The accessibility of beaches for blind people and their guide dogs: accessible tourism and inclusion in Spain

Lázaro Florido-Benítez

Abstract

Purpose — The purpose of this research is to analyse the accessibility of Spanish beaches for blind people and their guide dogs as an inclusive tourist destination for national and international tourists.

Design/methodology/approach — This empirical research used a quantitative and qualitative methodology from public and private organizations, which intends to give voice to blind people to improve their quality of life.

Findings — This study presents a new and surprising contribution to the issue of accessibility of beaches for blind people, and most Spanish tourist destinations exclude blind people and its guide dogs from enjoying the beach and the sun and their facilities. In Spain there are in total 3,547 beaches; 10.3% of these are adapted beaches for people with reduced mobility, whereas only 0.25% are adapted beaches for blind people. Indeed, results also suggest that more efforts are required in response to the needs of blind people in tourism and transport activities by researchers, academics and government bodies.

Originality/value — The contribution of this paper is especially important for the management of the accessibility of Spanish beaches for blind people and their guide dogs by public and private organizations.

Keywords — Accessible beaches, Blind people, Guide dogs, Inclusion, Accessible tourism, Adapted beaches

Paper type Research paper

盲人及导盲犬的海滩可进入性：西班牙无障碍旅游和包容性

摘要

设计/方法（100字内）：这项实证研究采用了来自公共和私人组织的定量和定性方法，旨在让盲人发声以改善他们的生活质量。

目的（100字内）：本研究的目的是分析作为国内和国际游客包容性旅游目的地的西班牙海滩对盲人及其导盲犬的可达性。

调查结果（100字内）：这项研究对盲人的海滩可达性和与该主题相关的未来研究提出了新的和令人惊讶的贡献。调查结果显示，西班牙只有9个适合盲人的海滩。大多数西班牙旅游目的地都禁止盲人及其导盲犬在海滩上享受海浪和阳光及其设施。西班牙共有3,547个海滩，其中10.3%是适合行动不便人士使用的海滩。事实上，结果还表明，研究人员、学术界、政府机构、私营企业以及一个更加公平、团结和尊重社会需要做出更多努力来满足盲人在旅游和交通活动中的需求。

独创性/价值（100字内）：本文的贡献对于公共和私人组织管理盲人及其导盲犬在西班牙海滩的可达性尤为重要。

关键词：无障碍海滩；盲人；导盲犬；包容；无障碍旅游；适宜的海滩

La accesibilidad de las playas Para invidentes y sus perros guía: un análisis del turismo accesible e inclusión en españa

Resumen

Objetivo: El objetivo de esta investigación es analizar la accesibilidad de las playas españolas para personas ciegas y sus perros guía como destino turístico inclusivo para turistas nacionales e internacionales.
Diseño/metodología/enfoque: Esta investigación utilizó una metodología cuantitativa y cualitativa apoyada con datos de organizaciones públicas y privadas, con la finalidad de dar voz a las personas ciegas para mejorar su calidad de vida.

Resultados: Este estudio presenta una nueva y sorprendente contribución sobre la accesibilidad de las playas para personas ciegas y futuros estudios relacionados con este tema. Los resultados revelaron que España tiene solo 9 playas adaptadas para invindicantes, la mayoría de los destinos turísticos españoles están excluyendo a las personas invindicantes y sus perros guía para disfrutar de la playa y el sol, y de sus instalaciones. En España hay un total de 3,547 playas, el 10,3% son playas adaptadas para personas con movilidad reducida, mientras que solo el 0,25% son playas adaptadas para invindicantes. De hecho, los resultados también sugieren que se requieren más esfuerzos en respuesta a las necesidades de las personas ciegas en las actividades de turismo y transporte por parte de investigadores, académicos, organismos gubernamentales, empresas privadas y una sociedad más justa, solidaria y generosa.

Originalidad/valor: La contribución de este trabajo es especialmente importante para la gestión de la accesibilidad de las playas españolas para personas ciegas y sus perros guía por parte de organismos públicos y privados.

Palabras clave: Playas accesibles, personas invindicantes, perros guía, inclusión, accesible turismo, playas adaptadas

Tipo de papel: Trabajo de investigación

1. Introducción

Accessibility of beaches for blind people and their guide dogs constitutes a current social priority for government bodies because blind people too must enjoy all tourist facilities and infrastructures like the rest of the fellow citizens. Unfortunately, at many European tourist destinations, tourist facilities on the beaches are physically inaccessible owing to the continued lack of economic budgets. The need to ensure accessibility of the beaches at tourist destinations is based on interoperability and management by governments, destination marketing organizations (DMOs) and stakeholders (Rubio-Escuderos et al., 2021). Disability occurs when an individual is deprived of practical opportunities because of an impairment (Bellucci et al., 2023; Mitra, 2006). According to the National Statistics Institute of Spain (INE), in 2022, there were 1.05 million people with visual disabilities (62% women and 38% men) and approximately 140,000 blind people (INE, 2022). These figures show us the importance of accessibility of beaches and accessible tourism at Spanish tourist destinations. To illustrates the need to enhance the accessibility of Spanish beaches within an accessible and inclusive tourism, the originality of this research advocates linking critical thinking, pedagogy and action to enhance social justice.

Accessible tourism requires cooperation between many interested parties to enable blind people and those with other disabilities to commute independently (Buhalis et al., 2012). Accessible tourism must provide mobile, visual, auditory and mental accessibility for people with disabilities, so they can move independently, equally and with dignity during holidays (Popović et al., 2022; Qiao et al., 2023). A tourist destination’s accessibility must tackle appropriated information of accessible facilities for people with disabilities. For this reason, accessible tourism needs to have high interaction and cooperation between regional governments and tourism stakeholders to develop and promote customised tourist services adapted to blind people and their guide dogs. Moreover, access to tourist information is a crucial factor determining a disabled person’s decision to travelling (Michopoulou and Buhalis, 2013; Shahzalal and Elgammal, 2023). All these arguments previously mentioned justify initiatives of social and inclusive tourism supported by economic budgets (Devile and Kastenholz, 2018).

From our viewpoint, the accessibility of beaches for blind people and their guide dogs has hitherto received inadequate attention in tourism literature (Rickly et al., 2022; Devile and Kastenholz, 2018; Packer et al., 2008). Accessible tourism is an evolving area of academic study and industry practice (Buhalis and Darcy, 2011). Indeed, there are no scientific studies in the context of accessible beaches for blind people and their families and guide
dogs. This is the main gap that this study aims to fill. The main challenge of this paper was to analyse the accessibility of Spanish beaches for blind people and their guide dogs as an inclusive tourist destination for both national and international tourists. Consider blind people inside of people with reduced mobility is an erroneous perception to identify their basic needs and tackle their mobility on beaches and cities. Findings of this research may also help improve blind people’ and their families’ lives. This manuscript recommends accessible tourism for all citizens in all public spaces. Although, beaches do not guarantee universal accessibility conditions (Santana-Santana et al., 2021).

There are few beaches in the world which are adapted for blind people and their dogs. In 2022, El-Mandara was the first beach in Egypt for blind people. The Formosa beach in Funchal city (Portugal’s Madeira archipelago) and Misericordia and El Dedo beaches in Spain have adapted their beaches for blind people and people with visual impairment. These beaches have installed a line of buoys fitted with sensors (see Figure 1). In the case of the Cabañal beach in Valencia (Spain), blind people use a small acoustic device like a clock, which transmits an audio signal based on information collected by the line of buoys, such as distance, sea depth from the beach and its direction, allowing blind people to swim freely, independently and safely. Moreover, a blind people's bracelet includes a button to send an SOS signal to lifeguards. The reader can see a real example at: https://youtu.be/hRJYNdc3i-w.

2. Literature review

2.1 Accessibility of Spanish beaches for blind people: a new challenge for tourist destinations

Tourism industry employees must be trained about and be understanding towards the specific needs of people with disabilities and be aware of the difficulties they may face every day. The European Commission (2010) indicates that accessibility for people with disabilities means a possibility of using facilities and services on equal terms with others (see Regulation EC No 1107/2006). The European Network for Accessible Tourism (ENAT) promotes universal accessibility in the tourism industry as a means of combatting discrimination towards people with disabilities (ENAT, 2022). Accessibility is a concept used to describe the degree to which the environment, device, service or product is available to as many people as possible (Queirós et al., 2015). Accessibility is very

Figure 1  Adapted beaches for blind people in Spain

Source: Figure courtesy of Accessibility (2016)
important for people who are unable to see permanently, and they try to be independent in their daily life.

The needs of people with reduced mobility are very different from the needs of blind people. To ensure the accessibility of information in Braille or audio format is very important for this group (Gregoric et al., 2019). Alterman and Pellach (2022) claim that the accessibility and access rights at beaches for blind people must be improved through unified international rules and a common framework in adapted beaches. Governments and researchers must work together to improve universal accessibility (Poli, 2020; López, 2005; Dischinger, 2000). As stated by Buhalis and Darcy (2011) the principles of accessibility also enable the development of multi-use accessible spaces, as well as improvement in organizations’ productivity, profitability and operational management. Disabled people’s embodied are often considered as “not belonging” in most everyday places (Morrison et al., 2020). More efforts are required to develop a stronger social model that ensures their rights, as well as to create an environment that enables blind people to flourish (Berghs et al., 2019).

Spanish tourist destinations do not have a common beach accessibility management policy. Autonomous communities manage the accessibility of beaches, and the basic accessibility conditions are regulated at state level through Order VIV/561/2010. Accessible points of adapted beaches for people with disabilities are determined by the corresponding local council according to the degree of use of the beach. Conversely, as stated by Santana-Santana et al. (2021) and Hernández-Galán et al. (2017), Order VIV/561/2010 is widely breached throughout Spain. For example, Richards et al. (2010) note that the location of braille signs is vital for blind people when they go the beach. To understand mobility in the beaches, one needs to understand the context and barriers which blind and visually impaired people face in these spaces (Small, 2015). The quality of the blind person’s experience is related to the feelings of inclusion in terms of access to information and travelling with a guide dog (Small et al., 2012).

The tourism industry has neglected people with disabilities (Buhalis and Michopoulou, 2011). In 1980, the disabled peoples’ movement forced the media and government to change their perception of them (Oliver, 2013). It is necessary to increase awareness of web platforms’ accessibility for people with disabilities to stay well connected to society (Ara et al., 2023). This reflects the difficulty of tackling this topic and a lack of homogeneity in regulations by the European Union, national governments, DMOs, tourism and air transport industries. General solutions by means of legislative reforms do not solve the problems and needs of the disability community because each type of disability requires different actions.

Eventually, quality certifications take the laws as the basis for continuous improvement at beaches. For instance, the Blue Flag award waves in hundreds of European beaches, and this blue flag is perceived as a symbol of quality of water and services by tourists, but this certification is not a regulatory framework of universal accessibility for people with disabilities (Mir-Gual et al., 2015). Therefore, it is recommended to develop universal directives for adapted beaches worldwide and unify accessibility standards implemented by national and local governments (Mayordomo-Martínez et al., 2019; Santana-Santana et al., 2021). Blind and disabled people inquire about their travel according to their special needs. Accessibility to information is significant for them to plan their travel. Darcy and Dickson (2009) revealed that information about accessibility is not true or detailed through digital channels and DMOs official websites. DMOs and governments should build official websites for disabled people (Özogul and Baran, 2016).

For instance, a tourist destination has a total of 30 beaches along its coast, among which are adapted beaches for people with reduced and physical mobility. For instance, a tourist destination has a total of 30 beaches along its coast and territory, among which two adapted beaches are available for people with reduced and physical mobility. Initially, all
beaches were not accessible to disabled people. In addition, the two adapted beaches were specifically designed for people with reduced mobility and physical mobility (e.g. wheelchair users need to enter with an access ramp and accessible strollers to enter the sea), but not for blind people and their guide dogs, that is, blind people were being excluded of the sun and sand activities on the beaches of this tourist destination. Possibly, this tourist destination complies with Spanish and European regulatory frameworks, but to be honest, this tourist destination is not so accessible and inclusive as it seems and as promoted on its official website and social media.

Wang et al. (2023) maintain that to gain information about tourist sites is part of a tourists’ psychological process, and an important reference for DMOs to formulate marketing and management strategies. The iconic Blue Flag is one of the world’s most recognised voluntary awards for beaches, marinas and sustainable tourism boats, but it does not contemplate the accessibility of beaches for blind people and their guide dogs (Hayden, 2021). In 2022, Spain was awarded with a total number of 621 Blue Flag beaches (see Figure 2), the world’s number one, beating the likes of Greece, Turkey, France and Italy (Blue Fag, 2022).

Although, all beaches with the blue flag do not meet legal accessibility frameworks. For this reason, cities and municipalities must equip the beaches according to the type and grade of disability of people. Obviously, not only on beaches, but these facilities and equipment should be installed and localised in places where accessibility and connectivity of public transport services are a priority. Indeed, Benjamin et al. (2021) note that national and regional governments must provide their own promotional material compared to the city-level DMOs of city and municipality. For instance, the four most solicited awards/certificates of beach quality by Spanish tourist destinations are:

1. Blue Flag: Criteria established by Asociación de Educación Ambiental y del Consumidor (ADEAC). Association for Environmental and Consumer Education.

![Figure 2](image.jpg)

**Figure 2** Spain’s blue flag beaches by region in 2022

*Notes: Included beaches; rivers; lake beaches; and reservoirs*

*Source: Figure by author*
2. **Blue Flag and Inclusive Beach**: This must include no architectural barriers and care for people with disabilities. Criteria established by ADEAC and Organización Nacional de Ciegos Españoles (ONCE), Spanish National Organization for the Blind.

3. **Universal Accessibility Certification (UNE) 170,001 Universal Accessibility Certification**: Provided by EANOR, Bureau Veritas, EQA, OCA and TÜV Rheinland organizations.

4. **Q for Quality Tourism**: Criteria established by Instituto para la Calidad Turística Española (ICTE), Spanish Tourism Quality Institute.

2.2 **Guide dogs are part of the family of blind people**

Turning our attention to the accessibility of beaches for blind people and their guide dogs opens new opportunities for understanding the mobility challenges for these people and their families who enjoy their holidays on tourist destinations and beaches. Rickly (2018) notes that guide dogs improve the mobility and touristic experience of blind people when they are on holidays. Blind people have a less active life due to lack of opportunities (Lieberman et al., 2019). Guide dogs provide a positive impact on physical tasks of blind people. A study carried out by Rodriguez et al. (2020) found that guide dogs improve blind people’s psychological well-being, emotional functioning, and self-esteem when blind people want to move in the city.

According to Assistance Dogs International (ADI) defines three types of assistance dogs:

1. guide dogs who assist individuals with visual impairments;
2. hearing dogs who assist individuals with hearing impairments; and
3. service dogs who assist individuals with disabilities other than blindness or deafness (ADI, 2022).

In this study, the focus is on blind people and individuals with visual impairments and their guide dogs. Guide dogs are “smartphones” and “eyes” of blind people (Gazzano et al., 2008).

Notwithstanding, despite the presence of a European Union legislation on the use of guide dogs, there remain some barriers, especially in air transportation and tourism sectors (Devile and Kastenholz, 2018), and this situation negatively affects both animal and owner (Bremhorst et al., 2018). Low et al. (2020) claim that the needs of visually impaired people are not well addressed, and journeys are very difficult for them, for this reason, audio information is very important for blind people. DMOs should seek feedback from blind people about their tourist experience within the destination to gradually improve the offer and infrastructure for this group (Mensah-Gourmel et al., 2023; Rucci and Porto, 2022).

The importance of blind people and their guide dogs being able to access the beach is seen as an inherent national right due Spain’s strong beach culture (Hayden, 2021). Accessible tourism on Spanish beaches should be able to provide equal opportunities for all people. This is where the concept of inclusive tourism and universal design comes into play. It explores the ways of involving people in the tourism activity who are typically marginalised or excluded from tourism (Oliver, 2013; Biddulph and Scheyvens, 2018; Gilovic and McIntosh, 2020). The social model of disability argues for disability to be seen as a collective experience and supported by a political, social, and cultural identity (Giri et al., 2022). It is for these reasons that this study is as important as understanding and empathy toward the people with disabilities.

Offering accessible and equitable tourism services for blind people and their families is an integral element of corporate sustainability and responsibility in the tourism industry (Tomej and Duedahl, 2023). For instance, smartphones provide audio guidance based on the user’s hand position and gestures (Cavazos-Quero et al., 2021). Tourist destinations need to improve their facilities considering blind people’s needs and requirements, especially in Spain that has
3,547 beaches and 4,872 km of coastline (IGN, 2022). The importance of beach life in our society creates more barriers to social inclusion for people with disabilities because of a lack of social acceptance and discriminatory attitudes towards those with disabilities (Darcy et al., 2022, 2020); for this reason local and regional governments need to improve beach access and encourage total inclusion of people with disabilities at beaches.

In this research, there are areas of knowledge for improvement in literature review and topics related to people with visual disabilities and blind people and their guide dogs. These two types of disabilities require different solutions and treatments; we cannot just analyse and interpret the information, questions and results from a unique viewpoint. A blind person with his/her guide dog faces many mobility and accessibility difficulties like with public transport services and at beaches and restaurants, among many others, because some establishments do not allow entry to guide dogs, which, however, is permitted by European and national regulations. Kirchner et al. (2008) suggested that physical and empathy barriers by society toward blind people persist in spite of legislative requirements and existing accommodations.

3. Methodology

This empirical research employed a quantitative and qualitative methodology, which intends to give voice to blind people to improve their quality of life. This study tries to stage the main barriers blind people face when they go to a beach. The main challenge of this paper was to analyse the accessibility of Spanish beaches for blind people and their guide dogs as an inclusive tourist destination for national and international tourists. For this reason, this study has consequently set the following research questions:

*RQ1*. How many Spanish beaches are adapted for blind people?

*RQ2*. What indicators or elements are the most suitable for an adapted beach of blind people?

*RQ3*. How can local and regional governments improve a beach adapted for blind people and vision-impaired?

To facilitate the present analysis of adapted beaches for blind people in Spain, the adapted Spanish beaches were classified as per blind people and people with reduced mobility because each group requires different services and needs (Figures 3 and 4), as well as indicators and elements according to the established rules of accessibility on adapted beaches. Information regarding adapted Spanish beaches for blind people and people with reduced mobility was obtained from Spanish DMO websites and public organizations like autonomous communities and cities. The equipment and infrastructure category encompasses the various facilities that are required to be able to access the Spanish beaches (Santana-Santana et al., 2021). After identifying the different adapted beaches in each Spanish region, the main indicators, elements and accessible points of accessible beaches were provided to identify which adapted beaches were for blind people and people with reduced mobility and their different accessibility dimensions (Rucci and Porto, 2022). To identify different indicators of accessibility has the advantage of demonstrating to decision-makers the benefits of investing in adapted beaches for blind people (Natalia et al., 2019).

Accessibility requirements for blind persons and their guide dogs at adapted beaches describe that these people need special communication, information, equipment, tools and technologies to access beaches. This research also includes the going and return journey by train, bus or car of the blind people (Figure 5). Blind people demand information through braille text, audio description elements or even access to qualified staff when they go to the beach. All these elements are tackled in the results of research to stage the reality of these people when they want to go to the beach. This information will help to promote the exchange of best practices, data, experiences and cooperation between tourist destinations to enhance accessible tourism for blind people on the beaches. The Americans with Disabilities Act (ADA)
recommends facilitating the orientation of blind people at beaches through the installation of guidance paths associated with audio beacons (ADA, 2023) to guarantee their safety, and they can move around independently in the beach.

3.1 Data design and research instruments

The selection criteria for Spanish beaches and their locations for blind people were determined at regional and city levels during the period from 1 September 2022 to 31
January 2023 (Table 1 and Figure 3). Quantitative data were collected from official websites of Spanish DMOs, namely, Spain.info, Andalucia.org, Asturias.com, Illesbalears.travel, Turismo.euskadi, holaislascanarias.com, amongst many others, to count the number of adapted beaches for blind people and people with reduced mobility. These data were filtered according to the criteria for adapted beaches (EU, ENAT, Spanish national and regional governments) for blind people and people with limited mobility throughout the Spanish territory, included the Canary and Balearic Islands. For instance, some autonomous communities and tourist destinations promoted adapted beaches for blind people and people with reduced mobility, but they did not really provide infrastructure for the blind people, or even they are confused that blind people and people with other disabilities demanded the same needs and installations.

This situation forced us to seek real information about adapted beaches in Spain and contact different autonomous communities and tourist destinations to corroborate the information showed on their official websites. Comparing the number of adapted beaches of blind people versus those for people with reduced mobility helped us analyse the real accessibility of adapted Spanish beaches for blind people, including their strengths and weaknesses. This relevant information can help DMOs and tourist destinations make better decisions in planning and management of adapted beaches for blind people.

Furthermore, indicators, elements and accessibility points of accessible Spanish beaches for blind people and their guide dogs, as well as people with other disabilities were analysed and implemented as indicators to compare the different needs from these two groups. This research followed the established rules of Order VIV/561/2010 (Art. 9) by corresponding autonomous community and the Regulation EC No. 1107/2006, Directive (EU) 2016/2102, Directive EU 2018/1972, Directive EU 2019/882, Directive EU 2010/13, to support access and reduce barriers for people with disabilities. For instance:

Urban authorities should be encouraged to integrate barrier-free accessibility to urban transport services in their Sustainable Urban Mobility Plans (SUMP), as well as to regularly publish lists of
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<th>Region</th>
<th>Total beaches</th>
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<td>3</td>
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<tr>
<td>Santander</td>
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<tr>
<td>Santona</td>
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<tr>
<td>Suances</td>
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<td>San Vit.</td>
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<tr>
<td>Barquera</td>
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<tr>
<td>Catalonia (43)</td>
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<td><a href="http://www.catalunya.com">www.catalunya.com</a></td>
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</tr>
<tr>
<td>Barcelona</td>
<td>13</td>
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<tr>
<td>Girona</td>
<td>10</td>
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<tr>
<td>Tarragona</td>
<td>20</td>
<td></td>
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<tr>
<td>Ceuta</td>
<td>2</td>
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<td>Ceuta y Melilla (6)</td>
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<td><a href="https://melillaturismo.com">https://melillaturismo.com</a></td>
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<tr>
<td>Melilla</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Beaches located totally or partially in urban areas must have accessible points for people with disabilities, the number and location of which will be determined by the corresponding City Council, according to the degree of use of the beaches. (Order VIV/561/2010, Art. 9).

Santana-Santana et al. (2021) note that the accessibility and management of adapted beaches need to be enhanced for blind people in Spain. Blue Flag and Inclusive Beach, UNE and Q for Quality tourism certifications do not guarantee universal accessibility at Spanish beaches. To strengthen this research, a qualitative approach is used in the study, using indicators, elements and accessibility points of accessible beaches for blind people and their guide dogs as well as people with disabilities, special needs and mobility issues (see Figure 4), to stage the actual situation of this group when they go to the beach, and their journey sequence from home to the beach (see Figure 5). This relevant information will assist researchers to better understand better the scope of this research for future studies, and regional authorities to implement new initiatives at beaches focused on blind people and their families.

4. Results of research

4.1 Adapted beaches for blind people: an imperative need in the twenty-first century

However, blind people and their guide dogs require a greater attention by public and private bodies with the aim of providing solutions to specific problems which this group has been claiming for years. New challenges and actions are required to respond to new needs. The problems and difficulties of the blind community cannot simply be resolved with the adoption of general laws and decrees develop by governmental institutions. Table 1 and Figure 3 display adapted Spanish beaches for blind people and people with reduced mobility from official websites of Spanish DMOs. It is important to mention that all adapted Spanish beaches for blind people are part of the same beaches for people with reduced mobility (from 1 September 2022 to 31 January 2023).

### Table 1

<table>
<thead>
<tr>
<th>Region/Total beaches and link of official webs</th>
<th>City</th>
<th>Number of adapted beaches for people with reduced mobility, and special needs</th>
<th>Number of adapted beaches for blind people and vision-impaired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galicia (40) <a href="#">www.turismo.gal/inicio</a></td>
<td>A Coruña</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lugo</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pontevedra</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Murcia (16) <a href="#">www.turismodemurcia.es/es/</a></td>
<td>Murcia</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Valencia (66) <a href="#">www.visitvalencia.com/valencia- accesible</a></td>
<td>Alicante</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Castellon</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valencia</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>365</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Adapted Spanish beaches for blind people are part of the same beaches for people with reduced mobility (from 1 September 2022 to 31 January 2023)

Source: Table by author
beaches, Valencia (66), Catalonia (43), Galicia (40), the Canary Islands (17), Murcia (16), Cantabria (15), Basque Country (13), Asturias (11), Melilla (4) and Ceuta (2).

If these data are compared with data for adapted Spanish beaches for blind people, the results are not so favourable for this group. In Spain there are 365 adapted beaches for people with reduced mobility, and only nine adapted beaches for blind people, that is, they are excluding blind people and their guide dogs from enjoying the beach and sun, and their facilities. Andalusia tourist destination provides five updated beaches, and this is the most accessible for blind people in Spain, followed by Valencia with two adapted beaches and the Balearic Islands and Melilla tourist destination with one adapted beach each (see Figure 3). In this context, we must not forget that Spain has been the second most visited country in the world in 2021, the first was France (UNWTO, 2022). Meanwhile, our results suggest that EU, Spanish government and Autonomous Communities, local authorities, DMOs, and stakeholders should help improve adapted Spanish beaches for blind people and their guide dogs. For instance, Valencia has two adapted beaches for blind people that can be used as a model to follow by other tourist destinations that want to provide adapted beaches for this group.

4.2 Indicators, elements and accessibility points of accessible beaches for blind people

Figure 4 presents the main indicators, elements and accessible points of adapted beaches for blind people and people with other disabilities. These indicators and elements are the most suitable according to the established rules and improve the accessibility on adapted beaches. In this research, I have tried to compare the needs of these two groups when they plan to go the beach, to envision and tackle the different demands of the blind people and the people with reduced mobility at beaches. The experience of these individuals must meet the requirements of independence, equity and dignity, so they will be motivated to travel and enjoy of beaches. As seen in Panel A of Figure 4, blind people mainly require information through braille text and audio description elements when they go to the beach. Indeed, blind people and their guide dogs demand spaces in public transport and beaches, because guide dogs are part of everyday mobilities of this group. Moreover, adapted beaches for blind people should provide a line of buoys fitted with sensors. This consists of a small acoustic device like a clock which informs the person about water depth and distance to the shore. A blind people’s bracelet includes a button to send an SOS signal to lifeguards, always supervised by assistant staff or lifeguards.

On the contrary, people with other disabilities like reduced mobility, special needs, deaf or deaf-mute demand information through official websites of DMOs and public transport, sign language and audio description in different languages. Indicators such as symbols or pictograms shall be applied consistently over the whole route and the journey sequence of people with disabilities to facilitate their travel experience when they go to the beach. For instance, people with reduced mobility require adapted seats, elements and spaces in public transport, water closet (WC) and beaches like wooden walkways, sound and visual indicators, shaded areas, amphibious chair and crutches, support staff to help them during the bathing, life jackets, amongst many others (see Panel B of Figure 4). It is worth a call or quick internet search prior to heading out to find whether a beach wheelchair is available to help you gain access to the beach, availability of accessible changing rooms, WC and lockers (Poli, 2020). Universal accessibility at beaches should be an obligation more than a condition by governments and local authorities because this demonstrates how the society has advanced in terms of inclusion, diversity and accessibility.

The concept of the “journey sequence” is useful for understanding the journey experience of blind people and rest of disabled people because it breaks the trip into different components. This concept was introduced by Soltani et al. (2012) to analyse the challenges faced by disabled people at tourism and transport spots. Low et al. (2020) noted that each
step in the journey sequence can represent a difficult point in a journey, and one weak link can mean a journey is not made or is uncomfortable for blind people. Lack of information through organizations and DMO websites denotes uncertainty and it is often frowned upon in the tourist decision-making process (Ren and Ma, 2023). For example, airports must include standards of disabled user access and facilities, inside and outside their infrastructures (Florido-Benítez, 2022). In this research, I adapted the journey sequence into a sequence of activities of blind people and their guide dogs, before they plan a journey to the adapted beach (see Figure 5).

Furthermore, in Figure 5, we can see the three types of social relations blind people have with society from exclusion, partial accessibility and integrations to total inclusion. In this study, we implemented a new journey sequence of leisure activities from blind people plan their journey at home to they arrive to the adapted beach through different steps or stages to enjoy a bath on the beach. Blind people have equal rights to the access and enjoy the beaches like their fellow citizens. Figures 4 and 5 is a roadmap which includes a progressive integration of infrastructures, indicators, elements and accessibility points of beaches by regional and local governments to improve the quality of life of blind people and their families.

4.3 SWOT analysis of adapted Spanish beaches for blind people and their guide dogs to improve accessible tourism in the immediate future

In Figure 6, I present the strengths, weaknesses, opportunities and threats (SWOT) analysis of adapted Spanish beaches for blind people, to improve the accessibility of Spanish beaches by government bodies. This information is based on results of research and supported by other studies that were tackled in the literature review. In this study, I detected a lack of updated information related to adapted beaches for blind people and people with other disabilities through digital channels, especially in official websites of DMOs, tourist destinations and their social media. This is a sign of weakness of tourist destinations which should be enhanced by Spanish DMOs and autonomous communities. Surely, that is

![SWOT analysis of adapted Spanish beaches to improve the quality of life of blind people](image)

**Strengths**
- Tourist destinations which have adapted beaches for blind people and their guide dogs promote accessible tourism and empower their brand image
- Spanish tourist destinations like Malaga, Valencia, and Barcelona are a benchmark to tourist worldwide, examples to follow for other cities
- Spain has 365 adapted beaches for people with disabilities and EU Blue Flag beaches, an excellent competitive advantage for improving in tourism accessible and quality of its beaches. Complementary certifications which empower Spain’s brand image
- Spanish tourist destinations have assistant staff or florids attributed to provide information, assistance and support to blind people and visually impaired people with special needs and mobility. This is an incentive to motivate national and international tourists with disabilities to visit Spanish adapted beaches
- Sun and beach is the first tourist activity in Spain demanded by international and national tourism. Accessible tourism at beaches boost the image of cities

**Weaknesses**
- Tourist destinations lack of updated information related to adapted beaches for blind people and people with other disabilities through digital channels, especially in official websites of DMOs, tourist destinations and their social media. This is a sign of weakness of tourist destinations which should be enhanced by Spanish DMOs and autonomous communities.

**Opportunities**
- Improve accessible tourism through projects, programs and actions in cities and municipalities, improving the quality of life of blind people and their families
- Creation of new businesses and jobs focused on blind people and other disabilities
- Improve the relationship of cities and municipalities with associations of blind people like ONCE, AACVE, ADICSE, Discap, COEMIF, among others
- Design marketing and promotion campaigns by Spanish DMOs through digital channels focused on adapted beaches for blind people, their guide dogs, and vision impaired to position as worldwide reference on accessible tourism
- Develop touristic packages focused on blind people and their families by DMOs and OTAs to stimulate tourism demand and reduce the effects of the accommodation system
- These actions encourage blind people and their guide dogs to travel without fear, improve personal growth and independence regardless barriers

**Threats**
- Consider blind people and people with other disabilities as homogeneous group
- Blind people and visually impaired people demand more movement and mobility independence in tourism and transport industries. Too many physical, digital, and operational barriers are still holding them back in their daily life
- Lack of interdependence between local and regional governments, public sector, and associations of blind people are determining the quality of life of this social group
- Lack of movement and independence of beaches by blind people and their guide dogs due to cities and municipalities are not implementing new adapted beaches in Spain
- Blind people do not need to perceive actions and feeling of vulnerability by the rest of people. They only need better equipment and support services to improve their quality life
- Discrimination and do not consider guide dogs as part of blind people in accommodations, restaurants, beaches, aware of transport, etc., reduce their personal freedom of movement

*Source: Figure by author*
because there is a lack of interoperability, cooperation and communication between regional and local governments. For this reason, Spanish tourist destinations must provide more homogeneous information on the characteristics of adapted beaches and which people with disabilities were adapted these beach areas. A detailed information about the opening and closing times of adapted beaches and updated timetable of buses and trains to go to the beaches would facilitate blind people’s journey. Roca et al. (2009) noted that specific characteristics of each beach are not considered in terms of tourist communication and promotion by DMOs.

It is therefore necessary to take political measures which includes a single legal regulation of adapted beaches for blind people in Spain. Tourist destinations should provide uniformity in infrastructures, indicators, elements and accessibility points of accessible beaches for this group. In this same line, Mayordomo-Martinez et al. (2019) revealed that Spanish municipalities and DMOs need to improve the communication, update information about beaches and improve interface and usability of their official websites and apps to promote the well-being of blind people and people with visual impairment (Qiao et al., 2022).

Notwithstanding, one cannot speak about universal accessibility at Spanish beaches for blind people and their guide dogs, when Spain only has nine adapted beaches out of 3,547 total beaches. Results revealed that northern Spanish and most Spanish tourist destinations have not adapted beaches for blind people. This means that this group is being excluded from enjoying a day at the beach like their fellow citizens. Honestly, in this study I have advocated the need for having a minimum of three adapted beaches for blind people for each city, or one adapted beach in each municipality. These initiatives will help blind people to cover their basic and special needs when they go to the beach. For instance, DMOs of Spain should design marketing strategies and joint promotion campaigns through their websites and social media to communicate and promote the adapted beaches for blind people on Spanish coasts.

Government bodies cannot continue to look the other way when blind people demand more movement independence for tourism and transport activities. Too many physical, digital and operational barriers are still holding them back in their day-to-day lives. This threat is real, and governments cannot shrink from their responsibility to combat it. For this reason, DMOs and autonomous communities must work together to equip and adapt some beaches with new and innovative infrastructure which allows full accessibility to blind people at Spanish beaches. This problem of lack of adapted beaches for blind people and their guide dogs is not only in Spain; this incidence of accessibility at beaches is present in most tourist destinations worldwide. El-Mandara beach in Alexandria City was the first adapted beach for blind people in Egypt in 2022. After due SWOT analysis, more efforts are required in response to the needs of blind people in tourism and transport activities by researchers, academics, government bodies, and a more fair, solidary and generous society.

Regarding the strengths of adapted Spanish beaches to improve the quality of life of blind people, we must emphasise that Spanish tourist destinations that provide adapted beaches for blind people and their guide dogs promote accessible tourism and universal accessibility, empowering their brand image around the world. Spanish tourist destinations that provide adapted beaches for blind people and their guide dogs promote accessible tourism and universal accessibility, empowering their brand image around the world. Spain is a world benchmark in tourism of the sun and beach, would be a great opportunity to design marketing and promotion campaigns through digital channels focused on adapted beaches for blind people to position itself worldwide on accessible tourism. Tourist packages focused on blind people and their companions should be developed by DMOs and online travel agencies can stimulate tourist demand and reduce the effects of stationary tourism (Gillovic and McIntosh, 2020).
Other relevant strengths of Spanish tourist destinations are that most beaches have assistant staff and lifeguards trained to provide information, assistance and support to blind people and people with other disabilities. This is an incentive to motivate national and international tourists with disabilities to visit adapted beaches. Moreover, these initiatives and actions encourage blind people to travel without fear, enhance their personal growth and inculcate independence regardless of barriers. Nonetheless, our findings support that it would be advisable to reinforce the relationship of autonomous communities, cities and municipalities with associations of blind people to know the real needs of this group with the aim of getting the maximum effectiveness of their proposals and to improve the quality of their life.

5. Conclusions

The findings of this research revealed that Spain has only nine adapted beaches for blind people, and most Spanish tourist destinations exclude blind people and their guide dogs from enjoying the beach and sun and their facilities. With these data, RQ1 is answered. In Spain there are in total 3,547 beaches, of which 10.3% are adapted beaches for people with reduced mobility, whereas only 0.25% are adapted beaches for blind people. These results are particularly worrisome, as this ought to make us think about the mistakes made with this group. Government bodies have been unable to guarantee effective law enforcement to integrate barrier-free accessibility at beaches for blind people. Alves et al. (2023) noted that the pandemic crisis increased the interpersonal constraints of the blind people during trips and recreational outdoor activities.

Additionally, this research shows the indicators and elements that are the most suitable for an adapted beach of blind people (RQ2), to improve the experience of this group, according to the principles of independence, equity and dignity, so they will be motivated to travel to and enjoy the beaches (see Figures 4 and 5). Blind people require mainly information through braille text and audio description elements when they go to the beach, as well as spaces in public transport and beaches for them and their guide dogs. Moreover, symbols and pictogram indicators should be applied consistently over the whole route and in the journey sequence of people with disabilities to facilitate their travel experience. Eichhorn et al. (2008) revealed that five elements are required in accessibility schemes for blind people: appropriate sources, communication tools, information richness, reliability and tourist-oriented services to fulfil the informational needs of this group.

Last, it was observed in this study that local and regional governments are improving the accessibility of Spanish beaches for blind people and their guide dogs (RQ3), but these efforts are still insufficient. These results are aligned with results of previous studies, such as those of Alves et al. (2023), Hayden (2021) and Buhalis et al. (2012), which revealed that the complexities of beach access for blind people have been explored by public and private organizations, but important progress on accessibility, personalised information and services are still needed for this group. A roadmap of accessible beaches for blind people must be established by government bodies and the European Union, which include progressive integration of infrastructures, indicators and accessibility points of accessible beaches to improve blind people’s experiences at beaches, so they will be able to fully enjoy the beach and sun, and their facilities. Michopoulou et al. (2015) suggest that DMOs should enhance accessible tourism activities for blind people and their guide dogs in terms of accessibility of facilities, transportation and tourist attractions.

Finally, I would like to highlight that Spain is a world benchmark with respect to the accessibility of beaches for people with reduced mobility and blind people. Indeed, most tourist destinations around the world do not have adapted beaches for blind people, and there are very few adapted beaches for people with reduced mobility such as in Turkey, Egypt, Portugal, Italy, Morocco, the UK, amongst many others. All tourist destinations
worldwide should consider and promote adapted beaches for blind people and their guide dogs, as an example of inclusion and universal accessibility by an advanced society.

5.1 Theoretical and practical implications

This research advances the literature about accessibility of beaches for blind people and their guide dogs. Findings show that public and private institutions are sometimes very distant from blind people’s needs. Thanks to this study, blind people’s experience and the inherent conditions under which they go to the beaches can be better understood. DMOs as well as tourism researchers can enhance their contextual understanding of the significance of adapted beaches for blind people. By familiarising with the accessibility of beaches, they can make better decisions regarding marketing strategies and actions to facilitate the experience of this group according to the principles of independence, equity and dignity (Buhalis and Michopoulou, 2011). Furthermore, the current study suggests that governments of Spain, Egypt, Portugal, Greece and France, amongst many others need to implement new adapted beaches for blind people. For this reason, greater efforts are needed to improve the accessibility of beaches and transport systems by researchers, academics and public and private organizations.

This study reveals the need to unify criteria for adapted beaches and their regulations, especially for blind people and their guide dogs, by Spanish tourist destinations. I am confident that findings from this research will help tourist destinations in the planning and management of accessibility requirements on adapted beaches for blind people, with respect to communication, information, equipment, tools and technologies terms. The findings suggest that government bodies’ support can considerably improve the quality of life of this group. For instance, the location of adapted beaches for blind people must be supervised by DMOs to ensure information acquisition and safety of people with disabilities. Moreover, tourist destinations should provide personalized information and content through touchscreen devices with braille, audio description in different languages and talk-to-text. These initiatives will encourage blind people and their families to enjoy the beaches (Qiao et al., 2023).

5.2 Limitations and future research

This study has limitations and other opportunities for future research. Since the target population was blind people and vision-impaired, information and data of this group are constrained because the protection of personal data remains a matter of concern, especially in this group. Moreover, governments bodies and some relevant companies did not want to cooperate in this research, possibly due to the alarming results. Future studies could analyse and measure the number of adapted beaches for countries or regions to compare with the results of this study. Of this study, as well as to analyse the accessibility of beaches applicable law by countries to tackle the best regulations and provide a common framework linking bind people’s needs with existing resources to improve the universal accessibility of beaches. Buhalis et al. (2023) noted that inclusive tourism, accessible tourism, social tourism, and solidarity tourism contribute to the reduction in social inequality.

References


Further reading

About the author
Lázaro Florido-Benítez holds a PhD in Tourism and Marketing from the University of Málaga (Spain) and a Master in Management of Airports–Aeronautics from European Business School (Spain). He is a lecturer and researcher in the Economics and Business Administration Department. His main research interests include airport marketing, air transport connectivity, cybersecurity. In the area of tourism, he has investigated promotion of the tourist destination, how airports and destinations use marketing strategies through digital marketing, mobile marketing, the impact of mobile marketing in the airports, the impact of airports and airlines on the tourist destination, among others. He has published in many peer-reviewed journals on topics such as tourism, airports and marketing. Lázaro Florido-Benítez is the corresponding author and can be contacted at: lfb@uma.es

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