central term linked to 'tourism,' 'agency,' 'accessibility,' 'beach,' 'Maspalomas,' and 'disability' in an intersection with the pink cluster. In this context, we highlight the information collected from tourist *D.A., including physical, visual, auditive, and sensor disabilities. D.A. Physical, visual, auditive, and sensor disabilities* visited the accessible beaches of Arona on the island of Tenerife and considered them accessible, particularly the beach of Playa de Los Cristianos. However, he found that the beach of Maspalomas in Gran Canaria is unsuitable for TWD. Beaches adapted with amphibious chairs, foot washes, and support staff are essential when choosing a beach.

Maspalomas on Canaria Island has many stairs at various points of access to the beach. Despite numerous hotels offering adapted taxicabs with wheelchair lifts for short journeys in Playa del Inglés, Maspalomas, and Meloneras and transfers to the airport, access to the beach is poor compared to Los Cristianos in Tenerife.

In another branch of the green cluster, linked to the term 'tourist,' the words 'tourism,' 'disabled,' and 'Madrid' appear. For L.O. *physical disability* who have physical, mental, and visual impairments, adapted cars are most important to facilitate a trip. "In Madrid, it was impossible to carry suitcases on subways. I felt powerless and had to ask for help many times," L.O. commented. Despite *L.O. physical disability* difficulties getting around by metro in Madrid, the Metro network in Madrid has 511 elevators, which means that 62.70% of Madrid metro stations have this facility. Of these, 157 units are external elevators (at street level), and 354 are internal elevators (connecting different levels within the Metro facilities) (Madrid Accessibility and Inclusion Plan, 2016-2020).

In the red cluster, the words 'disability,' 'mobility,' 'PRM,' 'limitation,' and 'impairment' indicate the difficulties and constraints that TWD experiences in some trips, especially at airports, considering the PRM service (Person

with Reduced Mobility). Some TWDs with reduced mobility are not always aware of the rules for transporting mobility equipment, which can lead to embarrassing situations at airports. According to the PMR Regulation, passengers with disabilities or reduced mobility can carry two mobility equipment free of charge (European Commission, 2012).

M.B. physical disability, reported that the equipment he uses most frequently is adapted cars, buses, special equipment, and PRM (Person with Reduced Mobility) service at airports. M.B. physical disability, states that he has never used any travel apps and instead purchases tourist products over the Internet, despite encountering many product sales pages with little accessibility. "I can navigate the Internet well because my disability does not prevent me from reading and understanding websites. However, if I had a different type of disability, it would not be possible or would take hours to purchase a tourist product. This situation creates a lot of insecurity and anxiety. Even after I buy the tourist product or service, I usually call the company to confirm that I did everything correctly," reveals *M.B. physical disability*. These intrapersonal constraints, such as emotions and personal fears (Gilbert, Hung & Petrick, 2010; Nyaupane & Andereck, 2008), tend to make the tourist's experience a negative one and make it difficult for them to plan to return to the same destination.

A. physical disability, reported that she has never had difficulties hiring an electric scooter at airports. Scooters are equipment that facilitates mobility for physically disabled individuals and the elderly. They can be easily found and rented in major tourist centers. Regarding user experience, most users felt that their scooter positively impacted their lives and viewed it positively. The scooter met their needs, allowing them to perform desired activities independently (Thoreau, 2015).

L.O. physical, mental, and visual disabilities reports that he prefers to travel with someone who helps him with the wheelchair he brings.

The blue cluster in the dendrogram features the word 'hotel' at the center, linking directly to words such as 'adapt,' 'bathroom,' 'room,' 'restaurant,' and 'satisfaction.' Words at the ends of the cluster include 'staff,' 'Spain,' 'physical,' and 'pool.' This cluster refers to TWD's trip satisfaction, considering accessibility in hotels, restrooms, restaurants, and apartments.

A.B. Blind reports that the primary limitation on his trips is taking his guide dog to restaurants and hotels in Spain. Officially recognized centers or specialized entities train guide dogs to accompany, guide, help, and assist people with disabilities (Ley, 3/2017).

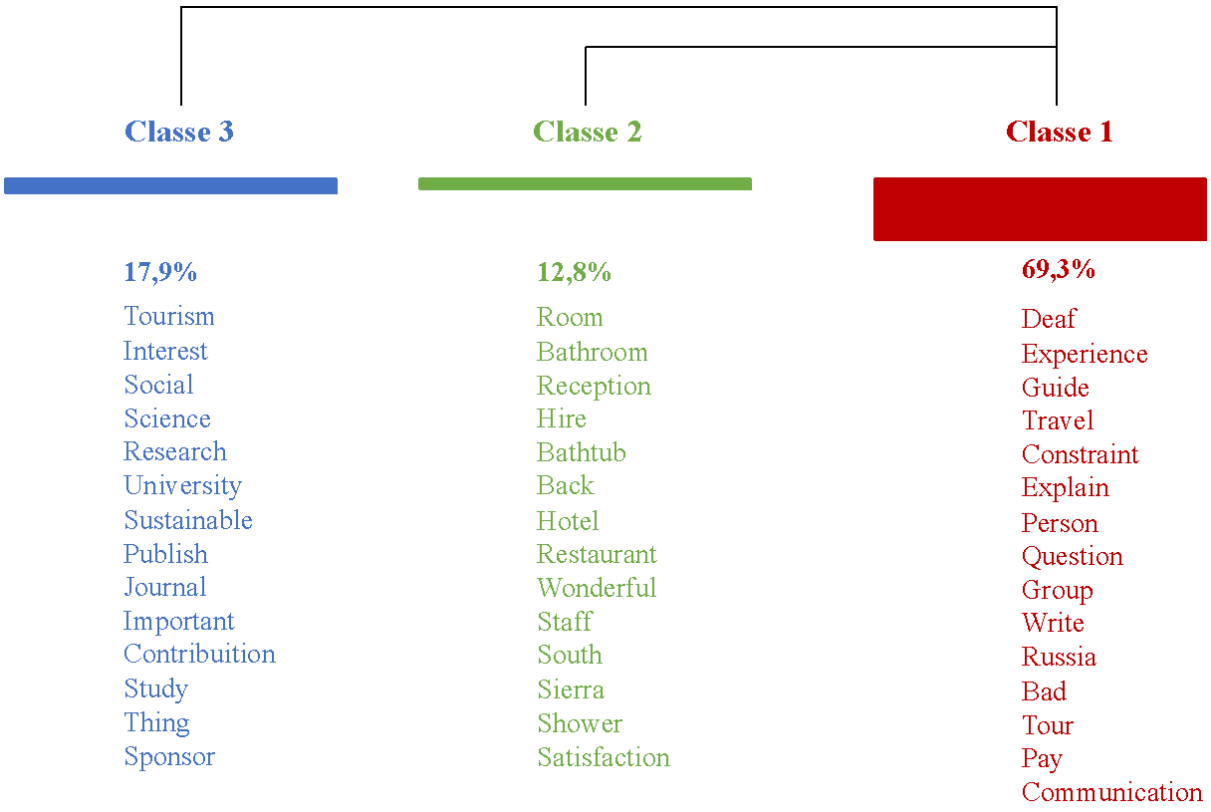
Spain legally recognizes blind or visually impaired individuals using guide dogs, and their right of access, accompanied by them, is free to all places, spaces, establishments, and public transport or public use. However, this right (known as the right of access or access to the environment) is regulated by the laws of each Autonomous Community. Therefore, the guide dog user must comply with the provisions of the legislation of the community they are in at the moment.

However, the applicable guide dog accreditation, registration, and identification requirements are those of the community where the user resides. In other words, if the guide dog user moves to another Autonomous Community, they do not have to carry out any specific procedure to recognize their right to access. Still, the provisions of the community's legislation govern this right. "People in hotels in tourist centers are not trained to deal with people with disabilities. They should know the basic needs of this collective," comments *A.B. Blind*.

On the other hand, *A.B. Blind* comments that, on his last trip, he stayed at a rural hotel in the Sierra de Gredos in the Autonomous Community of Castilla y León and felt satisfied with the accessibility offered. The region of Castilla y León, along with Valencia, was the most visited by research participants. *A.B. Blind* commented that the Sierra de Gredos National Park in the Castilla region offers attractions that are adapted for tourists with disabilities. In addition, he felt that the professionals were trained to support him, facilitating his stay in the area.

The study of the dendrogram allowed us to analyze how the categories relate and which words form them (Figure 3).

Figure 3. Dendrogram análisis



Subtitle: Generated using Iramuteq software version 0.7, Alpha 2 Laboratoire Lerass.

Source: authors (2023)

In summary, class 1 represents 69.3% of the total and brings relevant aspects related to the travel experiences of deaf tourists with the entries 'deaf,' 'experience,' 'travel,' 'guide,' 'constraint,' 'bad,' 'tour' and 'communication.' The proximity to class 2 also indicates a strong relationship between the columns within the text. Although the entries are not repeated, class 2 brings essential elements for facilitating or restricting TWD trips, such as 'hotel,' 'bathtub,' 'room,' 'bathroom,' 'reception,' 'restaurant,' and 'shower.'

The composition of class 2 also confirms one of the branches shown in the blue cluster (Figure 2). This classification pattern indicates the need to adapt physical spaces, providing autonomy and mobility for TWD. On the other hand, the term 'staff' refers to eliminating attitudinal barriers. Hiring trained personnel (or offering training) is essential to guarantee a positive tourist experience for TWDs.

Class 3 is more related to the social and scientific aspects of studies on accessible tourism. The words 'science,' 'research,' 'university,' 'journal,' 'study,' and 'publish' demonstrate the TWD interviewed's concern with disseminating the theme in the academic sphere through research and publications. This outcome is completed by the word 'sponsor,' which is essential, so the terms 'tourism' and 'interest' are seen at the beginning.

Many important issues were raised during the interview with groups of tourists with disabilities. What became most evident was the need to adapt public and private tourist spaces. Additionally, the findings indicate that most people working in tourism services are unprepared to deal with the limitations and negative experiences of travelers with disabilities.

A limitation identified during the focus group relates to the diverse approaches taken by each type of tourist with a disability. While it is thought that a focus group for tourists with the same disability is ideal, this approach proved fragile because each person presented themselves uniquely with their limitations and communication strategies.

5 Conclusions

This study focuses on the main limitations, needs, and adaptations of travelers with disabilities (TWD) while traveling. The primary limitations and needs of TWD during their travels are related to physical adaptations of tourist facilities, including means of access (airports, ports, train, and metro stations), accommodations, and transportation. Efficient urban mobility remains a challenge for many tourist destinations, particularly in terms of transportation for people with disabilities.

The primary adaptations for TWD are typically targeted toward those with physical disabilities, such as tactile floors, mechanical equipment, functional and spacious areas, and adaptations of spaces with ramps, elevators, handrails, and wheelchair circulation spaces. However, it should be noted that adaptation needs for other disabilities include audio description systems, appropriate signage, and the availability of sign language interpreters.

Using TWD as subjects and primary informants opens up new possibilities for research, including developing new tourism products and services for this market niche. Capturing information in focus groups consolidates various research purposes, such as exploring new areas little known by the researcher, deepening and defining little-known issues, answering questions, investigating cultural questions, and assessing opinions, attitudes, past experiences, and future perspectives.

Associations and their organized groups are fundamental in facilitating dialogue, influencing associated members, facilitating website understanding, communication with the trade, and consuming accessible or non-accessible tourist experiences. However, this relationship also impacts the professionalization of travel agents.

Hundreds of applications, whether informative about mobility in the destination or tourist products and services available on cell phones, should be reconsidered for their applicability to each type of disability. Unfortunately, most of these apps were created without being tested by their intended users: tourists with disabilities.

Future research should provide a more realistic topic scenario with TWD as the protagonist. Additionally, the results of this study are hoped to contribute to a deeper understanding of the hierarchy of barriers for people with disabilities to travel.

References

Agovino, M., Casaccia, M., Garofalo, A., & Marchesano, K. (2017). Tourism and disability in Italy: Limits and opportunities. *Tourism Management Perspectives*, *23*, 58–67. https://doi.org/10.1016/j.tmp.2017.05.001

Bardin, L. (2016). *Análise de conteúdo*. Edições 70.

Bialeschki, M. D., & Henderson, K. A. (1988). Constraints to trail use. *Journal of Park and Recreation Administration*, *6*(3), 20–28.

Bill, F., & Olaison, L. (2009). The indirect approach of semi-focused groups: Expanding focus group research through role-playing. *Qualitative Research in Organizations and Management: An International Journal, 4*(1), 7–26. https://doi.org/10.1108/17465640910951423

Bowtell, J. (2015). Assessing the value and market attractiveness of the accessible tourism industry in Europe: A focus on major travel and leisure companies. *Journal of Tourism Futures*, *1*(3), 203–222. https://doi.org/10.1108/JTF-03-2015-0012

Brittain, I., Biscaia, R., & Gérard, S. (2019). Ableism as a regulator of social practice and disabled peoples' self-determination to participate in sport and physical activity. Leisure Studies, 39(2), 209–224. https://doi.org/10.1080/02614367.2019.1694569

Buhalis, D., & Darcy, S. (Eds.). (2010). *Accessible tourism: Concepts and issues*. Channel View Publications.

Burnett, J. J., & Baker, H. B. (2001). Assessing the travel-related behaviors of the mobility-disabled consumer. *Journal of Travel Research*, *40*(1), 4–11. https://doi.org/10.1177/004728750104000102

Camargo, B. V., & Justo, A. M. (2013). IRAMUTEQ: A free software for analysis of textual data. *Temas em Psicologia*, *21*(2), 513–518.

Cameron, B., Darcy, S., & Foggin, E. (2003). *Barrier-free tourism for people with disabilities in the Asian and Pacific region*. United Nations.

Carneiro, M. J., Teixeira, L., Eusébio, C., Kastenholz, E., & Moura, A. A. (2021). Use of the internet to plan tourism trips by people with special needs. In C. Eusébio, L. Teixeira, & M. J. Carneiro (Eds.), *ICT tools and applications for accessible tourism* (pp. 74–95). IGI Global.

Corbett, J. (2013). *Bad mouthing: The language of special needs*. Routledge.

Council of Europe Committee of Ministers. (2006). *Recommendation Rec (2006) 5 of the Committee of Ministers to Member States on the Council of Europe Action Plan to Promote the Rights and Full Participation of People with Disabilities in Society: Improving the quality of life of people with disabilities in Europe 2006-2015*. https://rm.coe.int/1680595206

Crawford, D., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences, 9(*2), 119–127. https://doi.org/10.1080/01490408709512151

Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.

Daniels, M. J., Drogin Rodgers, E. B., & Wiggins, B. P. (2005). 'Travel tales': An interpretive analysis of constraints and negotiations to pleasure travel as experienced by persons with physical disabilities. *Tourism Management, 26*(6), 919–930. https://doi.org/10.1016/j.tourman.2004.06.010

Darcy, S. (2010). Inherent complexity: Disability, accessible tourism, and accommodation information preferences. *Tourism Management, 31*(6), 816–826. https://doi.org/10.1016/j.tourman.2009.08.010

Darcy, S., & Buhalis, D. (2010). Introduction: From disabled tourists to accessible tourism. In D. Buhalis & S. Darcy (Eds.), *Accessible tourism* (pp. 1–20). Channel View Publications.

Darcy, S., & Daruwalla, P. S. (1999). The trouble with travel: People with disabilities and tourism. *Social Alternatives, 18*(1), 41–46.

Darcy, S., & Ravinder, R. (2008). Last out of the plane: Air travel for people with disabilities. In D. Buhalis & S. Darcy (Eds.), *Accessible tourism: Concepts and issues* (pp. 207–221). Channel View Publications.

Darcy, S., & Taylor, T. (2009). Disability citizenship: An Australian human rights analysis of the cultural industries. *Leisure Studies, 28*(4), 419–441. https://doi.org/10.1080/02614360903125226

Devile, E., & Kastenholz, E. (2018). Accessible tourism experiences: The voice of people with visual disabilities. *Journal of Policy Research in Tourism, Leisure and Events, 10*(3), 265–285. https://doi.org/10.1080/19407963.2018.1470183

Devile, E., & Moura, A. (2021). Travel by people with physical disabilities: Constraints and influences in the decision-making process. In C. Eusébio, L. Teixeira, & M. J. Carneiro (Eds.), *ICT tools and applications for accessible tourism* (pp. 74–95). IGI Global.

Disable World. (2022). *Disability statistics: Information, charts, graphs, and tables document list*. https://www.disabled-world.com/disability/statistics-2/

Domínguez Vila, T., Rubio-Escuderos, L., & Alén González, E. (2024). Accessible tourism: Using technology to increase social equality for people with disabilities. *Tourism Review*. https://doi.org/10.1108/TR-11-2023-0812

Edmunds, H. (2000). *The focus group research handbook*. NTC Business Books.

Eichhorn, V., & Buhalis, D. (2011). Accessibility: A key objective for the tourism industry. In D. Buhalis & S. Darcy (Eds.), *Accessible tourism: Concepts and issues* (pp. 46–61). Channel View Publications.

Eichhorn, V., Miller, G., Michopoulou, E., & Buhalis, D. (2008). Enabling access to tourism through information schemes? *Annals of Tourism Research, 35*(1), 189–210. https://doi.org/10.1016/j.annals.2007.07.005

European Commission. (2012). *Passenger rights: What passengers with reduced mobility need to know when travelling by ai*r. https://ec.europa.eu/commission/presscorner/detail/pt/MEMO_12_422

European Commission. (2021). *Union of equality: Strategy for the rights of persons with disabilities 2021–2030*. COM(2021) 101 final.

Eusébio, C., Silveiro, A., & Teixeira, L. (2020). Website accessibility of travel agents: An evaluation using web diagnostic tools. *Journal of Accessibility and Design for All, 10*(2), 180–208.

Fernandes, D. L., & Bernier, E. T. (2021). Acessibilidade virtual em destinos turísticos inteligentes: Os casos de Curitiba [Brasil] e Málaga [Espanha]. *Rosa dos Ventos, 13*(1), 2–15.

Fernández-Villarán, A., Erice, M., Espinosa, N., Goytia, A., Madariaga, A., & Rodríguez, A. (2021). Information about tourism destinations' accessibility in tourism online platforms: Is it useful for people with diverse abilities? In *Inclusive tourism futures* (pp. 1–20). Channel View Publications.

Fleischer, A., & Pizam, A. (2002). Tourism constraints among Israeli seniors. *Annals of Tourism Research, 29*(1), 106–123. https://doi.org/10.1016/S0160-7383(01)00025-2

Fundacion ONCE. (2017). *Observatorio de Accessibilidad Universal del Turismo en España*.

Gilbert, D., & Hudson, S. (2000). Tourism demand constraints - A skiing participation. *Annals of Tourism Research, 27(*4), 906–925. https://doi.org/10.1016/S0160-7383(99)00110-3

Hoyo, M. M., & Valiente, G. C. (2010). Turismo accesible, turismo para todos: La situación en Cataluña y España. *Cuadernos de Turismo, 25*, 25–44.

Hung, K., & Petrick, J. (2010). Developing a measurement scale for constraints to cruising. *Annals of Tourism Research, 37*(1), 206–228. https://doi.org/10.1016/j.annals.2009.09.003

Kennedy, D. W., Austin, D. R., & Smith, R. W. (1987). *Special recreation: Opportunities for persons with disabilities*. Saunders College Publishing.

La Declaración de Madrid. (2002). *Congreso Europeu Sobre las Personas com Discapacidad*.

Lima, L. B. B. de M. (2020). Accessible tourism supply services in Spain. *Tourism and Hospitality International Journal, 15*(1), 104–118.

Lima, L. B. B. M. (2016, April 7–8). City tour for visual disabilities in Aracaju, Sergipe, Brazil. *Spring Symposium on Challenges in Sustainable Tourism Development*.

Lima, L. B. B. M. (2019, March). Accessible tourism supply services in Spain. In *2nd International Conference on Tourism Research* (Vol. 15, No. 1, pp. 104–118).

Lima, L. B. B. M., Arruda, M. P., & Santos Junior, G. J. (2021). Estudo sobre a acessibilidade em atrativos turísticos de Brasília. In Q. Pahim (Ed.), *Turismo: Reflexões e desafios* (pp. 76–88). Pantanal.

Lima, L. B. B. M., Lima, A. C., & Santos, D. S. (2014). Potencialidades de turismo acessível em Aracaju (SE). *Semana Nacional da Ciência e Tecnologia do Instituto Federal de Sergipe*.

McKenna, S. A., & Main, D. S. (2013). The role and influence of key informants in community-engaged research: A critical perspective. *Action Research, 11*(2), 113–124. https://doi.org/10.1177/1476750313477328

McKercher, B., & Darcy, S. (2018). Re-conceptualizing barriers to travel by people with disabilities. *Tourism Management Perspectives, 26*, 59–66. https://doi.org/10.1016/j.tmp.2017.10.007

McKercher, B., Packer, T., Yau, M. K., & Lam, P. (2003). Travel agents as facilitators or inhibitors of travel: Perceptions of people with disabilities. *Tourism Management, 24*(4), 465–474. https://doi.org/10.1016/S0261-5177(02)00107-6

Metro de Madrid. (2016–2020). *Plan de Accesibilidad e Inclusión de Metro de Madrid 2016-2020*.

Muloin, S. (1992). Wilderness access for persons with a disability. In G. Harper & B. Weiler (Eds.), *Ecotourism* (pp. 20–25). Australian Bureau of Tourism Research.

Murray, M., & Sproats, J. (1990). The disabled traveler: Tourism and disability in Australia. *Journal of Tourism Studies, 1*(1), 9–14.

Nyaupane, G. P., & Andereck, K. L. (2008). Understanding travel constraints: Application and extension of a leisure constraints model. *Journal of Travel Research, 46*(4), 433–439. https://doi.org/10.1177/0047287507308325

Olya, H. G., Altinay Gazi, Z., Altinay Aksal, F., & Altinay, M. (2018). Behavioral intentions of disabled tourists for the use of peer-to-peer accommodations: An application of fsQCA. *International Journal of Contemporary Hospitality Management, 30*(1), 436–454. https://doi.org/10.1108/IJCHM-03-2016-0146

Portales, R. C. (2015). Removing 'invisible' barriers: Opening paths towards the future of accessible tourism. *Journal of Tourism Futures, 1*(3), 269–284. https://doi.org/10.1108/JTF-04-2015-0018

Shaw, G., & Coles, T. (2004). Disability, holiday making and the tourism industry in the UK: A preliminary survey. *Tourism Management, 25*(3), 397–403. https://doi.org/10.1016/j.tourman.2003.09.002

Smith, R. (1980). Leisure of disabled tourists: Barriers to participation. *Annals of Tourism Research, 14*(3), 376–389. https://doi.org/10.1016/0160-7383(87)90058-7

Souza, M. A. R. D., Wall, M. L., Thuler, A. C. D. M. C., Lowen, I. M. V., & Peres, A. M. (2018). O uso do software IRAMUTEQ na análise de dados em pesquisas qualitativas. *Revista da Escola de Enfermagem da USP, 52*, 1–7.

Spain. Comunidad Autónoma de Canarias. (2017). *Ley 3/2017, de 26 de abril, de perros de asistencia para personas con discapacidad en la Comunidad Autónoma de Canarias*. Boletín Oficial del Estado.

Stein, M. A., Stein, P., Weiss, D., & Lang, R. (2007). Convention on the rights of persons with disabilities. *European Journal of Health Law, 14*(3), 281–298. https://doi.org/10.1163/157180907781369983

Tao, C. (2020). Tourism of people with disability and accessible tourism: A research progress and enlightenment based on oversea studies. *Tourism Tribune, 35*(1), 127–142.

Thoreau, R. (2015). The impact of mobility scooters on their users: Does their usage help or hinder? A state of the art review. *Journal of Transport & Health, 2*(2), 269–275. https://doi.org/10.1016/j.jth.2015.03.004

Turco, D. M., Stumbo, N., & Garncarz, J. (1998). Tourism constraints for people with disabilities. *Parks and Recreation, 33*(5), 78–84.

United Nations. (2006). *Convention on the rights of persons with disabilities* (A/RES/61/106).

United States Access Board. (n.d.). *About the ADA standards*. https://www.access-board.gov/

Vila, T. D., Darcy, S., & González, E. A. (2015). Competing for the disability tourism market – A comparative exploration of the factors of accessible tourism competitiveness in Spain and Australia. *Tourism Management, 47*, 261–272. https://doi.org/10.1016/j.tourman.2014.10.001

W3C. (2014). *Diretrizes de acessibilidade para conteúdo web (WCAG) 2.0*. https://www.w3.org/Translations/WCAG20-pt-br/

World Health Organization. (2011). *World report on disability*. https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/world-report-on-disability

Yau, M. K. S., 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

Zajadacz, A. (2015). Evolution of models of disability as a basis for further policy changes in accessible tourism. *Journal of Tourism Futures, 1*(3), 189–202. https://doi.org/10.1108/JTF-04-2015-0015