

VALUING ACCESSIBILITY IN HOSPITALITY AND THE LOYALTY OF TOURISTS WITH DISABILITIES

VALORAÇÃO DA ACESSIBILIDADE NA HOTELARIA E A LEALDADE DO TURISTA COM DEFICIÊNCIA

VALORAR LA ACCESIBILIDAD EN LA HOSTELERÍA Y LA FIDELIZACIÓN DE LOS TURISTAS CON DISCAPACIDAD

Marklea da Cunha Ferst¹, Sara Joana Gadotti dos Anjos², Vitor Roslindo Kuhn²

¹ Amazonas State University, Manaus, Amazonas, Brazil ²² University of Vale do Itajaí, Balneário Camboriú, Santa Catarina, Brazil

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Abstract

The official data regarding the development of the tourist activity shows its importance and reflexes on the economy and social well-being. However, the question is whether the countries are properly prepared to meet all tourism demands with equality, which is why the needs of people with disabilities or reduced mobility are addressed in this study. Accessibility in accommodation facilities is an essential factor, whether by seeking to understand ways to eliminate barriers and/or how to develop an environment that is conducive to tourism activity. Thus, the research aims to analyze the valuation of accessibility in the choice of the accommodation and aspects that may influence the loyalty of the tourist with disabilities or with reduced mobility (TwDMr). The study is characterized as applied descriptive, with a bibliographic survey and the use of a questionnaire with both open and closed questions. It collected results from 995 respondents, serving as a basis for quali-quantitative analyses. The results establish that having access to tourist activities positively influences people's quality of life; the importance of accessibility in the purchase of a tourism product or service was proven, highlighting the accessibility of the means of accommodation as the most important element in the TwDMr's choice of tourist destination. It was concluded that meeting the accessibility requirements in the means of accommodation influences the choice of tourist destination, generating value to the enterprise, leading to loyalty, and, as a result, the TwDMr tend to be more loyal when their needs are adequately met.

Marklea: Adjunct Professor at the Amazonas State University, Manaus, Amazonas, Brazil. PhD in Tourism and Hospitality from the Universidade do Vale do Itajaí, Balneário Camboriú, Santa Catarina, Brazil. E-mail: mferst@uea.edu.br, Orcid: <https://orcid.org/0000-0003-4399-8870>

Sara: Full Professor and researcher of the Postgraduate Program in Tourism and Hotel Management of the University of Vale do Itajaí, Balneário Camboriú, Santa Catarina, Brazil. PhD in Production Engineering from the Universidade Federal de Santa Catarina, Florianópolis, Santa Catarina, Brazil. E-mail: sara@univali.br, Orcid: <https://orcid.org/0000-0002-6546-4960>

Vitor: PhD candidate in the Postgraduate Program in Tourism and Hospitality at the Universidade do Vale do Itajaí, Balneário Camboriú, Santa Catarina, Brazil. Master in Tourism and Hotel Management from the Universidade do Vale do Itajaí, Balneário Camboriú, Santa Catarina, Brazil. E-mail: vitorkuhnchef@gmail.com, Orcid: <https://orcid.org/0000-0002-2006-3784>

Palavras-chave:

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Resumo:

Os dados oficiais a respeito do desenvolvimento da atividade turística demonstram a sua importância e reflexos na economia e bem-estar social. Entretanto, o que se questiona é se os países estão devidamente preparados para atender com igualdade a todas as demandas turísticas, motivo pelo qual as necessidades de pessoas com deficiência ou com mobilidade reduzida são abordadas no estudo. A acessibilidade no meio de hospedagem é um fator essencial, seja buscando compreender formas de eliminar barreiras e/ou como desenvolver um ambiente que propicie a atividade turística. Com isso, a pesquisa objetiva analisar a valoração da acessibilidade na escolha do meio de hospedagem e aspectos que podem influenciar na lealdade do turista com deficiência ou com mobilidade reduzida (TwDMr). O estudo é caracterizado como descritivo aplicado, com levantamento bibliográfico e uso de questionário com perguntas abertas e fechadas. Coletou resultados de 995 respondentes, servindo de base para as análises quali-quanti. Os resultados estabelecem que ter acesso a atividades turísticas influencia positivamente na qualidade de vida das pessoas; comprovou-se a importância da acessibilidade na aquisição de um produto ou serviço turístico, salientando a acessibilidade aos meios de hospedagem como elemento mais importante na escolha do destino turístico pelo TwDMr. Conclui-se que atender aos requisitos de acessibilidade no meio de hospedagem tem a capacidade de influenciar na escolha do destino turístico, gerando valor ao empreendimento, conduzindo a lealdade, e, como resultado, os TwDMr tendem a ser mais fiéis quando são adequadamente assistidos em suas necessidades.

Palabras clave:

Accesibilidad;
Alojamiento;
Lealtad;
TwDMr.

Resumen

Los datos oficiales sobre el desarrollo de la actividad turística muestran su importancia y reflejos en la economía y el bienestar social. Sin embargo, la pregunta es si los países están debidamente preparados para atender con igualdad todas las demandas turísticas, por lo que en este estudio se abordan las necesidades de las personas con discapacidad o movilidad reducida. La accesibilidad en las instalaciones de alojamiento es un factor esencial, ya sea buscando comprender formas de eliminar barreras y/o cómo desarrollar un entorno propicio para la actividad turística. Así, la investigación pretende analizar la valoración de la accesibilidad en la elección del alojamiento y los aspectos que pueden influir en la fidelización del turista con discapacidad o con movilidad reducida (TwDMr). El estudio se caracteriza por ser descriptivo aplicado, con levantamiento bibliográfico y el uso de un cuestionario con preguntas tanto abiertas como cerradas. Recopiló resultados de 995 encuestados, sirviendo como base para análisis cuali-cuantitativos. Los resultados establecen que tener acceso a actividades turísticas influye positivamente en la calidad de vida de las personas; Se comprobó la importancia de la accesibilidad en la compra de un producto o servicio turístico, destacando la accesibilidad del medio de alojamiento como el elemento más importante en la elección del destino turístico por parte de la TwDMr. Se concluyó que el cumplimiento de los requisitos de accesibilidad en los medios de alojamiento influye en la elección del destino turístico, generando valor al emprendimiento, generando fidelización, por lo que las TwDMr tienden a ser más leales cuando sus necesidades son satisfechas adecuadamente.

INTRODUCTION

The provision of a superior service to the customer - usually built by a positive differentiation - culminates in their loyalty, and this positive differentiation has been called value creation (Tomczyk *et al.*, 2022), used by the industry as one of the competitiveness strategies.

According to several authors (Moura *et al.*, 2022; Rabontu, 2018) the so-called accessible tourism is considered a potential and profitable tourism segment, since according to the World Health Organization (2015) more than one billion people in the world have some kind of disability.

In addition to the significant number of people with disabilities, there are also tourists with reduced mobility, such as the elderly, pregnant women, and the obese, who tend to have mobility difficulties and needs similar to those of people with disabilities. The literature has pointed out that the fact of the constant growth of the elderly population - which is estimated to represent 21.1% of the total world population by 2050, compared to the current 11.7% (Losada Sánchez *et al.*, 2018) - potentializes the number of tourists who demand for tourism products and services that meet their needs (Ferst *et al.*, 2020; Rabontu, 2018).

It occurs that even though studies indicate the strength of accessible tourism, there have been few initiatives by the tourism sector to meet the accommodation preferences of people with disabilities or reduced mobility (Lyu, 2017). On the other hand, there are few scientific studies regarding accommodations for people with disabilities (Martin-Fuentes *et al.*, 2021).

Thus, considering the importance of this consumer with disabilities or reduced mobility, coupled with the fact that 49.6% of tourists stay in hotels, apartments, resorts or inns (Brazil, 2017), understanding the behavior of tourists with disabilities or reduced mobility in the decision making for the choice of their accommodation is extremely relevant for the hotel industry, to the extent that the choices they make regarding the type of accommodation reflect not only the expectations of tourists, but also influence their behavior in the destination (Pulido-Fernández *et al.*, 2023).

The lack of accessibility in the hotel network is one of the factors that hinder the practice of tourism by people with disabilities or reduced mobility, and investment in the elimination of barriers can be a factor for the development of tourism activity and a competitive advantage (Sousa & Mangas, 2020; Wall-Reinius *et al.*, 2022), being important to highlight the fact that there is no social model of disabled people in the tourism literature (Babaita, 2012), which hinders the adoption of specific actions for this public.

From these statements the following research problem arises: Does the promotion of accessibility in hotels generate value to the enterprise and lead to the loyalty of the tourist with disabilities or reduced mobility?

Thus, this article aims to analyze the valuation of accessibility in the choice of the accommodation and aspects that may influence the loyalty of the tourist with disabilities or reduced mobility.

This is a descriptive, explanatory and applied research, with a deductive way of thinking and a bibliographic and survey approach. We opted for a study of mixed nature, with quantitative and qualitative data analysis. The quantitative analysis occurred with the application of an online questionnaire in the

social networks. The qualitative analysis was done through the analysis and interpretation of open questions in the applied questionnaire, which was applied in the period between 22/11/2019 and 31/01/2020, having 995 respondents. Of these, 755 were people with disabilities or reduced mobility.

From the data analysis it was possible to prove the importance of accessibility in the choice of the means of accommodation by people with disabilities or reduced mobility, and the loyalty of this segment when their needs are met.

As a theoretical contribution, we have the definition of the concept of disability in tourism; the analysis of the importance of accessibility for the choice of the means of accommodation; the loyalty of the segment of tourists with disabilities or reduced mobility and the demonstration that the promotion of accessibility influences the competitiveness of the establishment, thus contributing to the image of the enterprise. And, as a practical contribution, it will serve as support for the decision making process of hotel managers in promoting accessibility in their properties.

THEORETICAL BACKGROUND

The context of disability and accessibility in hospitality

The various theoretical approaches on disability developed in the 20th century led to the development of several conceptual models that initially focused on the characteristics of the individual, and later advanced to the inclusion of the environment in its physical and social aspects for the definition of disability (Degener & Quinn, 2018) and today the International Classification of Functioning, Disability and Health - ICF is used, i.e., it is the so-called biopsychosocial model, which includes the issue of dysfunctions from the perspective of biology: (i) health conditions such as diseases, disorders and injuries; (ii) of the person: gender, age, education, culture, professional status, experience, etc.; and (iii) of society: legal and social infrastructure; climate and architecture (Oliveira, 2021).

In the contemporary view of disability the change must happen in society and not in the individual (Friggi Ivanovich & Gesser, 2020), because in the words of Leite *et al.* (2016), p. 44) "It is society itself that takes away the capacity of the human being with its barriers and obstacles, or with the absence of supports".

Although each country has its own legislation to protect the rights of the person with disability, in order to work with a universal concept of disability in this article, we chose the definition brought by the United Nations International Convention on the Rights of Persons with Disabilities, which, in its article 1, defines a person with disability as that who has long-term impairments of a physical, mental, intellectual or sensory nature, which, in interaction with various barriers, may hinder their full and effective participation in society on equal terms with others (ONU, 2019).

From the conceptualization brought by the UN Convention on people with disabilities is extracted the biopsychosocial concept of disability, that is, it is the disability combined with the various barriers that generate disability. Therefore, the hotel industry needs to adapt and make the necessary changes to meet the needs of people with disabilities so that they may enjoy - on equal terms with other people - the services provided.

It is important to analyze the fact that there is no social model of disabled tourist in the tourism literature (Babaita, 2012), being imperative the need to go beyond the definition of disability and develop solutions to enable the tourism industry to meet the needs of people with disabilities and to recognize the importance of barrier-free or inclusive design - which is the appropriate approach to examine accessible tourism and tourism signage, as it advocates design for all users and has seven Bouchard-Ribera design principles, in that barriers are a reality in contemporary society in all environments (Wall-Reinius *et al.*, 2022).

The importance of this adaptation is based on consumer behavior, which must be analyzed by the industry in order for it to remain competitive in the market with the provision of innovative and personalized services (Meira *et al.*, 2020; Tweneboah-Koduah *et al.*, 2018).

In order to develop a concept of tourists with disabilities, the concepts of the UN International Convention on the Rights of Persons with Disabilities (CRPD), and the legislation of France, Spain, and the United States were taken into consideration. These countries were chosen because they are, according to the World Tourism Organization (2019) data, the three countries that received the most tourists in the year 2018. Table 1 shows each of the concepts according to the cited regulations.

Chart 1 - Disability Concepts

Legislation	Concept of Person with Disability
ONU Art. 1º CRPD	People with disabilities are those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.
France Art. L114 Code of Social Action and Families	Any activity limitation or participation restriction in social life by a person due to a substantial, long-lasting, or definitive alteration in one or more sensory, mental, cognitive, or psychological functions, polyphagia, or disabling health condition
Spain § Royal Legislative Decree 1/2013, of November 29	It is a situation that results from the interaction between people with permanent foreseeable disabilities and any type of barriers that limit or prevent their full and effective participation in society on an equal basis with others.
United States Sec. 12102 Americans with Disabilities Act of 1990 (ADA)	The term "disability" means, with respect to an individual: (A) a physical or mental impairment that substantially limits one or more major life activities of that individual; (B) a record of such impairment; or (C) being regarded as having an impairment

Source: Prepared by the authors.

Another important element considered was the concept of tourism approved by the UNWTO in 1991 and updated in 1999 (Pakman, 2014), which states that tourism includes activities performed by people during their travels and stays in places other than their usual environment, for a consecutive period of time less than a year, for leisure, business, or other reasons not related to the exercise of a paid activity in the place visited.

On the other hand, the provisions of the World Code of Ethics for Tourism were also considered, regarding tourist activity as an element of individual and collective development. Thus, the following concept of tourist with disability (TwD) is proposed: A tourist with disability is a person who, in interaction with various barriers, has a physical, mental, intellectual, or sensory impairment that may hinder his full and effective participation in tourism on equal terms with others, who moves away from his usual place of residence for a period of less than a year and undertakes tourism-related activities such as: leisure, rest, sports, access to culture and nature, business, or other reasons not related to the exercise of a paid activity in the place visited.

Once the disabled tourist is identified, it is understood that his concept is extended to the tourist with reduced mobility as applicable.

Certainly, so that tourists with disabilities or reduced mobility can enjoy the tourist activity on equal terms with other tourists, it is essential to eliminate the barriers that obstruct their autonomous, full and effective participation. In this sense, the CRPD provides in its Article 3 the need to carry out reasonable accommodation, which are the necessary and appropriate modifications and adjustments aimed at ensuring that persons with disabilities can enjoy or exercise, on an equal basis with others, all human rights and fundamental freedoms, which must be done with the adoption of a universal design (UN, 2019).

Finally, the need for effective measures to ensure persons with disabilities their personal mobility with as much independence as possible is highlighted, as provided for in Article 20 of the CRPD (UN, 2019).

Creating value and loyalty of the disabled tourist guest

Consumer behavior is understood as a process involving a transaction where two or more parties provide and receive something of value (Solomon, 2016). They highlight Dixit *et al.* (2019, p. 152) that five stages involve the traditional consumer decision-making process: "i) problem recognition; ii) information seeking; iii) judgment; iv) decision-making process and v) post-decision."

It should be noted that several people may be involved in the stages of decision making, either because not always the one who acquires the service or product is the one who will use it; either because of the influence that the opinion of other people may infer on the consumer's decision, or when the consumer is a group or an organization, as occurs in the family, in which all members may have an opinion on the acquisition of products and services that will be used by all (Solomon, 2016).

In any case, it is in the post-decision stage that the consumer will evaluate the product or service, which implies its satisfaction and loyalty (Dixit *et al.*, 2019) and promoting guest satisfaction is one of the essential elements in the pursuit of loyalty, as will be analyzed.

Value creation can take place based on different strands, which include price, strategy, position, relationships, experience, benefits, and customer focus (Dowell *et al.*, 2019).

Customers build value for themselves in their daily practices when they use the resources provided by the company in combination with other resources and apply the skills they maintain. When the company develops interactive contacts with its customers during the provision of services, it provides the opportunity to co-create value with and for them. This is the essence of service logic for the customer and the provider according to Grönroos (2008). In the first case, we have the customer service logic, and in the second, the provider service logic.

Co-creation occurs when you have the active participation of the end consumer in the innovation process of products and services (Tomassini, 2019; Voorberg *et al.*, 2014), highlighting Tomassini (2019) that co-creation arises from the ability of service providers together with consumers to robustly and inclusively understand market gaps and the real needs of stakeholders.

In the logic of provider service, the company adjusts its business and marketing strategies to create value according to customer consumption (Grönroos, 2008), providing better quality service delivery which helps to ensure customer loyalty (Tanford, 2016).

The search for customer loyalty is a constant variable in market logic. Tanford (2016), when doing a study on loyalty in hospitality using meta-analysis quantified the relationships between antecedents and indirect and direct outcomes of loyalty. The author demonstrates that direct antecedents such as trust, emotional commitment, satisfaction, and service quality demonstrate robust relationships with loyalty (2016, p. 133).

The growing competition of tourist destinations and the increasingly demanding consumer profile require not only quality in the provision of services, but that destinations are sustainable and socially responsible, highlighting Martin-Fuentes *et al.* (Martin-Fuentes *et al.*, 2021) that the development of accessible tourism can contribute to greater competitiveness, since it is a market usually underserved and generally more loyal audience.

Another important aspect is the contemporary trend of a culture of social responsibility, thus, the promotion of accessibility in tourism products and services “would reinforce a shared, human and engaging vision of the destination among stakeholders” (Figueiredo *et al.*, 2012, p. 369), i.e., not only of TWD but also tourists without any disability or mobility difficulty, but that tend to value services, products and companies socially responsible.

Moreover, by adopting innovative practices to meet the needs of the TwD, a strong social demand is met, since there is a gain for society as a whole, both for people with mobility impairments such as the elderly, pregnant women and the obese, and for people without disabilities or mobility impairments (Ferst *et al.*, 2020).

Accommodation has proven to be an attribute of great importance for the person with disabilities, highlighting Lyu (2017) that the person with disabilities is willing to pay U\$ 112.4 more for accommodations with a high level of accessibility. For WHO and access to tourism facilities, products and services should be a central part of any sustainable and responsible tourism policy, highlighting Martin-Fuentes *et al.*, (Martin-Fuentes *et al.*, 2021) data indicating that 70% of Europeans with accessibility

needs in addition to holding physical and economic ability to travel usually travel accompanied, with the average being 1.5 companions per potential traveler.

Hence the importance of promoting affordable hotel services, since the expansion of the tourism industry is accompanied by the hotel industry, being imperative that the hotel makes a diagnosis of its current productivity and develop operational strategies from an efficiency analysis that provides its sustainable growth, and in this analysis should consider customer satisfaction as it represents a valuable resource in the implementation of sales and loyalty (Kim & Chung, 2020; So *et al.*, 2020).

In the quest for loyalty and efficiency value creation has proven important for the hospitality industry “because the survival and growth of hotels depend in large part on creating and delivering unique, memorable, and personalized experiences to their customers” (Roy *et al.*, 2019, p. 353). Research shows that 73% of companies with above average customer experience perform better financially than their competitors; Customer-centric companies are 60% more profitable than companies that do not focus on customers; and those that offer superior customer experiences generate 5.7 times more revenue than others (Morgan, 2019).

On the other hand, guest satisfaction impacts their loyalty to the hotel brand leading them to choose the same brand for another trip, with the various services offered by the hotel having a strong influence on consumer satisfaction (Kim & Chung, 2020), with Morgan (2019) pointing out that loyal customers are five times more likely to buy again and four times more likely to refer a friend to the company.

The research conducted by Griessmair *et al.* (2020) demonstrates an important element regarding loyalty. According to the authors, exploring the emotions experienced by the customer during a hospitality service has the potential to influence customer loyalty and generate positive recommendations. Thus, considering all aspects of accessibility (physical; attitudinal; communicational; technological) the three research hypotheses arise:

H1: Influencing and hindering factors about accessibility are different for TwDMr and TnD;

H2: TwDMr's satisfaction with hotel accessibility influences their loyalty.

H3: The information about the accessibility of a certain destination or service aimed at tourism, is a determining factor for their choice, by TwDMr.

METHODOLOGY

The study developed regarding the objective has: i) descriptive character in that it is carried out the study of the association between two or more variables: person with disabilities versus accessibility and hospitality (Hernández Sampieri *et al.*, 2015); ii) explanatory, because it explains why the influence of accessibility on the choice of means of accommodation by TWD using records, classifications, analysis and interpretation of the phenomena observed (Prodanov & Freitas, 2013); and iii) applied for seeking a solution to the problem by presenting an answer about the concept of disability in tourism and how much accessibility influences the decision making of the TWD guest in the choice

of the means of accommodation through scientific knowledge in order to provide immediate managerial decision making (Cooper & Schindler, 2016).

Regarding the source of research, this research is characterized by a state-of-the-art analysis study, that is, it performs the types of studies that have already been conducted on the topics, the form of data collection, trends and gaps (Hernández Sampieri *et al.*, 2015).

As for the form of reflection, the deductive method was used. The bibliographic approach and the survey were used, and a quantitative analysis was made with the method of intentional non-probability sampling of the data and a qualitative analysis of the open answers was carried out.

To calculate the quantitative sample, it was used the common rule suggested by Hair Jr. *et al.*, (2009) where there are between 10 and 15 respondents per question. Considering that the research instrument has 54 variables, the minimum necessary number of respondents with disabilities or reduced mobility was defined as 540 respondents. For the application of the questionnaire, the selection was made by convenience using the authors' social networks and shared by people in their contact network. To reach the largest number of respondents, the questionnaire was translated into Spanish, English, French and German, using the reverse translation technique suggested by Malhotra (2012).

Since this is a research of a mixed nature, a questionnaire was developed for the quantitative research, with some open-ended questions to perform the qualitative analysis and a system of categories, relationships and hypotheses for the qualitative research (Hernández Sampieri *et al.*, 2015). The questionnaire was designed based on the previous studies already conducted by the literature (Cole *et al.*, 2019; Dávid & Kiss, 2011; Rabontu, 2018; Zbikowski *et al.*, 2011), containing closed questions about the: respondent's profile; decision influencing factors, travel impediment and accessibility; as well as open-ended optional questions regarding accessibility influence on the choice of tourism product or service (Adam *et al.*, 2017; Cole *et al.*, 2019; Rabontu, 2018; Var *et al.*, 2011; Zbikowski *et al.*, 2011).

For data analysis and consolidation, descriptive tests of frequency and mean of the questions; normality test and the nonparametric Mann-Whitney test were performed with the use of IBM SPSS Statistics version 25 software.

The questionnaire was applied between November 22, 2019, and January 31, 2020, with a total of 995 respondents. Of these, 755 were composed of the target audience of this work, that is, people with disabilities or people with reduced mobility.

Regarding the type of impediment, the survey reached 570 people with some type of disability (physical, mental/intellectual, hearing, or visual); 185 people with reduced mobility (obese, pregnant women, the elderly, or other mobility difficulties), and 240 people without disabilities or mobility difficulties. The largest number of respondents was composed of people with physical disabilities, equivalent to 38.69% (385) of the overall total of participants. Table 1 consolidates these data.

Table 1 - Respondent Profile: Type of Impediment

	Respondent Profile	n	%	Subtotal
Twd	Physically def.	385	38,69%	570
	Mental/intellectual def.	111	11,16%	
	Hearing Def.	40	4,02%	
	Visual Def.	34	3,42%	
TwMr	Other Mobility Difficulties	64	6,43%	185
	Obese	48	4,82%	
	Pregnant	38	3,82%	
	Elderly	35	3,52%	
TnD	Tourist without disability	240	24,12%	240
	Total	995		

* * Twd = Disabled tourist * TwMr = Tourist with reduced mobility * TnD = Tourist without disability

Source: Research data (2020)

RESULTS

We analyzed how much accessibility influences the choice of a travel destination and the visit to a tourist attraction, as well as if the respondent would not visit a destination or a tourist attraction because of the lack of accessibility compared to other elements of travel decisions, such as accessibility in hotels, insecurity in the destination, and participation costs. The study was carried out through two strands. The first concerns the factors that influence the choice of the city and the tourist attraction, and the second, the factors that hinder the choice of the city and the tourist attraction.

When analyzing the response of the influencing factors (Table 2) with the application of the nonparametric Mann-Whitney test, we have the verification of the null hypothesis of equality in the perception between the group of tourists with disabilities or reduced mobility (TwDMr) versus tourists without disabilities (TnD). In the first variable: "influence of accessibility on the choice of the city", the null hypothesis must be rejected ($p=0.000$), having the perceptions of the tourists different, with the TwDMr showing a mean 3.75 and standard deviation 1.40 while the TnD shows mean 3.03 and stan-

standard deviation 1.40. In the second variable the null hypothesis was also rejected: “influence of accessibility on the choice of tourist attraction” has a significance $p=0.000$, with TwDMr showing a mean 3.80 and standard deviation 1.33 while TnD shows mean 3.05 and standard deviation 1.37 (Field, 2009).

Table 2 - Classification of Travel Influencing Factors

	Respondent Profile				Mann-Whitney Hypothesis Test Summary		
	TwDMr		TnD		U-value	Sig.	Decision
Travel Decision	Average	Standard Deviation	Average	Standard Deviation			
Influence of Accessibility on the choice of City	3,75	1,36	3,03	1,39	61401,50	,000	Rejecting Equality of Samples
Influence of Accessibility on the choice of Tourist Attraction	3,80	1,33	3,05	1,34	59080,00	,000	Reject equality of samples

*Asymptotic significance is shown. The significance level is .05; *TwDMr = Tourist with disability or reduced mobility; *TnD = Tourist without disability.

Source: Research data (2020)

It can be noticed that in both variables of influence of accessibility in the choice of the city and in the choice of the attraction, the importance factor for TwDMr is higher than for TnD. Such analysis reinforces the importance of accessibility in the choice of tourist destination by the tourist with disabilities or reduced mobility.

Regarding the impeding factors, there are statistical differences in the groups of tourists with and without disabilities in all six variables presented, all verified with the application of the nonparametric Mann-Whitney test, as described in table 03.

Table 3 – Classification of trip impediment factors

Travel Impediment Factors	Respondent Profile				Summary of Hypothesis Test with Mann-Whitney Method		
	TwDMr		TnD		U-Value	Sig.	Decision
	Average	Standard Deviation	Average	Standard Deviation			
Lack of accessibility in lodging facilities prevents me from visiting a city for tourism	4,17	1,04	3,30	1,26	78435,50	,001	Rejecting Equality of Samples
Insecurity prevents me from visiting a city for tourism	4,06	1,04	4,44	0,86	63379,50	,000	Rejecting Equality of Samples
Lack of accessibility in tourist attractions prevents me from visiting a city for tourism	4,04	1,13	3,41	1,25	59881,50	,000	Rejecting Equality of Samples
Participation costs prevent me from visiting a city for tourism	3,89	1,03	4,07	0,95	82365,50	,026	Reject the equality of samples
I would no longer visit a tourist attraction due to lack of accessibility	3,88	1,12	3,03	1,17	54592,00	,000	Reject the equality of samples
I would stop visiting a city for tourism due to lack of accessibility	3,79	1,13	3,03	1,11	57747,00	,000	Reject the equality of samples

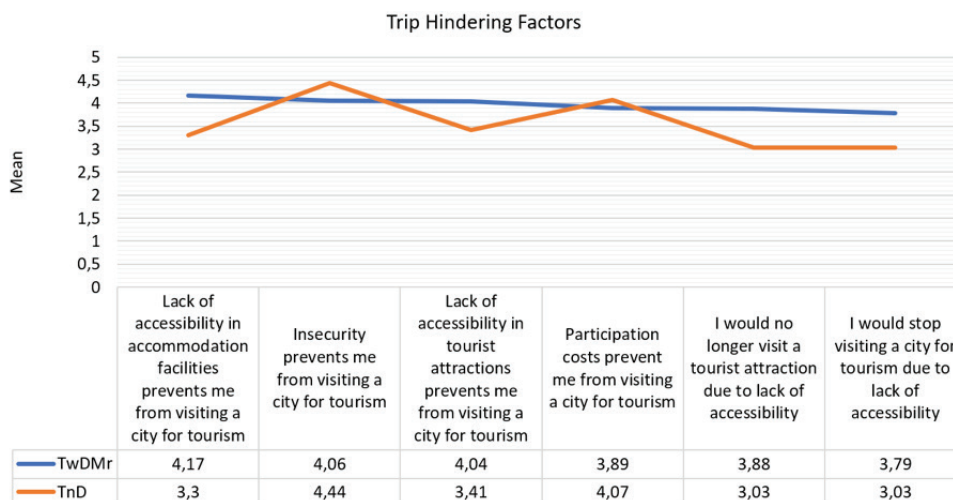
*Asymptotic significance is shown. The significance level is .05; *TwDMr = Tourist with disability or reduced mobility; *TnD = Tourist without disability. Source: Research data (2020)

For tourists with disabilities or reduced mobility, the order of factors that hinder a tourism trip was: (i) absence of accessibility in the means of accommodation presented significance $p=0.001$ (Average 4.17 and Standard Deviation 1.04) and proved to be the most relevant impeditive factor to visit a city for tourism, followed by (ii) insecurity with significance $p=0.000$ (Average 4.06 and Standard Deviation 1.04); (iii) absence of accessibility in tourist attractions as an impeditive to visit the city for tourism with significance $p=0.000$ (Average 4.04 and Standard Deviation 1.13); iv) participation costs with significance $p=0.026$ (Average 3.89 and Standard Deviation 1.03); v) would stop visiting a tourist attraction due to lack of accessibility with significance $p=0.000$ (Average 3.88 and Standard Deviation 1.12); and vi) would stop visiting a city for tourism due to lack of accessibility with significance $p=0.000$ (Average 3.79 and Standard Deviation 1.13).

As for tourists without disabilities, there is another profile of factors that hinder a tourism trip, the most relevant being i) insecurity with significance $p=0,000$ (Average 4,44 and Standard Deviation 1,00), followed by ii) participation costs with significance $p=0,026$ (Average 4,07 and Standard Deviation 1,02); iii) lack of accessibility in tourist attractions prevents me from visiting a tourist city with significance $p=0,000$ (Average 4,41 and Standard Deviation 1,13); iv) lack of accessibility in the means of accommodation prevents me from visiting a tourist city with significance $p=0,001$ (Average 3,30 and Standard Deviation 1,21); v) I would no longer visit a tourist city due to lack of accessibility with significance $p=0,000$ (Average 3,03 and Standard Deviation 1,17) and vi) I would no longer visit a tourist attraction due to lack of accessibility with significance $p=0,000$ (Average 3,03 and Standard Deviation 1,18).

When ranking the importance of the impeding factors, shown in figure 01, one notices the heterogeneity between what is more relevant for TwDMr and what is more relevant for TnD. While for the former, accessibility in the means of accommodation is the most relevant impeding factor, for tourists without disabilities it is insecurity.

Figure 1: Trip deterrent factors for TwDMr and TnD



Source: Research data (2020)

The two analyses presented, verification of influence and hindrance factor, on travel decisions confirm the difference in the perception of the groups of tourists with and without disabilities, serving as an argument to support and confirm the first hypothesis: H1: The influence and hindrance factors regarding accessibility are different for TwDMr and TnD.

Regarding participation costs, it is important to highlight that for the TwDMr, despite being an important factor, it was not shown in the survey to be the most relevant one, and confronting the open answers it is possible to allege their willingness to spend more for an accessible service. For the sake of convenience, we transcribe one of the answers referring to the theme:

Impossible to enjoy a vacation if you are constantly hampered by accessibility issues. I may be on “wheels”, but I still have disposable income and a credit card and am happy to spend to enjoy an accessible vacation. I think many people underestimate the “disability dollar”. People with disabilities are no longer happy to sit at home and watch television for fun (Respondent #297 - ID 58.165.27.99), Our translation.

Another relevant issue to be addressed and that appeared especially in the open questions is that the TwDMr highly values accessibility and previous information about it, but makes an effort to overcome the difficulties, even if it harms their tourist experience because unfortunately, if one considers the accessibility of the destination, the options become scarce. It is important to highlight the answer of some tourists with disabilities.

Fully, partially or not accessible, I will try to find a solution to make it accessible when I am traveling. But it is still important, because with good accessibility the vacation trip will be good (Respondent 223 - Id 102.119.241.100) Our translation.

I don't let accessibility barriers stop me. I try to be independent and find ways around it with my wheelchair, because you need to live your life and disability should not stop you from seeing the world (Respondent #87 - ID 99.247.128.223).

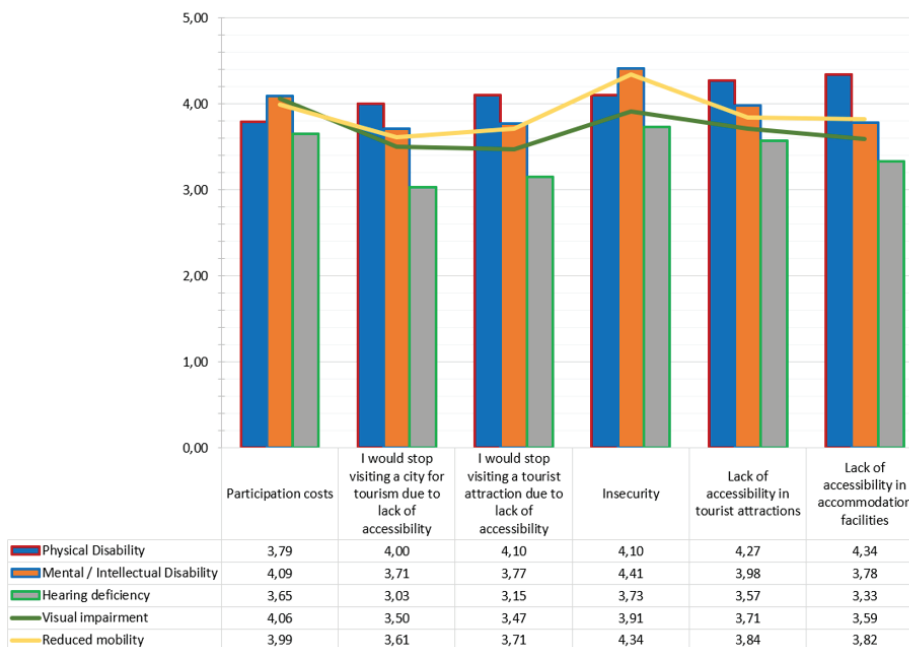
On the other hand, for some tourists with disabilities the lack of accessibility makes a tourism trip completely impossible, as can be seen in the answers transcribed below:

There is no point in me traveling to places where I won't be able to take tours, visit sights, or even stay because I don't have accessibility. (Respondent # 287 - ID 191.180.247.143).

I want to be sure that I will not have problems with my trips, because it would hurt me (Respondent # 343 - ID 172.58.227.131).

These statements show that even among the TwDMr there can be differences in decisions, as each will have different individual needs and know how willing they are to face certain barriers. The variation in individual perceptions and needs, on travel decisions, can be complemented by viewing figure 02. The chart contains the responses given to the travel deterrents divided by TwDMr respondent profile.

Figure 2: TwDMr's travel impeding factors detailed by profile.



Source: Research data (2020)

At any rate, combining the quantitative results and the qualitative analysis of the open answers of the questionnaire applied, it is possible to see that the lack of accessibility has proven to be an impediment to the practice of tourism by people with disabilities or reduced mobility.

By analyzing the open answers, it is possible to notice the importance of accessibility in the means of accommodation for tourists with disabilities or reduced mobility, as can be seen in the comments highlighted below:

I consider the accessibility of the hotel more than the accessibility of the city in general (Physically disabled tourist residing in Spain. Respondent ID 83.33.210.241)

I cannot go to a place that I cannot physically enter. for example, if the hotel does not have a working elevator, I will have nowhere to stay. Respondent 49, Id. 172.251.165.196

I have stopped going and sending clients to some hotels because of their attitudes toward their clients' affordable problems Respondent 290, Id. 50,102,77,29

Hotels with low beds to enable wheelchair transfer and high toilet seats. Accessible light switch, shelves, counters. Accessible common areas. Respondent 431, Id 173.66.183.76

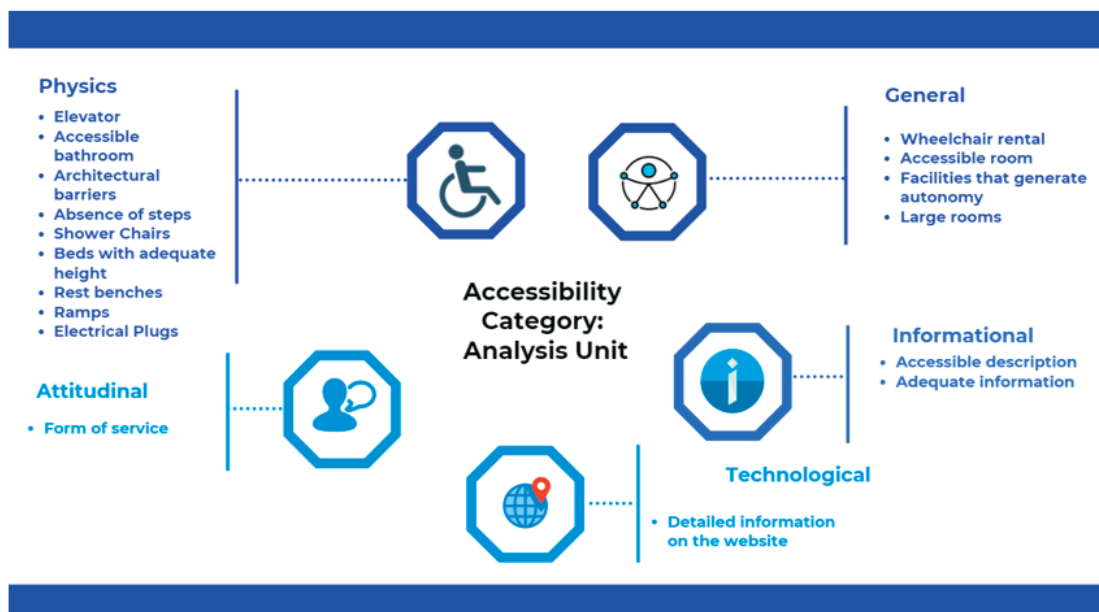
As can be seen, both in the quantitative analysis of the questionnaire applied and in the qualitative analysis of the open questions, the means of accommodation have fundamental importance for people with disabilities, proving the statement of Darcy & Pegg (2011) that people with disabilities change their destination or stop traveling if they do not find an accommodation that meets their needs and confirming the second research hypothesis: H2: The TwDMr's satisfaction with the hotel accessibility influences their loyalty.

Reinforcing that in the qualitative approach, the main quest is to collect data that will not be reduced to numbers, but rather transformed into information, reflecting perceptions, experiences, emotions and interactions, being subsequently analyzed and understood as an argument to answer research questions. In this way it shows to be a very useful data to fully capture and understand the underlying motives and internal reasons (Hernández Sampieri *et al.*, 2015).

The open-ended questions were not mandatory to answer, nor was any type of filter created for their validation, thus there were the equivalent of 595 complementary answers. All were analyzed in a system of categories, based on the literature (Hernández Sampieri *et al.*, 2015), and for the purposes of this study only those that referred to lodging facilities were categorized. Thus, of the 596 open-ended responses analyzed, 27 were categorized and 569 were discarded.

Following the guidance of the literature (Cooper & Schindler, 2016) the respondents' comments were transcribed, indicating their identity (Id) generated by the data collection system, thus conferring legitimacy to the categorization. In Figure 3 it is possible to verify which elements were identified in the survey and are considered important to make available in the means of accommodation for tourists with disabilities or reduced mobility.

Figure 3: Units of analysis of accessibility in means of lodging



Source: Research data (2020)

It is worth considering the approaches made regarding the accessibility advertised by the hotels and that perceived by the TwDMr. It is noticeable that there is a lot of criticism regarding the bathrooms and beds due to the existing barriers for the proper use by a person with disabilities or reduced mobility, as pointed out by respondent 476:

Hotel bathroom areas. And some Australian and international hotels completely misunderstand what 'accessibility' means! I stayed in some that were totally unacceptable and useless. I.e. non-accessible showers, steps, rooms too small, not wide enough for wheelchairs, tall cabinets and powerpoints, etc. Respondent 476, Id 49.197.97.64

It is verified that the accessibility of the accommodation - in general terms - is considered essential for the realization of a tourism trip by TwDMr, with emphasis given to physical accessibility, with the indication of the need for accessible bathrooms and rooms; elevators; large rooms/rooms, as well as the overcoming of barriers such as stairs and luggage transport and suggestions of providing wheelchairs for rental and benches during commutes to rest, confirming other studies on the subject (Liu *et al.*, 2023; Martin-Fuentes *et al.*, 2021).

Respondents also highlighted the importance of informational accessibility in planning and choosing accommodation. An important aspect that appeared in the open answers was the need for information about the location of hospitals, in case of an emergency, which validates the third research hypothesis H3: Information about the accessibility of a particular destination or service focused on tourism is a determining factor for the choice of these, by TwDMr. Finally, another factor that deserves relevance is the need to promote autonomy to the guest tourist with disabilities or reduced mobility so that he can enjoy his trip without depending on others.

FINAL CONSIDERATIONS

Having access to tourism activities positively influences people's quality of life (Moura *et al.*, 2022), being, therefore, a fundamental right of every human being. Thus, the first important element to highlight in this research is the definition of the concept of tourist with disability, thus filling the existing gap regarding accessible tourism. Thus, a tourist with disability is considered to be a person who, having some impediment of physical, mental, intellectual or sensorial nature, which in interaction with several barriers may obstruct his full and effective participation in the tourist activity in equal conditions with other people, moves from his usual place of residence for a period of less than a year and performs activities related to tourism, such as: leisure, rest, sports, access to culture and nature, business or other reasons not related to the exercise of a paid activity in the place visited.

Regarding the results presented if proved the importance of accessibility in the acquisition of a tourism product or service, it is worth considering the approaches made regarding the hotel, since this appeared as the most important element to be considered in the choice of the TwDMr, to the point of prioritizing the accommodation in the face of the tourist destination, that is, the TwDMr may choose another tourist destination that has a more accessible accommodation service, which confirms other studies already conducted (Martin-Fuentes *et al.*, 2021).

The hotel that meets accessibility requirements has the ability to influence the choice of the tourist destination, i.e., the adaptation of hotel developments to meet the needs of the guest with disabilities or reduced mobility generates value to the enterprise, and, as a result, leads the loyalty of this audience due to the achievement of their trust, satisfaction and quality, as pointed out in the litera-

ture (Liu *et al.*, 2023; Martin-Fuentes *et al.*, 2021; Tanford, 2016). The fact that the TwDMr is willing to invest a higher amount to obtain an accessible service, accommodation and tourism product proves to be extremely relevant and should not be dismissed.

Thus, considering that tourists with disabilities tend to be more loyal when they are adequately assisted in their needs, the investment in accessibility by the hotel industry is a necessity to achieve the expansion and sustainability of its business. Moreover, tourists with disabilities tend to travel more often in low season and most of the time accompanied, which generates a market advantage.

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AUTHORS CONTRIBUTION

Marklea da Cunha Ferst: research conception; development of the theoretical framework; methodology; interpretation and writing up of results; and final draft.

Sara Joana Gadotti dos Anjos: evaluation of the theoretical framework; methodology; and results evaluation.

Vitor Roslindo Kuhn: data analysis and results writing.