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## Abstract

The access to tourism activities is considered a right for everybody no matter their origin nor their condition. Consequently, accessible tourism is becoming more important in modern societies in order to create barrier free experiences which allow all individuals to experience this area of cultural life. However, due to the recentness of this phenomena there are not many academic studies and theories on the topic. This paper expands the literature on accessible tourism focusing on how to make hotel stays more accessible to individuals who present a disorder within the Autist Spectrum and to their families. To this aim, a self-administered survey based on the existing literature was created. A sample of 70 families who have a child that present a disorder identified within the Autism Spectrum were polled about their patterns, requirements and main barriers when traveling. The gathered data together with its posterior analysis and interpretation seem to suggest that the stronger demand of certain services, such as the availability of accessible rooms or food delivery promptness, may be related to the child degree of disability. The possible existence of a gap between what these families require and what they actually get when staying in a hotel may also be pointed out from the obtained results. Finally, price, lack of available information and lack of trust on the property might be seen as the most relevant barriers families traveling with a child with autism consider when choosing a hotel for their stay.

**Key words:** accessibility, accessible tourism, autism, ASD, barriers.

## Table of contents

<b>Acknowledgments</b> .....	<b>2</b>
<b>Abstract</b> .....	<b>3</b>
<b>List of figures and tables</b> .....	<b>5</b>
<b>Chapter 1: Introduction</b> .....	<b>6</b>
1.1. Research Question .....	6
1.2. Background.....	6
1.3. Research Aim and Objectives .....	8
<b>Chapter 2: Literature Review</b> .....	<b>9</b>
2.1. Accessibility and Accessible Tourism .....	9
2.1.1. Definition.....	9
2.1.2. Accessibility values and principals.....	9
2.2. Universal design.....	10
2.3. Introduction to Autism Spectrum Disorder.....	11
2.3.1. General characteristics.....	12
2.4. The role of families .....	12
2.5. Motivations: the role of leisure for children with ADS and their families.....	13
2.6. Main barriers and constraints faced by families who travel with a child with ADS15	
a) Trust.....	15
b) Socialization .....	15
c) Information availability.....	16
d) Own environment perception .....	16
2.7. Experience design .....	17
<b>Theoretical framework</b> .....	<b>19</b>
<b>Chapter 3: Methodology</b> .....	<b>20</b>
3.1. Research philosophy and approach .....	20
3.2. Research design and strategy .....	20
3.3. Survey design .....	20
3.4. Sample .....	23
3.5. Data Collection .....	23
3.6. Data analysis .....	24
<b>Chapter 4: Results</b> .....	<b>26</b>
<b>Chapter 5: Discussion</b> .....	<b>33</b>
<b>Chapter 6: Conclusions</b> .....	<b>37</b>
<b>Study limitations and future research</b> .....	<b>38</b>
<b>References</b> .....	<b>40</b>
<b>Appendices</b> .....	<b>43</b>
Appendix 1: Research Survey .....	43
Appendix 2: Contingency Tables and Sommers' Delta Results.....	49
Appendix 3: Spearman's Correlation Test Table Results.....	54
Appendix 4: Frequencies Tables of Barriers .....	57

## List of figures and tables

### List of Figures

<b>Figure 1:</b> Leisure travel needs of families of children with disabilities .....	14
<b>Figure 2:</b> Models of social exclusion, integration and inclusion of people with disabilities .....	17
<b>Figure 3:</b> Catering to the tri-level of needs of family travellers of children with disabilities .....	18
<b>Figure 4:</b> Theoretical Framework .....	19
<b>Figure 5:</b> Check In Promptness Sommers' D .....	26
<b>Figure 6:</b> Accessible Rooms Sommers' D.....	27
<b>Figure 7:</b> Silent Rooms Sommers' D .....	27
<b>Figure 8:</b> Food Delivery Promptness Sommers' D.....	27
<b>Figure 9:</b> Specialized Menu Sommers' D .....	27
<b>Figure 10:</b> Trained Staff on ADS Sommers' D .....	28
<b>Figure 11:</b> Personalized Attention Sommers' D .....	28
<b>Figure 12:</b> Leisure Activities Sommers' D .....	28
<b>Figure 13:</b> C/I Promptness Demand-Offer Comparison .....	30
<b>Figure 14:</b> Accessible rooms Demand-Offer Comparison .....	30
<b>Figure 15:</b> Silent Rooms Demand-Offer Comparison .....	30
<b>Figure 16:</b> Food Delivery Promptness Demand-Offer Comparison.....	30
<b>Figure 17:</b> Specialized Menu Demand-Offer Comparison.....	30
<b>Figure 18:</b> Trained Staff on ADS Demand-Offer Comparison.....	30
<b>Figure 19:</b> Leisure Activities Demand-Offer Comparison .....	31

### List of Tables

<b>Table 1:</b> Survey structure and design. Own Source. ....	22
<b>Table 2:</b> Central Tendency Measures Difference .....	29
<b>Table 3:</b> Main barriers families consider when choosing a hotel.....	32

## Chapter 1: Introduction

Recreation, as well as participation in cultural life, leisure and sports, is a right for every person. Unfortunately, that is not equally accessible for everybody. Some people, due to their condition, tend to have more difficulties when planning and performing leisure activities. Regarding tourism, a lot of work is still needed in order to provide same opportunities to all individuals when traveling. One of the main motivations of this project is to try to make traveling easier and more accessible to individuals who present a disorder within the Autist Spectrum and to their families.

At the same time, taking part in this project is a great opportunity to collaborate with the University team. In my opinion, the “Alas para el autismo” project is a potential driver of change in the accessible tourism field. Physical accessibility has become a major issue among tourism service providers. However, needs and requirements of people presenting developmental disabilities, such as autism, have normally been left aside and underdeveloped. Thus, I see this project as an opportunity to make travelling a more enjoyable and easier experience for both children with autism and their families. At the same time, I will be able to take part in a team of teachers and researchers which will help me to further develop my knowledge and research skills.

### 1.1. Research Question

The **research question** is: What are the specific needs and constraints families traveling with children that present a disorder identified within the Autism Spectrum face when staying in a hotel?

### 1.2. Background

Nowadays, accessible tourism is still a big unknown given that not many scholars have researched this area. Therefore, there are not many academic studies and theories on the topic. However, it seems to be clear that accessibility is an upcoming trend. The World Report on Disability from the World Health Organization (WHO) and the World Bank (2011) points out that 15% of the world population is suffering nowadays from at least one kind of disability, which means more than 1 thousand million people over the world.

Nevertheless, tourism products and environments are usually still not adapted to the needs and wants of people suffering some kind of disability. Consequently, this can lead to an exclusion of this group from leisure activities. This is one of the main reasons why research on accessibility and accessible tourism experience development is going to contribute not only to the destination management theory but also to the social inclusion of this group of people.

Regarding the magnitude of people affected by one of the disorders considered within the Autism Spectrum Disorder (ASD), recent studies point out that one out every one hundred

children born in the European Union present some type of these afflictions (Autism Europe, 2015). These numbers have increased over the past thirty years. However, this phenomenon can be related to the research and knowledge increase during recent years on these disorders. Even less attention has been paid to this collective regarding their travel needs. Scholars normally focus on the illness itself, from a scientific point of view, when researching in this field. On the other hand, most of the studies related to accessibility in tourism also forget about this particular segment while they normally focus on physical disabilities.

It is also important to highlight the fact that in the last few years many worldwide organizations such as United Nations (UN), the WHO and also some countries' governments, are taking different actions to develop accessible environments. They are conscious of the situation presented above and they are consequently reacting to avoid social exclusion of people suffering any kind of impairment. One of the most relevant actions taken in this direction in recent years is the signature of the Convention on the Rights of People with Disabilities (United Nations, 2008). This document highlights the right to access all the areas of cultural life. Tourism is included in it as a key factor of social personal growth as well as an important component of life as an experience generator. That is why the UN hope to make it accessible for everybody and sustain that no one should be excluded from tourism, leisure and recreation activities. When specifically talking about ASD affected people, it is important to emphasize the role of their families. These people are, in many occasions also, set apart from tourist activities since they do not have enough resources to either participate in leisure activities with the person with autism or do not have a "safe" place to leave him or her. That is why the promotion of the inclusion concept is becoming popular with the aim of establishing social sustainability and to assure the citizenship of people with disabilities (Darcy et al, 2010). Government and other worldwide organizations are also taking part in this process since providing accessible experiences to disabled people is another way of contributing to the social sustainability goal.

Finally, when looking at the accessible market scenario, an unexplored market niche can be identified. Thus, a new business opportunity is arising for those willing to immerse themselves in the world of accessibility since the WHO predictions denote a clear growth in the demand of accessible products and environments. This would be a good reason to bet on development and research in this area with the aim of trying to define the specific needs of this target group. This information could be used by tourism suppliers in order to provide the most suitable and tailored products to these tourists.

### 1.3. Research Aim and Objectives

#### Research Aim

The research aim is to create and develop a characterisation profile for families living in Catalonia travelling with a child with autism and define the specific needs and requirements this collective has when staying in a hotel during a leisure trip.

To this aim it is important, in the first place to review the accessibility concept, especially focusing on accessible experiences for people with autism. In the second place it is key to better understand the travel needs, behaviours, constraints and expectations of this travel group in order to be able to adapt tourism products and experiences to them.

#### Research Objectives

The specific objectives of the research are:

- Study literature on accessibility concept, values, requirements and barriers focusing on the concrete implications that they have on tourism and leisure experiences for people with autism.
- Elaborate a survey addressed to families where one of their members present a disorder identified within the Autism Spectrum to get first-hand information regarding their needs as travellers.
- Evaluate and analyse the results obtained from the surveys contrasting the tested hypotheses based on the literature review.
- Make recommendations for improving the accessibility and adaptation of tourism products and experiences to travellers with autism and their families.



## Chapter 2: Literature Review

The following section gives an overview of the accessibility concept, its values and it also approaches the universal design concept. Then, an introduction to Autism Spectrum Disorder and its characteristics is exposed. Finally, accessible tourism concept is developed related to families traveling with a child with autism.

### 2.1. Accessibility and Accessible Tourism

Several studies show the benefits associated with participation in leisure and tourism activities for disabled people which, in many cases, are greater and more intense than the ones for individuals without disability. Some of these benefits are related to raise of happiness levels, improvement of health conditions and also increment of self-esteem and of levels of satisfaction in several stages in life (Darcy, 2009). However, to achieve this goal, many aspects and dimensions related to accessible tourism experiences need to be taken into consideration. The following section presents an extended approach to accessibility through its definition and values, and also to all elements related with accessible tourism and experiences. The study focuses on the developmentally disabled perspective, aiming the attention on people affected by some aspect of the Autism Spectrum Disorder.

#### 2.1.1. Definition

Accessible tourism was defined by the Sustainable Tourism Cooperative Research Centre in 2005 as *“the process of enabling people with disabilities and seniors to function independently and with equity and dignity through the delivery of universal tourism products, services and environments”*. The definition is inclusive of the mobility, vision, hearing and cognitive dimensions (Darcy, 2009). This definition is closely related with the article 7 of The Global Code of Ethics for Tourism (UNTWO, 1999) which stresses the right to enjoy leisure and the opportunity to travel and enjoy periodic holidays as a basic right of any individual. In terms of accessible tourism this means that equal opportunities must be provided for all people, no matter which kind of impairment they may have. This concept also includes family members who have, for example, a kid or a sibling with autism and consequently see their recreational options limited or restricted (Amet, 2013). That is the way to fight against discrimination, to promote the fundamental rights of individuals with special needs and their inclusion in all social life domain, leisure and tourism (Figueuredo et al., 2012).

Accessible leisure and tourism will substantially contribute to the quality of life of disabled people since nowadays leisure is an intrinsic and important part of modern life.

#### 2.1.2. Accessibility values and principals

Another important fact to highlight is the three accessibility values included on the definition: independence, equity and dignity. As Dolan (2000) states (in Bi et al., 2007 p.207), the

functioning level of individuals with disabilities has an impact on their travel experience. The sense of being independent when enjoying a leisure activity, but also in everyday life, is a highly valued fact for most of disabled people. With regard to mobility, barrier free environments and continuous pathways are really helpful to disabled people autonomy. Regarding to equity and dignity, an important fact to be considered is the necessity of avoiding disabled people to feel apart from the group. They must be treated on the same way as the rest of individuals who are consuming the product or service. These individuals additionally wish to live these tourism experiences together with those without disabilities and not in an exclusive segregated format (Figueiredo et al., 2012).

## 2.2. Universal design

A central concept in the development and understanding of accessible tourism is Universal Design. This concept is linked to the social sustainability and refers to the paradigm that extends the concepts of continuous pathways, access and mobility and barrier-free environments to incorporate intergenerational planning that recognizes the nexus between ageing, disability and the continuum of ability of people over their lifespan (Darcy et al., 2009). The exact definition for Universal Design given by the Centre of Universal Design (2003) is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design (Centre for Universal Design, 2003). The intent of the universal design concept is to simplify life for everyone by making products, communications, and the built environment more usable by more people at little or no extra cost. The universal design concept targets all people of all ages, sizes and abilities.

This definition and also the whole concept of Universal Design is based on seven principles (Centre for Universal Design, 2003):

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive Use
4. Perceptible Information
5. Tolerance for error
6. Low Physical Effort
7. Size and Space for Approach and Us

Apart from the tourism industry, these principles can be applied to all kind of industries. This way the social inclusion and sustainability will be fomented in all society sectors.

Furthermore, not only disabled people will benefit from the appliance of Universal Design and its principles. In modern societies there are some other groups, such as families with young children who use prams, seniors with access considerations and temporary disabled, which find access barriers when traveling or even moving around in everyday services. They will also benefit from the building codes and standards which define the uninterrupted path of travel to or within

a building providing access to all required facilities (Darcy & Dickson, 2009). Finally, employees will be benefited of the incorporation of Universal Design patterns since good and consciously designed environments will apply more health and safety requirements. Next section delves into the Autism Spectrum disorder, its characteristics and its impact on the traveling behaviour of children with autism and their families.

### 2.3. Introduction to Autism Spectrum Disorder

Autism Spectrum Disorder is defined as a neurobiological disorder that affects individual's ability to communicate and relate with other people (The National Autistic Society from United Kingdom, 2016). It consists on a *"range of conditions characterised by some degree of impaired social behaviour, communication and language, accompanied by a narrow range of interests and activities that are both unique to the individual and carried out repetitively"* (World Health Organization, 2016).

As lifelong developmental disability, it also affects the way this people perceive the world. A recent study carried out by Autism Speaks (2016) points that the world for people with autism is as a mass of people, places and events in which they struggle to make sense of and which causes them anxiety.

Nevertheless, it is important to highlight that autism is an umbrella concept. As emphasized by the new terminology, Autism Spectrum Disorder, autism is considered a spectrum condition. This means that even though people with autism share certain difficulties, their condition may affect them in very different ways (Autism Speaks, 2016). Most of them present interaction difficulties, specially regarding to non-verbal communication, however, some characteristics like independence level or sensitivity to stimulus, among others, are unique to every individual. This situation leads to a huge heterogeneity of symptoms and capabilities within the spectrum (Dawson, 1996).

Latest data provided by America's Centers for Disease Control and Prevention (2016) places the prevalence of ASD in 1 child out of 68 (4.5 times more common with boys than girls). Those suffering from this developmental disability most confront social, communication and behavioural challenges, usually having poor eye contact, language delay and exhibited stereotyped or repetitive behaviour (Hamed, 2013). Although each individual with autism presents heterogeneity of symptoms and capabilities within the spectrum, researchers distinguish three main groups, in view of their degree of disability: high functioning (0-33%), middle functioning (34-65%) or low functioning (>65%) (Dawson, 1996; Hamed, 2013). High functioning presenting the lesser degree of disability though often times suffering behavioural

problems. Furthermore, different syndromes, like Asperger and Rhett, have also been identified as part of the autism spectrum.

### 2.3.1. General characteristics

As mentioned above, there are some characteristics that are common in most cases on the Autism Spectrum Disorder. People affected by ADS tend to isolate as much as possible since they do not have any interest on relating with other people. This fact is enhanced by communication difficulties, that this people normally has, and the lack of understanding and anticipation of others' feelings and intentions (Fundación Once, 2016). This characteristic needs to be taken into account when proposing and planning tourism activities. Activities that involve socialization with others may appear as really stressful one for individuals with ADS (Carter et al., 2008), even though, for different kind of tourists they would be really appealing.

Furthermore, people with autism normally present a narrow range of interests. They tend to focus on very specific knowledge areas which passionate them, but at the same they will not be paying any attention to most of the other fields (Confederación Autismo España, 2016). In this sense, it seems to be reasonable that tourism activity proposals are related to the area of interest of the individual with autisms so he or she actually enjoys the experience.

A part from that, people with ADS have trouble when dealing with changes. They usually have a very well established routine to which a minimal change may involve high increment of individual's stress levels. Turning it into tourism field, travelling is seen as a synonymous of constant change. Thus, this activity can be really stressful for people with autism. However, stress levels could be reduced by preparing the person for the trip by doing some previous trials and rehearsals and by providing him or her with a lot of information so he or she can get a clear idea of what is going to happen.

### 2.4. The role of families

Every person has a different context which relates to the family they were born in. The importance and involvement of the family and its members on child development and education may be different for every case. However, when referring to families who have a child with ADS, all members are highly implicated in the child's wellbeing and care. For this reason, it is very important to analyse family roles and implications when living and traveling together with a person with autism.

Research normally tends to focus on the disabled person. Nevertheless, families' opinions and views also need to be taken into account (Emira, M. and Thompson, D., 2011). Children with disabilities normally spend more time with their family due to the constant attention needed and the high implication parents and siblings tend to have on child's caring. Thus, these

interactions are more intense and frequent than those from their peers who do not have any disability (Kim and Lehto, 2013).

Consequently, tourism sector and providers need to pay special attention to these situations, where children have special needs as do their families. All members are considered then essential components of a child's development and their presence may be crucial when planning a leisure activity. However, it is important to highlight that this close and constant relationship may also be a cause of stress for families (Kim and Lehto, 2013). First, traveling with a person with ADS, as well as any other cognitive disability, may be reason enough to be excluded from some activities. This is not necessarily caused by the provider; it can be due to family self exclusion or any other reasons which are further developed in the next chapters. However, the lack of recreational time, added to the pressure of constant dealing with a person with a high degree of dependence, are considered extra sources of stress.

So, as established by Rodriguez (2005), all families have a certain support capacity. This depends on the personality of all family members as well as the external support the family gets, that can come from relatives, friends or associations amongst others. Knowing that, family demands, normally related to covering special needs and requirements of the child with ADS, cannot exceed their supporting capacity. If this happens, family wellbeing is endangered. Leisure plays an important role in reducing family stress levels. However, it needs to be well managed, otherwise it could become another stress source and have a negative impact on them.

#### 2.5. Motivations: the role of leisure for children with ADS and their families

Leisure is an important part of everyone's life. Mostly all people need a time to evade themselves from the everyday tasks and have time to join in different kind of activities which give them a sense of break. However, there are some collectives of people where leisure plays an even more important role. Moving specifically to children with autism some authors have highlighted the positive impact leisure has on child's life and development (Kim and Lehto, 2013; Agarwal, Kim and Lee, 2012). As shown in Figure 1, leisure impacts on different areas of the child's life. Nevertheless, leisure not only instils wellbeing on the child but also on the rest of family members (Rodriguez, 2005).



**Figure 1:** Leisure travel needs of families of children with disabilities (Kim and Lehto, 2013).

From Kim and Lehto (2013) understanding, most families who travel with a child with any disability tend to be very child-focused when planning and looking for family leisure activities. Traveling, as well as any other kind of activity related to leisure, is seen by many parents as a way of developing child's physical ability as well as his or her self-confidence. On the next level, parents also see traveling as a beneficial activity to enhance family closeness and cohesion. Sharing time together and getting involved in activities which differ from everyday life strengthen the family bonds and makes all members grow closer. At the same time, having this kind of "breaks" enables all family members to escape from their routines and relieve their tensions and stress. Finally, last level relates to social support need. This one has two perspectives. On the one hand, participating in leisure activities helps to teach the child how to interact with others, normally while having a fun experience. On the other hand, it allows parents and relatives to meet new people which some of them may be on the same situation creating in this way a sense of belonging. So, it can be concluded that leisure activities have positive impacts not only on the child but also on the rest of family members. Consequently, all the mentioned levels need to be taken into account when considering families' motivation to go for a trip.

## 2.6. Main barriers and constraints faced by families who travel with a child with ADS

Despite all the benefits presented above, getting involved in leisure activities also present some difficulties for children with autism as it does for their parents and relatives. Some studies have been carried out regarding the main barriers families traveling with a child with ADS encounter when traveling.

Previous research demonstrates that is important to consider that disable individuals are not homogeneous so there is a need to segment the offer, as the criteria to choose a product that cater to the needs of the individuals vastly differ upon the disability type and level of (in)dependence (Bi, Card and Cole, 2007; Buhalis and Michopoulou, 2011; Burnett and Bender-Baker, 2001; Darcy et al., 2010).

According to different authors, the following barriers have been considered the most relevant:

### a) Trust

Emira and Thompson (2011) identify lack of trust as the main constraint faced by these families when engaging on a leisure activity. To service providers, parents may often seem overprotective with their children. Thus, they sometimes overlook their advice and concerns to interact with the child. However, it is important to bear in mind that those parents are facing this challenge every day and, consequently, even if they are not ADS experts, they do know really well how to treat their kid. So, the fact of leaving their child with a stranger is already a traumatic situation, which could certainly get worse if the professional does not seem trustworthy to them. In this sense, it is important that service providers are open to parents' advice and suggestions on every particular case.

### b) Socialization

Socialization refers to different encounters and relationships that are established during the trip with other people. Most tourism activities involve socialization at some level, either with other tourists, with the staff or both. This relationship is normally regarded as a positive exchange between people and cultures. However, for individuals with ADS, socializing may appear to be a stressful activity. Thus, these individuals, as well as their families, may avoid traveling and getting involved in leisure activities in order to avoid uncomfortable situations (Carter et al., 2008). This phenomenon is named by the authors as social anxiety, which appears when both family and the child need to face an interpersonal contact they feel unprepared to deal with (Carter et al., 2008).

Regarding tourism professionals, Amet (2013) finds the lack of qualified staff as another major barrier related to socialization for these families when traveling. Unless families feel comfortable

and in good hands, they will keep worrying and consequently will not enjoy the experience. This point is also related to the previously mentioned trust. Only specifically trained staff provides enough security for parents to leave their child with and think only about them for that period of time. In this sense, staff attitudes are also important when building a relationship with all family members. Ignoring parents' knowledge about their children may imply building a barrier between the family and the professional. Nevertheless, listening and learning about the special needs of the child may be the best way to approach parents and make them feel comfortable and secure (Emira and Thompson, 2011). This point can also be related to the attitude of staff towards disabilities (Kim and Stonesifer III, 2011). Professionals need to treat disabilities as any other guest characteristic. They need to be aware of their specific needs but never seem bothered by that or make it difficult to solve them. Families traveling with a child with any kind of disability, including ADS, are aware of their situation and may be even more willing to collaborate with service providers than other kind of guests (Kim and Stonesifer III, 2011).

#### c) Information availability

Service unavailability and accessibility for disabled people are also seen as relevant barriers for this segment when traveling (Brandt, Poirá and Reichel, 2011). In other words, information about adapted services should be more accessible and evident (Kim and Stonesifer III, 2011). At this point, it is important to highlight that this information needs to be clear and specific for every segment, since every disability is related to some kind of difficulty. Consequently, just using the concept accessible may be too broad and mean nothing to potentially disabled guests and to their families (Brandt, Poirá and Reichel, 2011; Darcy, 2010).

Furthermore, many families who do not have a clear idea of which kind of activities are suitable for children with ADS make their involvement on these activities more difficult. Consequently, some counselling initiatives could be done in order to help families to plan their vacations and leisure time.

#### d) Own environment perception

Maybe one of the less evident barriers but in some cases one of the most difficult to overcome, especially by families who have never travelled before, is the own perception of the environment they will find at the destination. First of all, as previously explained, people with autism tend to react badly to changes in their routines. Consequently, both them and their families tend to show fear to any change of environment since it implies from the beginning a novelty for all of them (Amet, 2013).

Nevertheless, service providers who acknowledge these barriers can work on palliating them by designing experiences and environments that satisfy families traveling with autism needs and

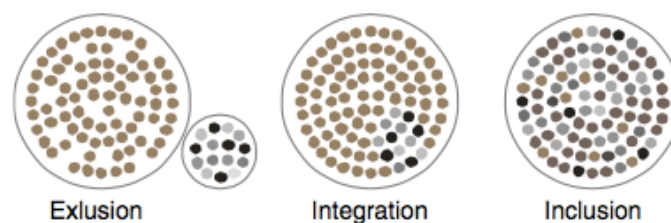


demands and minimize the stressful situations they may face due to the previously mentioned facts. Next section exposes an inclusive model as a possible way to make leisure and traveling more accessible to this collective and may help to minimize the discussed barriers.

### 2.7. Experience design

Zajadacz (2015) studies the different disability models that have been developed according to the way disability is understood and integrated in the community. For example, the medical model understands disability as a personal tragedy that needs to be alleviated. In this model, the individual is responsible for his or her own adaptation to the environment. On the other hand, the social model focuses on the need of adaptation of the environment rather than of the person with the disability. Disability is seen as a collective responsibility about the integration of all community members. Economic model sees people with disability as a potential pool of demand which service providers can explore and develop their products to cover this target specific needs. Finally, bio-psychological and geographical models appear as a synthesis of the previous models. Disabilities are seen as individual characteristics which require medical assistance. However, the inclusion of people with disabilities in society is regarded as a social responsibility as well.

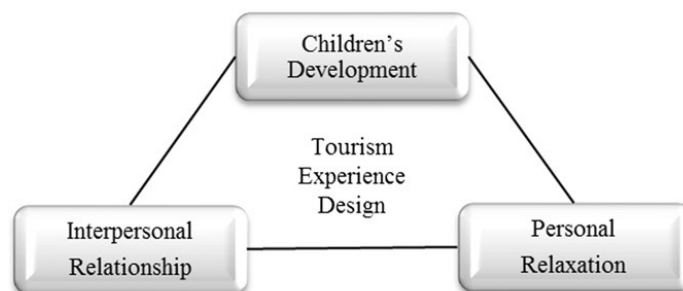
Depending on the prevailing model providers believe in, tourist products will be created in different ways. The medical model leads to the creation of a separated offer for people with certain disability. It is normally linked with health tourism. The social model results from an integrative model whose main aim is to create the conditions to make trips for people with disabilities as accessible as possible. Otherwise, bio-psychological and geographical models are focused on developing social inclusion. Social inclusion is defined as the process where people with disabilities have the resources and opportunity to entirely take part in economic, social and cultural life and to preserve a standard of living level (Zajadacz, 2015). Social inclusion is closely related to universal design, which encompasses the needs of all society members, seeing people with disabilities as one of many different profiles in society. Figure 2 illustrates the three models and gives a visual idea on their meanings.



**Figure 2:** Models of social exclusion, integration and inclusion of people with disabilities (Zajadacz, 2015).

From the models presented above, it cannot be established if one is better than the others, since it would depend on every specific service and situation. In some cases, specialized health services or adapted supplies are necessary and valuable to people within the disabilities segment. However, regarding families traveling with children with autism an inclusive model where the child disability is regarded as one feature as any other rather than as an impairment, would be the most appropriate one to make the most of their tourist experience. Universal service supply guarantees a greater independence for these families considering that their specific needs, such as special menus or hyper sensibility to certain stimulus, have been already taken into account.

From an inclusive universal design model perspective, tourism providers can start developing accessible products which take care of the different needs of families traveling with children with disabilities (Kim and Lehto, 2013). Figure 3 summarizes the experience design from an inclusive model perspective combined with needs of families traveling with a child with autism presented in point 2.5 of this chapter.



**Figure 3:** Catering to the tri-level of needs of family travellers of children with disabilities. (Kim & Lehto, 2013)

## Theoretical framework

Figure 4 presents a graphic outline of all the literature presented in Chapter 2. These concepts have been used on developing the methodology exposed in next chapter.

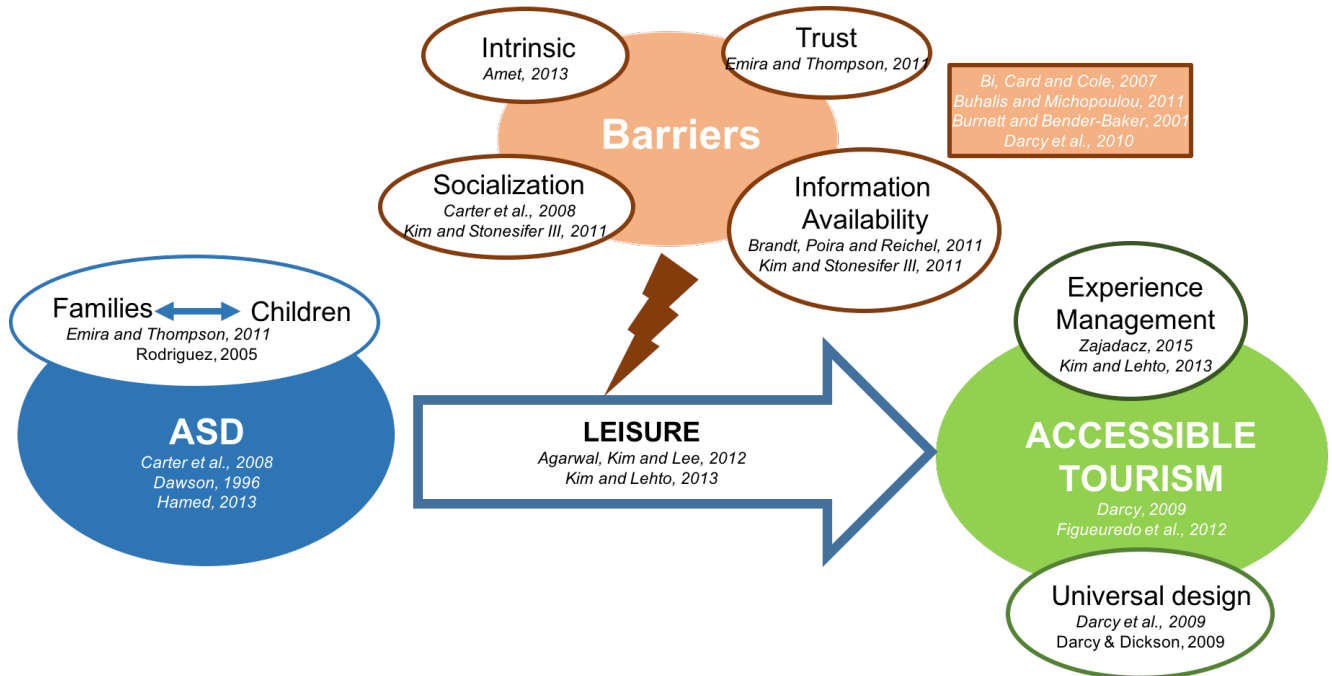


Figure 4: Theoretical Framework. Own source.

## Chapter 3: Methodology

This chapter tries to create a deep understanding of the research methods that have been used for gathering and analysing data. First of all, the research philosophy and approach are exposed followed by the research design and strategy. Then the survey creation process is explained as well as its content and design. Finally, the study sample and the data collection time frame are determined and the selected analysis methods are presented and developed.

### 3.1. Research philosophy and approach

Developing knowledge, even if it is at small scale, requires paying attention to the way on how this knowledge is going to be developed and its nature. This concept is known as the research philosophy. This can be considered the starting point of every study. The research question as well as the preferred methodology and the interpretation of the results are all influenced by this way of understanding knowledge development (Lewis, Saunders and Tornhill, 2012). This study was carried out from a positivist point of view. This research philosophy aims to drive conclusions from an objective observation of the reality by searching for regularities on the data which enables the researcher to propose law-like generalizations. This procedure requires hard data to analyse and a formal research design.

Regarding to research approach the study was driven from a deductive methodology which means that from a given theoretical framework a hypothesis was proposed and it was further developed and corroborated by specific field research.

### 3.2. Research design and strategy

From this point, two types of methodology will be followed in the different parts of the research. On the one hand, a literature review will be used as a guideline in order to provide a consistent and reliable theoretical framework (Figure 4). The second part consists of the field work based on quantitative methods. To this aim, a self-administered survey was delivered to families that have a person with autism in their families. The survey was based on the concepts and ideas presented of the authors included on the literature review. Traveling barriers, motivations and patterns are some of the dimensions included on the survey.

### 3.3. Survey design

For the present study a survey composed of pre-determined, structured questions will be used as research method to gather information from the sample. The survey will be presented in questionnaire format which is meant for data collection in order to generalize from a sample to a population (Creswell, 2003). The questions are based on the previous literature, introduced in Chapter 2, on accessibility and the barriers and constraints families with a child with autism have when traveling. All questions are focused on obtaining valuable information for answering the research question.

According to Saunders et al. (2012) classification, surveys on questionnaire format are aimed to collect three different types of data. First, some questions are designed to get respondents opinion. With this kind of questions, the researcher can get participants' feelings and beliefs on a specific topic or situation. On the survey created for this study (a complete copy can be found in Appendix 1), questions number 8 and 13 can be identified as examples of opinion ones. Attitudes and behaviour are also important data regarding to the study. Questions 3 and 6 are examples of how the survey pays attention to respondents' behaviours. Finally, respondents' attributes, like the ones asked on the social-demographical profile, are important to the research in order to get more information about the sample. Regarding different topics of study, the survey is structured as shown in table 1:

Section	Dimension	Nº of question	Description	Objectives
1. Traveling patterns	General information	1 to 3	Introductory questions regarding number of family trips during the past three years and their duration.	To get to know whether they have travelled or not in recent years.
	Intention	4	Family willingness to travel.	Understanding the degree of willingness to travel. If the family does not like to travel that is the end of the survey.
	Motivation	5	Main motivation for a family trip.	Determine which aspects and potential benefits motivate these families to travel. (Kim and Lehto, 2013; Agarwal, Kim and Lee, 2012)
	Planning	6 to 8	Questions regarding trip planning: sources of information and ways families with special needs arrange their accommodation and leisure activities.	Find which are the main sources of information used by these families when deciding to go for a trip as well as the ways they prepare their journeys both the group of people they travel with and the way of anticipating their special needs in the destination.
	Travel preferences	9 to 16	Questions about preferred travel destination, transport, lodging facility and leisure activities at the destination.	Obtain an overview of the travel patterns of families traveling with a child with autism. Understand which are their most visited destinations, transports, lodging facilities and the leisure activities they participate in.

	Tourist experience improvement in a hotel	17 & 18	Relevant aspects to families traveling with a child with autism regarding accessibility and availability of specific accessibility related services.	Determine which are the most valuable aspects when looking at hotel accessibility as well as which services may improve the family experience when staying in a hotel.
	Hotel services offer	19	Availability found by the families of the previous services when staying in a hotel.	To find the consistency of hotel offer regarding certain services related to accessibility.
	Barriers	20 to 24	Intrinsic and extrinsic barriers families face when staying in a hotel, as well as, other constraints such as the level of available information or trust on the establishment and the staff.	Determine which are the barriers families find more relevant when making the decision of staying in a hotel and understand which are the most common stressful situations these families face in hotel environments. (Amet, 2013; Brandt, Poirá and Reichel, 2011; Carter et al., 2008; Darcy, 2010; Emira and Thompson, 2011)
<b>2. Socio-demographic profile</b>	Of the respondent	1 to 8 (25 – 33)	Gender, level of studies, number of family members and family income are asked among other socio-demographic attributes.	To determine respondent attributes and family environment.
	Of the child	1 to 4 (34 – 37)	Age, gender and degree of disability are asked regarding the child with ADS.	To determine child's attributes. (Dawson, 1996; Hamed, 2013).

*Table 1: Survey structure and design. Own Source.*

When designing the survey, special attention was paid to wording and format (Altinay, Paraskevas and Shawn, 2016). Questions were kept as simple as possible to make them as understandable as possible for all people but without losing the scientific value. Regarding the format different question typologies were used in order to get the most of each question when looking at the results and, at the same time, to add diversity and make the survey less tedious for the respondents. Length was also taken into account for questionnaire design to limit the number of respondents who do not complete the survey.

Finally, the survey was validated and piloted. The ADS expert from IDAPP Noemi Balmaña revised the questions, during an interview, in order to make sure all questions were appropriate and added value to the research. After that, a pilot test was carried out with three families within the sample. Three parents from different children with autism went through the questions and

answered the survey. Feedback was collected from them in order to make some final changes before designing the final survey.

### 3.4. Sample

For defining the sample Altinay, Paraskevas and Shawn (2016) sampling guidelines were followed. The target population for the study were families living in Catalonia who have a family member with autism. The research accessible population is defined as the subset of part of the described target population which is accessible for the researcher and reflects the desired characteristics for the study (Altinay, Paraskevas and Shawn, 2016). At this point, the study was working with volunteer families from three different ASD related Associations based in Barcelona. The chosen organizations were the Autism Association Aprenem, the Institute of diagnosis and psychiatric y psychological support IDAPP and the school of special education Paideia. All three associations include, among their members, families with a child that presents a disorder identified within the Autism Spectrum. This fact was defined as the study inclusion criteria. That is because not all members of these associations belong to the specific group that adds value to the study. Consequently, only the families who accomplish this specific criterion received the surveys and were included in the research. In total, the study included 500 families, within the parameters presented above, that were asked to answer the specific survey about the barriers and constraints they face when traveling. However, from all people who received the survey, only 71 of them successfully answered the survey during the established time frame for data collection.

### 3.5. Data Collection

The study was carried out during the months of March and April 2016. Surveys were sent via email to part of the sample, all members belonging to the institute of diagnosis and psychiatric y psychological support IDAPP, while for the rest, related to the school of special education Paideia and the Autism Association Aprenem, paper copies were respectively delivered at the centres.

### 3.6. Data analysis

From the research objective, three hypotheses were proposed. First hypothesis (H1) states that the demand of adapted services increases as it does the child's degree of disability. Second hypothesis (H2) exposes that there is an existing gap between the existing services provided by the hotels and the actual demand families traveling with a child with autism have. Finally, the third hypothesis (H3) presents lack of trust on the establishment, lack of information and own perception of the future environment as the main barriers families face when making the decision of staying in a hotel. According to the aim of each hypothesis, variables were analysed from different methods and perspectives.

Findings for H1 were extracted from the relation between questions 18 and 37 of the survey. In order to verify the hypothesis, Sommers' Delta was run using SPSS to determine the association between demand of adapted services and child's degree of disability. Sommers'D is a nonparametric measure which indicates the strength and direction of the relationship between an ordinal dependent variable with another ordinal independent variable (Ferrán, M., 2001). In this case, both selected variables are ordinal where the "demand of adapted services" appears the dependent variable and "Child's degree of disability" is identified as the independent one.

For analysing Sommers' D values it is important to understand that those can range between +1 and -1. The absolute value points the strength of the relationship between the variables, so the closer the value is to +/-1 a stronger relationship exists between variables. 0 value indicates a lack of relationship between variables. On the other hand, a positive sign shows direct relationship between the variables while a negative one indicates an inverse relationship.

In order to identify the existence or not of a gap between the existing services provided by hotels and the actual demand families traveling with a child with autism have (H2) central tendency measures are calculated and compared between the variables (Spiegel, M.R., 1991). To do so, from the same exact question format, questions 18 and 19, the study extracts which services would improve the family experience when staying at a hotel and how often these services are offered to them. These measures are usefully used in this case since the analysed variables are ordinal, 1 to 5 on a Likert scale. Then, the comparison of the means, modes and medians of one service demand and offer can give an idea of the perception or not of an existing gap between these two concepts.

Continuing with this hypothesis, some graphic support is included (Figures 13 to 19). The graphic counters the two variables according respondents perception. Then, the X axis stands for the service demand. Each stage of this axis includes five bars, reporting to Y axis, which reports to families' perception of how often the specific service has been offered to them. This graphics provide a visual understanding and complement the methodology presented above. Finally,



Spearman's correlation test was run between the variables in order to identify existing correlations to complement the median difference results. Spearman's rank-order correlation calculates a coefficient which is a measure of the direction and strength of the association between two ordinal variables (Ferrán, M., 2001). In this case, variables are the services compared from question 18, services demand, and question 19, services offer. For example, when analysing check in promptness the variables will be: Demand/appreciation of check in promptness (question 18) and Offer of check in promptness (question 19).

When looking at H3, in order to determine the main barriers which families face when choosing a hotel, frequencies and percentages are used. The original question is based on a Likert scale, however, for the analysis variables are recoded and restructured in three groups. First group gives low importance to the barrier and comes from the addition of values 1 and 2 in the Likert scale: Completely disagree and disagree respectively. Then, neutral value is kept same as in the Likert scale value 3. So the second group, after variable recoding, equates to the group of respondents who said neither agree nor disagree, value 3. Finally, third category relates to those respondents who answered that they either agree or totally agree. Thus, it correlates with the last two dimensions, 4 and 5 levels of the Likert scale.

Having all the variables recoded highest punctuations are highlighted. Those variables are the ones that are considered the most important barriers families traveling with a child with autism want to overcome. That is because these barriers are the ones which families have either agreed or totally agreed that they take them into consideration when making the decision of choosing a hotel. Punctuations come from a frequencies table expressed in percentage.

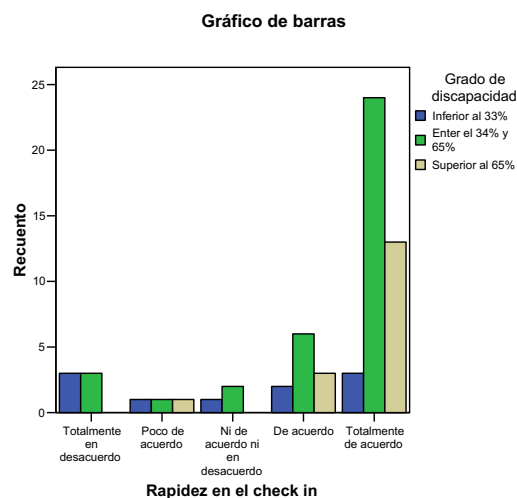
Finally, it is important to mention that on the different tests, sample sizes (n) may present small variations since some cases had to be excluded given that they had left blank answers.

## Chapter 4: Results

Results are analysed according to the three hypotheses of the study. This section presents the graphics and results obtained from the analysis methods explained above. All the graphs presented on this section were created from the analysis of the primary data collected (Own Source).

In relation to the first hypothesis, the analysed services are the check in promptness, the availability of accessible rooms, the availability of silent rooms, the promptness on food delivery, the availability of specialized menus, staff specific training on ASD, the offer of a personalized service and attention and the availability of leisure activities. All of them were extracted from question 18 of the survey. Sommers' D test results and graphs are presented below. The respective tables of results can be found in Appendix 2.

First service analysed is the check in promptness. Sommers' D analysis showed a **moderate**, positive correlation between the demand of check in quickness and the child's degree of disability, which was statistically significant ( $\delta = .281, p > .05$ ).



**Figure 5: Check In Promptness Sommers' D**

Secondly, it was found that there was a **moderate**, positive correlation between the demand of adapted rooms and the child's degree of disability, which was statistically significant ( $\delta = .384, p > .001$ ). However, when looking at the demand of noiseless rooms, **low**, positive correlation was found between this variable and the child's degree of disability, which was not statistically significant ( $\delta = .201, p > .115$ ).

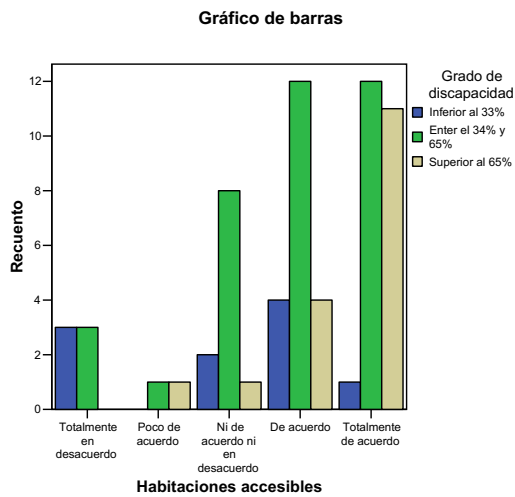


Figure 6: Accessible Rooms Sommers' D

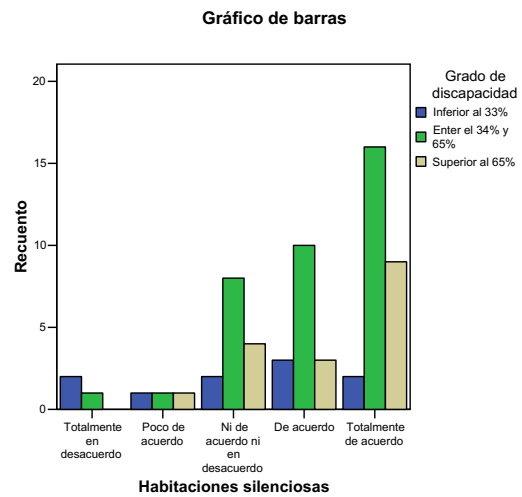


Figure 7: Silent Rooms Sommers' D

Regarding to the promptness on food delivery at the restaurants, **moderate**, positive correlation exists between the variable and the child's degree of disability, which was statistically significant ( $\delta = .354, p > .001$ ). Still regarding into dining services, there was **no correlation** between the demand of special menu and the child's degree of disability ( $\delta = .078, p > .525$ ).

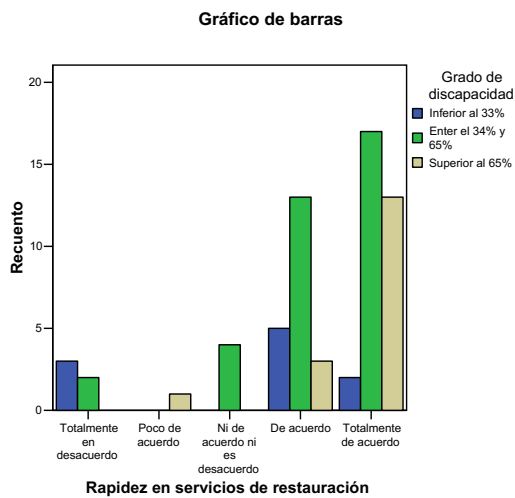


Figure 8: Food Delivery Promptness Sommers' D

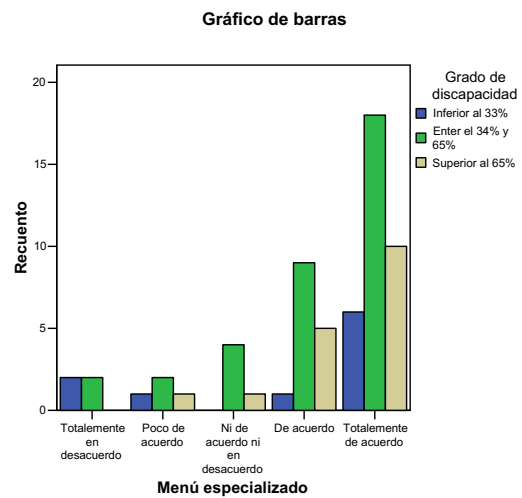


Figure 9: Specialized Menu Sommers' D

In relation with hotel staff, the demand of staff specific training and their capability to provide a personalized attention were evaluated. It was found that it **does not exist** a correlation between the demand of staff specific training and the child's degree of disability ( $\delta = .086, p > .468$ ). On the other hand, it does exist a **moderate**, positive correlation between the demand of a personalized attention and the degree of child's disability, which was statistically significant ( $\delta = .286, p > .01$ ).

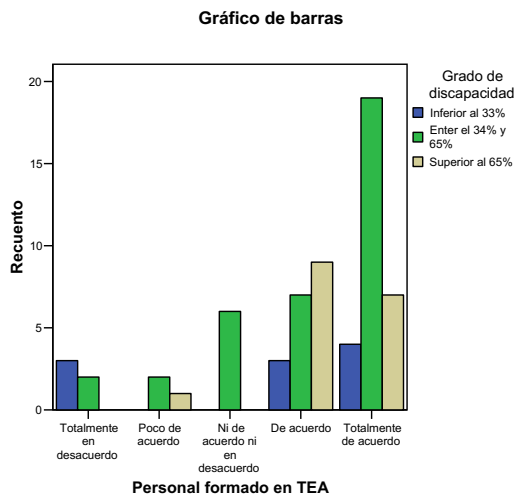


Figure 10: Trained Staff on ADS Sommers' D

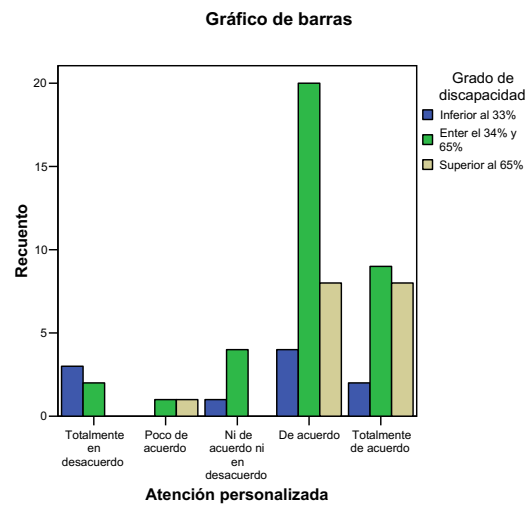


Figure 11: Personalized Attention Sommers' D

Finally, there was a **moderate**, positive correlation between the demand of adapted leisure activities and the child's degree of disability, which was statistically significant ( $\delta = .272, p > .015$ ).

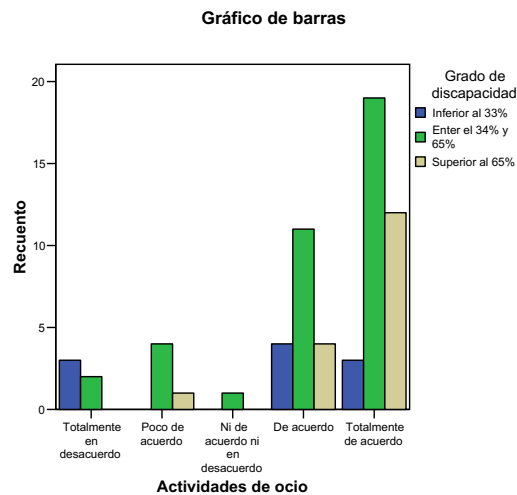


Figure 12: Leisure Activities Sommers' D

In general, correlations are not extremely strong, however, they have enough presence to show clear tendencies. These tendencies enable the researcher to understand which are the main aspects of their demand that tend to depend on the child's degree of disability.

Referring to the second hypothesis, analysed services are the same of previous question: check in promptness, the availability of accessible rooms, the availability of silent rooms, food delivery promptness, availability of special menus, trained staff on ASD, personalized attention and availability of leisure activities. In this case, data was combined with question 19 which explores the perceived offer that hotel have regarding to those services. The following tables present the comparison between median of the demanded service and its actual availability:

Variable	Demand Mean	Offer Mean	Mean difference
Check in promptness	4.24	2.59	1.65
Availability of accessible rooms	3.90	1.68	2.22
Availability of silent rooms	4.00	2.54	1.46
Food delivery promptness	4.19	2.28	1.91
Availability of special menus	4.21	2.91	1.30
Trained staff on ADS	4.07	1.28	2.79
Personalized attention	3.96	1.76	2.20
Availability of leisure activities	4.17	1.40	2.77

Variable	Demand Mode	Offer Mode	Mode difference
Check in promptness	5	2	3
Availability of accessible rooms	5	1	4
Availability of silent rooms	5	3	2
Food delivery promptness	5	1	4
Availability of special menus	5	4	1
Trained staff on ADS	5	1	4
Personalized attention	4	1	3
Availability of leisure activities	5	1	4

Variable	Demand Median	Offer Median	Median difference
Check in promptness	5	3	2
Availability of accessible rooms	4	1	3
Availability of silent rooms	4	3	1
Food delivery promptness	5	2	3
Availability of special menus	5	3	2
Trained staff on ADS	5	1	4
Personalized attention	4	1	3
Availability of leisure activities	5	1	4

**Table 2: Central Tendency Measures Difference**

Apart from the central measures comparison, the correlation between the importance the service has on improving family's experience and how often services have been offered is illustrated by the graphics above. The complete set of Spearman's correlation test tables can be found on the Appendix 3.

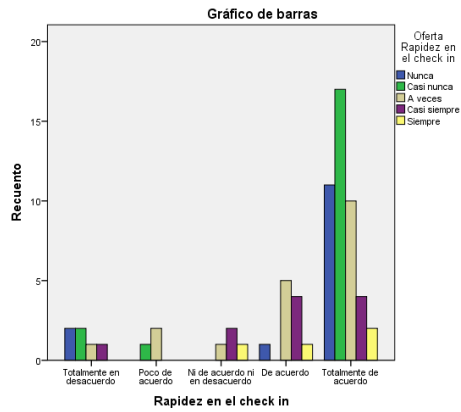


Figure 13: C/I Promptness Demand-Offer Comparison

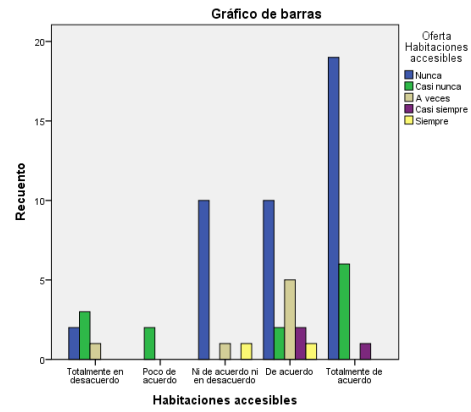


Figure 14: Accessible rooms Demand-Offer Comparison

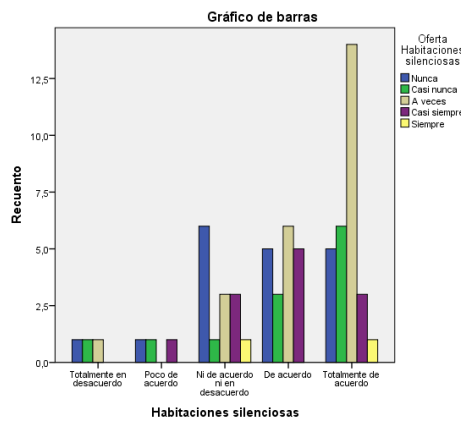


Figure 15: Silent Rooms Demand-Offer Comparison

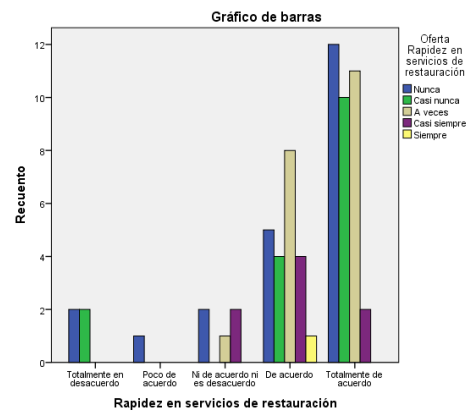


Figure 16: Food Delivery Promptness Demand-Offer Comparison

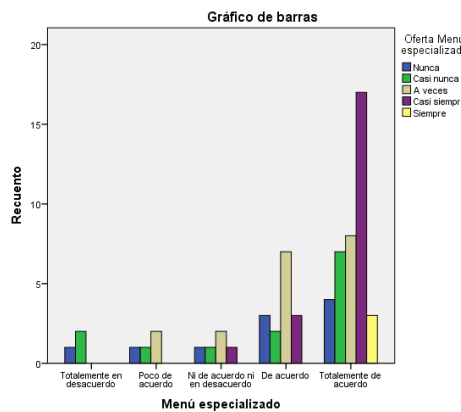


Figure 17: Specialized Menu Demand-Offer Comparison

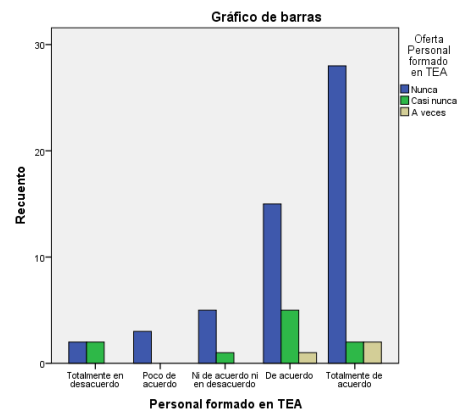
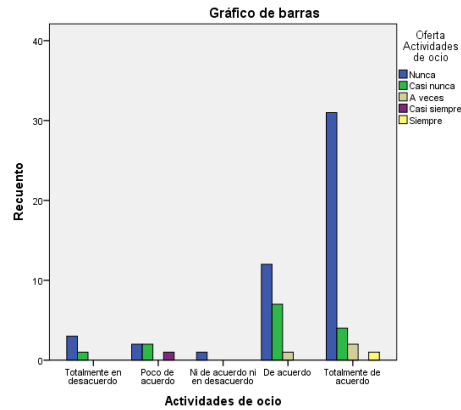


Figure 18: Trained Staff on ASD Demand-Offer Comparison



**Figure 19:** Leisure Activities Demand-Offer Comparison

Finally, Spearman's correlation results are presented. There was a moderate negative correlation between check in promptness demand and check in promptness offer,  $r_s = -.275$ . Regarding accessible rooms, there was a moderate negative relationship between this service demand and offer,  $r_s = -.178$ . For silent rooms availability there was a low positive correlation between its demand and its offer,  $r_s = .097$ . In relation with hotel restoration services, there was a low negative correlation between food delivery promptness demand and food delivery promptness offer,  $r_s = -.070$ ; nevertheless, there was a moderate positive correlation between special menu availability demand and its offer,  $r_s = .365$ . Then, a moderate negative correlation was found between trained staff on ASD demand and trained staff on ADS offer,  $r_s = -.142$ ; and a moderate negative correlation was also found between personalized attention demand and hotels' offer,  $r_s = -.230$ . Finally, there was a moderate negative correlation between leisure activities demand and hotels' leisure activities offer,  $r_s = -.207$ .

To verify the third hypothesis, frequencies and percentages are used to understand which are the main barriers families consider when choosing a hotel. The consequent analysis is presented in table 3 and the complete set of frequencies can be found in Appendix 4.

	Variable	1	2	3
Own perception of the environment we are going to find in the destination	Fear of not interacting with anyone.	42,6	31,9	24,6
	Fear of being overwhelmed by the requirements of the trip.	27,5	15,9	56,5
	Fear of being a nuisance.	20,3	20,3	59,4
	Fear of needing to ask for help.	17,4	23,2	59,4
	Fear to have medical emergencies.	26,1	24,6	49,3
Our relationship with others	Fear of others staring at us.	39,1	17,4	43,5
	Fear of being ignored.	49,3	29	21,7
	Fear of being the centre of attention.	39,1	14,5	46,4
	Overprotection by the hotel staff.	52,2	39,1	8,6
	Excess of fellow customers' kindness due to the child condition.	52,2	39,1	8,7
	Prejudices.	41,2	26,5	32,3
	Fear of child's social exclusion.	36,2	20,3	43,4
Level of available information	Information regarding adapted services.	15,9	20,3	63,7
	Other families' reviews regarding their experiences in the hotel.	7,2	13	79,7
	Available information regarding staff training on disabilities.	17,4	26,1	56,5
	Existence of a specific certificate regarding hotel accessibility level.	14,5	36,2	49,3
Other factors	Affordable prices.	5,8	11,6	88,4
	Hotel support to disabled guests.	10,3	39,7	60,3
	WIFI access.	13,0	17,4	69,5
	Hotel occupancy level.	13,0	49,3	37,7
	Staff training.	10,3	32,4	57,3
	Trust on the establishment.	5,8	8,7	85,5
	Potential sensorial stimulus (lights, noises...)	8,7	30,4	60,9
	Available information on the web page.	5,9	5,9	88,3
	Sleep difficulties.	13,2	32,4	54,4
	Medical contraindications.	16,2	48,5	35,3

*Table 3: Main barriers families consider when choosing a hotel*



## Chapter 5: Discussion

The results presented above drive the following findings:

Regarding first hypothesis, Sommers' D results point out that the demand of accessible rooms and the quickness of food delivery at the restaurants are the two variables which have stronger positive correlation with the child's degree of disability. This may indicate that families whose child presents a higher degree of disability value more these two services than the ones whose child presents a lower degree of disability. This correlation does not mean that families with children with low disability degrees do not ask or appreciate these services. However, as higher the degree of disability is families might consider these aspects more important. This point can be linked with Dawson's (1996) perspective of different degrees of disability within the spectrum. Even though every individual presents different characteristics, higher degrees of disability may require a more consistent delivery of some specific services, such as the ones suggested by this exploratory research.

The statistical analysis also seems to highlight, in a weaker manner, that check in quickness and personalized attention are also correlated with child's degree of disability. Even if these variables are not the ones with the strongest correlation, they have enough statistical significance to be taken into account. So, to sum up it could be determined, as part of a first exploratory approach, that for families traveling with a child with ASD with a high disability level the availability of accessible rooms, the food delivery and check in promptness and the provision of a personalized attention are seen as more important and determinant of their final tourism experience when staying at the hotel. Thus, services providers may need to be aware of the child's degree of disability in order to understand these needs and assure these procedures in order to create a more accessible and enjoyable experience for these guests. This recommendation can be linked with Rodriguez (2005) family stress levels. By taking small actions in lodging properties, such as giving check in or food delivery priority to families with a family member with ADS, the stress level of the child is reduced as well as the one of the whole family. In this sense, the effective delivery of the previously mentioned services can be understood not only as a benefit for the child but for all the family members (Emira, M. and Thompson, D., 2011). However, results from Sommers' D are not strong enough to validate H1. They can be taken as a first exploration in the area, which suggests that it may exist a correlation between the demand of certain services and the degree of child's disability. Nevertheless, correlation values are not high enough, maybe due to the ordinal nature of the variables, to draw a final conclusion. Consequently, further research is required on this field with a wider sample and more in depth analysis.

Second hypothesis proposes there is an existing gap between the existing services provided by the hotels and the actual demand families traveling with a child with autism have. Both, the difference of central measures as well as the Spearman's correlation seem to support H2. Also the graphics presented above suggest this difference. All variables, to a greater or lesser extent, present positive difference between demand central measures and offer central measures, always between than 1.3 and 2.79 points. This means that these measures are higher for demand than offer, thus, there is a gap between what is demanded and what is actually provided. The bigger gaps, according to central tendency measures differences, staff training on ASD, availability of leisure activities and availability of accessible rooms appear as the services which present a higher gap between the importance families give to this services availability and what hotels are actually offering. This could mean that even if these services are highly valued by families traveling with a child with autism, with a median of 4.07 for staff training on ADS, 4.17 for availability of leisure activities and 3.90 for availability of accessible rooms, hotels seem to rarely provide these type of guests with the demanded services. Medians for the offer would be 1.28, 1.40 and 1.68 respectively. The possible existence of this gap may be also pointed out by the negative correlations that show from Spearman's test. This result may indicate the existence of a dissatisfied demand. Nevertheless, it is important to highlight that the availability of special menus is the service with lower differences between central tendency measures (mean difference=1.3, mode difference=1 and median difference=2), is as well the only variable which presents a positive moderate correlation according to Spearman's test. This might indicate that from all services, families traveling with a child with autism, even if they seem to highly value this service, with a mean of 4.21, a mode of 5 and a median of 5, hotel providers seem to have a more consistent delivery on this availability of special menus than on the rest of services. All results discussed immediately above, may be taken as a first approach to H2 validation since they seem to indicate the existence of the gap. The existence of this gap could be related to exclusion and integration models presented by Zajadacz (2015). On the one hand, there are properties who, from an excluding model understanding, consider that disabled people need to find their own way to adapt to the existing services, so little effort is done to create accessible environments. On the other hand, there are some hotels who have an integrative perspective that enhances the creation of accessible environments and experiences through the adaptation of the existing ones. To different extend, both models could lead to an existing gap of what hotels are offering and the actual needs and requirements of these families. Either because they directly do not pay attention to accessibility or because they create the

accessible experiences they believe are more appropriate, their offer and the real guest demands might differ.

H3 states that lack of trust on the establishment, lack of information and own perception of the future environment as the main barriers families face when making the decision of staying in a hotel. From the results it can be extracted that affordable pricing (88.4%), availability of information on the web page (88.3%) and family trust on the hotel (85.5%) might be seen as the most relevant factors families traveling with a child with autism when considering to choosing a hotel for a leisure trip. These findings concur with Emira and Thompson (2011) identify lack of trust as the main constraint faced by these families when engaging on a leisure activity. Parents need to feel that both hotel staff and facilities are prepared to host their family and are qualified to respond to their child specific needs.

Regarding to available information, the web page is on of the most effective communication vehicle between service providers and its potential customers. That may be the reason why families traveling with a child with autism use the hotel's web page to find information which is relevant to them. In this sense, some of the previously explained authors (Brand, Poirá and Reichel, 2011; Darcy, 2010; Kim and Stonesifer III, 2011) have defend the importance of easy access to information regarding hotel accessibility. However, it is not enough to state that the property is accessible. It is necessary to specify which accessibility they have covered since every disability has its own specific requirements (Brand, Poirá and Reichel, 2011; Darcy, 2010). In this case, hotels could identify themselves as accessible properties for families traveling with children with autism and could even make reference to the services presented in the previous points. Apart from that, this information needs to be clear and evident on the web page (Kim and Stonesifer III, 2011). People want to easily know, without needing to spend to much time on the site, if the property is suitable for them or not.

Apart from these three barriers, some other aspects could be pointed out from the results. With lower percentages, the existence of other families' reviews regarding their experience in the hotel (79.7%) and the provision of Wi-Fi connection (69.5%), may also be counted as relevant aspects which influence the decision. First aspect, peers' reviews can be connected to information aspect. Getting to know past experiences of other families in the same situation in the hotel is another way to have more information about the hotel accessibility, its service and its facilities. On the other hand, Wi-Fi connection is a must in nowadays hospitality industry. Not only millennials but all target segments travel with their personal devices which allow them to be in contact with home. For families traveling with a child with autism, Wi-Fi may also be a

communication and distraction tool for the child, as well as, provider of security of keeping the family connected to their close beings and relatives in case of emergency for example. However, these last points are just assumptions that may be part of a future research on the barriers this collective faces.

Finally, among the intrinsic barriers, the ones related to the own perception of the future environment on the destination, fear of needing to ask for help (59.4%) and fear of being a nuisance (59.4%) seem to appear as the most relevant barriers for families traveling with a child with autism. Amet (2013) indicates the change of routine as one of the mayor problems people with a disorder within the Autism Spectrum face when traveling. Consequently, this is considered as a mayor barrier for families traveling with a child with autism. Furthermore, this fact is complemented by the probability of families having to face unexpected situations during their trip. In this scenario they may be disoriented on how to react and may need to ask for help (Amet, 2013). These two points that the author highlights could be linked with the barriers that stand out in the analysis. Needing to ask for help could lead to a feeling of being a nuisance and these situations are more likely to be encountered in a unknown environment away from home. Nevertheless, as previously pointed these two barriers are not the ones with highest punctuation, so it can be understood that even though they are considered relevant by families traveling with a child with autism, they are not the principal ones they think of when choosing to stay in a hotel.

According to all the information exposed above the third hypothesis that states that lack of trust on the establishment, lack of information and own perception of the future environment as the main barriers families face when making the decision of staying in a hotel is partially confirmed. While trust and information seem to appear as important barriers when making the decision a third player is suggested which is the price. From the results it may be understood that affordable pricing is also a key point on whether to choose a hotel or not. However, further research needs to be carried out in order to clearly identify the validity of these results. Regarding to intrinsic barriers, results tendency gives importance to them but not in first positions. Nevertheless, that is not enough to completely reject H3 consideration since a deeper analysis may need to be done to this aim.

Then, same as in the previous result analysis it is important to remember that this is an exploratory study that may show the tendencies variables have in this area. However, it can never be taken as a final and determinant result since further research needs to be done in the area with more advanced statistical methods and if possible with a wider sample.

## Chapter 6: Conclusions

The present paper has attempted to identify the specific needs and constraints families traveling with children with ASD face when staying in a hotel. Given the above discussion some conclusions can be drawn in this direction. On the one hand, results seem to point out that some specific needs and demands might be related to the child degree of disability. It has been suggested that families who have a child with autism who presents a high degree of disability may strongly demand and value the availability of accessible rooms, the promptness of food delivery and check in process and the reception of personalized attention. A part from that, from families' past experiences, which were extracted from the survey, a gap is suggested between their demands and the actual services provided by hotels. The biggest dissatisfaction seems to be related with the absence of staff with specific training on ASD, the availability of leisure activities and the provision of accessible rooms. Even if these services are one of the most appreciated and required by families traveling with a child with autism the majority of this collective affirms that never or hardly ever have stayed in a hotel which offer them. Nevertheless, from this results it could also be highlighted that most of this families whose children have special food requirements have been provided with special menus which satisfy their needs. A future goal on for accessible tourism with the aim of integrating children with ASD and their families, may be to give consistent answer to this collective demands and, in this way, minimize the existing offer-demand gap consequently improving their customer experience. Finally, price, information unavailability and lack of trust on the property seem to be defined as the most relevant barriers for families traveling with a child with autism when choosing a hotel for their stay. So, these three factors may be the most influencing ones which make these families give up traveling. A part from that, the existence of other families' reviews about their previous experience as well as Wi-Fi connection availability seem to appear as two factors that positively contribute to the decision.

Regarding to future implications these findings may have, hotels could consider some kind of specific training for their employees on ASD and how to deal with it. Furthermore, an autism friendly label could be created in order to make more evident to the families if the property is prepared to satisfy their special needs and requirements. On the other hand, the promotion of an autism identifier card might be a really useful tool to clearly identify people affected by this disorder. Apart from that, a tourism manual could be created in order to show families the specific services they can ask for as well as to help the children to anticipate the situations. Related with this anticipations simulations like plane boarding or hotel check in rehearsal can

be very positive to help the children to be familiar with this kind of situations and reduce their stress levels when facing them in real life.

## Study limitations and future research

This study can be considered an exploratory approach to accessibility regarding families traveling with a child that present a disorder identified within the Autism Spectrum. The exploratory condition of the results is due certain research limitations.

On the one hand, it is important to bear in mind that this research is part of a larger project within the university. This study was the first statistical approach to the project *Alas para el Autismo* with the aim to have exploratory results that can give a first direction on where to focus the future phases of the project. Thus, the present study was conditioned in some aspects. First of all, the survey was designed to cover as much areas as possible thinking on gathering data for the whole project. The result was a 37 question survey which was really complete but extremely long from the respondent point of view. This caused that from the people who received the survey online only the 58.9% of respondents got to the final question and answered them all. Consequently, information was lost in the process since many surveys were discarded. Apart from that, the fact that the survey covered so many topics made it impossible to this particular study to include all of them. Thus, only few questions were analysed while all the rest are left for future research within the larger project. However, in future studies may be a shorter but more focused survey may be a good tool to avoid losing potential information because of respondents getting tired.

On the other hand, time was also a restricting factor of the study. The research is framed on the Undergraduate Dissertation subject. Consequently, it needed to be done in four months. Then, sample gathering period was not extensive enough to get the expected sample. Furthermore, the researcher was neither expert on Autism Spectrum Disorders nor on the used methodology. So an extra effort was needed in order to catch up with both topics in a short period of time in order to obtain the best possible results. This process was extremely fulfilling both at academic and personal level since wide knowledge was acquired which will be useful for further research in this and other areas. However, the initial lack of expertise has also made the process even harder.

Finally, the lack of specific literature on the topic can also be considered a study limitation. Accessibility topic has been covered by some authors in recent years, however, literature volume on this area is not yet comparable to other tourism and hospitality fields which have been researched for many years. Moreover, accessible tourism is typically covered from a general perspective. This means that there is not much bibliography regarding accessible experiences

focused on Autism Spectrum Disorder. In this sense, further research needs to be carried out in the area in order to get a consistent theoretical framework for future studies and initiatives.

Regarding future research, as previously mentioned in the findings and discussion section, more research need to be carried out in order to strongly validate or decline the proposed hypotheses. Looking at the methodology, deeper analysis can be developed from the current results. Furthermore, the remaining variables from the survey may also be analysed in order to get new hypothesis and draw new conclusions. Apart from that, the current research has focused on the hotel industry. Nevertheless, travel industry is much wider so, future research might consider investigating other areas such as transportation, food and beverage and leisure activities. On the other hand, accessibility can be understood from many perspectives. People facing different disorders and disabilities present different specific needs and requirements. Thus, it may be interesting to deeply research different disabilities, as this project aims to do with autism, in order to promote an accessible tourism experience for all.

Finally, it seems relevant to the future that this time research has been given a quantitative approach. For coming studies a qualitative approach may be interesting to get a different perspective on the topic and gain and in-depth insight.

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## Appendices

### Appendix 1: Research Survey

#### CUESTIONARIO "ALAS PARA EL AUTISMO"

Por favor cumplimenta el cuestionario para conocer mejor las necesidades y barreras que se encuentran las familias con menores con TEA a la hora de viajar. Se ha invitado a participar a **familias vinculadas a la Asociación Aprenem, Fundación Paideia e IDAPP.**

La Facultad de Turismo y Dirección Hotelera Sant Ignasi (Universitat Ramon Llull), lidera el proyecto de investigación "Alas para el autismo" de **accesibilidad universal en turismo para las personas con discapacidad cognitiva**". El objetivo es crear y adaptar servicios para familias con menores con autismo en el sector turístico, hotelero y de oferta de ocio complementario.

La participación es **voluntaria** y los datos serán tratados en forma anónima y confidencial tanto en el proceso de recogida, el tratamiento de los datos y las publicaciones posteriores. El fichero de datos del estudio estará bajo la responsabilidad de HTSI ante el cual podrás ejercer en todo momento los derechos que establece la Ley 15/1999 de Protección de Datos Personales. Para resolver cualquier duda podéis contactar con la Dra. Mónica Cerdán Chiscano (Facultad de Turismo y Dirección Hotelera Sant Ignasi): teléfono 93. 252.28.90 / email: [monica.cerdan@htsi.url.edu](mailto:monica.cerdan@htsi.url.edu).

Por favor, complete el cuestionario y retorneo antes del día X de Marzo de 2016.

- Confirmo que he leído, he entendido el objetivo del cuestionario "Alas para el autismo" y que me han brindado la oportunidad de clarificar dudas.**
- Entiendo que mi participación es voluntaria y que puedo retirarme de la investigación en cualquier momento, sin alegar razones.**
- Acepto cumplimentar el cuestionario.**
- Acepto el uso de declaraciones o comentarios que realice en el cuestionario de forma anonimizada.**

**Nombre/Apellidos:**.....

**Fecha:**.....

**Firma:**.....

**1. ¿Ha pernoctado junto a su familia fuera del domicilio habitual en los últimos 3 años?**

- Sí  No (pase a la pregunta 4)

**2. ¿Cuántas veces ha viajado en familia en los últimos 3 años?**

- Entre 1 y 5 veces  Entre 4 y 10 veces  Entre 11 y 20 veces  Más de 20 veces

**3. ¿Cuál ha sido la estancia media de sus viajes familiares en los últimos 3 años?**

- Entre 1 y 3 días  Entre 4 y 7 días  Entre 8 y 15 días  Más de 15 días

**4. Tenemos la intención de viajar en familia...**

- Siempre, independientemente de que existan servicios adaptados.  
 Sólo si disponemos de servicios adaptados.  
 No me gusta viajar. (Fin del cuestionario)

**5. Las motivaciones principales del viaje familiar son... (Puede marcar más de una respuesta)**

- Mejorar las competencias intelectuales del menor (creatividad, descubrir nuevos entornos y culturas...).  
 Mejorar las habilidades sociales del menor ( conocer nuevas personas, establecer lazos y conexiones...).  
 Mejorar las competencias físicas del menor (mejora de la salud física y mental, autoconfianza...).  
 Relajación (alejarse de las tensiones del día a día, romper con la rutina, calmar el estrés...).  
 Fortalecer los lazos familiares (disfrutar de experiencias en familia, compartir momentos e intereses...).  
 Viajar con otras familias en una situación similar.  
 Otras:

**6. ¿Qué fuentes de información usa para planificar sus vacaciones? (Puede marcar más de una respuesta)**

- Agencias de viajes  Agencias de viajes especializadas  Internet  Experiencias personales  
 Folletos y catálogos  Asociaciones de discapacitados  Recomendaciones (familiares, amigos...)  Boca-boca  
 Revistas especializadas  Prensa  Plataformas online especializadas (ej: Barcelona Special Travel)  
 Plataformas online de opinión (TripAdvisor)  Otros:

**7. ¿Cómo planifican sus necesidades especiales antes del viaje en familia?**

- Solicitamos asistencia de una agencia de viajes especializada.  
 Nos ponemos en contacto directamente con los establecimientos hoteleros y otros servicios, como transporte.  
 Solicitamos asistencia a la asociación de personas en mi misma situación.  
 Solicitamos ayuda a mis familiares y amigos.  
 Otros:

**8. ¿Cuál cree que es la mejor manera de planificar una salida con menores con discapacidad cognitiva?**

- Conjuntamente con otras personas sin discapacidad.  Conjuntamente con otras personas con la misma o parecida discapacidad.  
 Únicamente con la familia o grupo con el que viaja el menor.  Depende del tipo de discapacidad.  
 Depende del grado de discapacidad.  No tengo una opinión al respecto.

**9. En sus viajes se desplaza:**

- Dentro de Cataluña  Dentro de España  A nivel internacional

**10. Indique su tipo de viaje preferido para unas vacaciones en familia:**

- Tour por diversos destinos  Estancia en un único destino

**11. Escoja su destino al que acude en sus vacaciones en familia:**

- Entorno urbano  Playa  Entorno rural  Montaña  
 Crucero

**12. Medios de transporte utilizados durante sus vacaciones en familia: (puede marcar más de una respuesta)**

- Avión  Barco/ Crucero  Tren  Coche  
 Autocar/ Bus privado  Otros:

**13. ¿Hay medios de transporte que, bajo su criterio, requieran mayores servicios adaptados? (puede marcar más de una respuesta)**

- Avión  Barco/ Crucero  Tren  Coche  
 Autocar/ Bus privado  Otros:

**14. ¿En que tipo de establecimiento se aloja en sus vacaciones en familia? (Puede marcar más de una respuesta)**

- Resort todo incluido  Hotel  Casa de amigos o familiares  Alquiler Vacacional  
 Apartamento  Camping  Otro:

**15. En caso de alojarse en apartamento, usa plataformas de economía colaborativa como Airbnb, Homeliday, Niumba o Rentalia, como alternativa a los alojamientos turísticos tradicionales?**

- No  Si, ¿Cuáles?:

**16. Actividades de interés, dentro del destino turístico, para el menor con TEA: (puede marcar más de una respuesta)**

- Deportes (fútbol, natación...)  Eventos sociales (festivales, visitar a amigos...)  
 Actividades de ocio (museos, bolera...)  Apreciación del entorno y paisajes  
 Actividades dinámicas al aire libre (escalada, mountain bike...)  Actividades sedentarias al aire libre (pic-nic, pasear...)  
 Bienestar y salud (yoga, circuitos spa...)  Otros:

**17. ¿Qué aspecto valora más de un hotel en relación a la accesibilidad?**

- Que el personal del hotel valore mis opiniones y sugerencias.  
 Que el personal del hotel de una respuesta rápida a mis necesidades específicas.  
 La existencia de variedad de servicios adaptados.  
 Que se comunique mejor la existencia de servicios adaptados.

**18. ¿La existencia de los siguientes servicios mejora su experiencia turística? Indique su grado de acuerdo. 1=Totalmente en desacuerdo, 2=Poco de acuerdo, 3=Ni de acuerdo ni desacuerdo, 4=De acuerdo, 5=Totalmente de acuerdo.**

Rapidez en el check-in y check-out.	1	2	3	4	5
Habitaciones accesibles para personas con TEA.	1	2	3	4	5
Habitación silenciosa.	1	2	3	4	5
Rapidez de acceso a los restaurantes y de servicio durante las comidas.	1	2	3	4	5
Disposición de menús especiales en caso de alergias o intolerancias.	1	2	3	4	5
Tener un espacio silencioso reservado durante las comidas.	1	2	3	4	5
Personal formado en TEA.	1	2	3	4	5
Atención personalizada por parte del personal turístico en base a nuestras necesidades específicas.	1	2	3	4	5
Disponibilidad de actividades de ocio adaptadas a menores con TEA.	1	2	3	4	5

**19. ¿Los alojamientos turísticos en que se han alojado les han ofrecido estos servicios?**

**1=Nunca, 2=Casi nunca, 3=A veces, 4=Casi Siempre, 5=Siempre**

Rapidez en el check-in y check-out.	1	2	3	4	5
Habitaciones accesibles para personas con TEA.	1	2	3	4	5
Habitación silenciosa.	1	2	3	4	5
Rapidez de acceso a los restaurantes y de servicio durante las comidas.	1	2	3	4	5
Disposición de menús especiales en caso de alergias o intolerancias.	1	2	3	4	5
Tener un espacio silencioso reservado durante las comidas.	1	2	3	4	5
Personal formado en TEA.	1	2	3	4	5
Atención personalizada por parte del personal turístico en base a nuestras necesidades específicas.	1	2	3	4	5
Disponibilidad de actividades de ocio adaptadas a menores con TEA.	1	2	3	4	5

**20. En el momento de elegir un hotel como alojamiento para nuestra estancia, los siguientes factores influyen en nuestra decisión:**

**1=Totalmente en desacuerdo, 2=poco de acuerdo, 3=ni de acuerdo ni desacuerdo, 4=de acuerdo, 5=totalmente de acuerdo**

*Mi propia percepción del entorno en el que nos vamos a encontrar:*

Miedo a no relacionarnos con nadie.	1	2	3	4	5
Miedo a que los requerimientos del viaje sean superiores a nuestras capacidades.	1	2	3	4	5
Miedo a causar molestias.	1	2	3	4	5
Miedo a encontrarnos en una situación en que necesitemos pedir ayuda.	1	2	3	4	5
Miedo a tener incidencias médicas.	1	2	3	4	5

*Nuestra relación con los otros:*

Miedo a recibir miradas molestas de otros individuos.	1	2	3	4	5
Miedo a ser ignorados.	1	2	3	4	5
Miedo a ser el centro de atención.	1	2	3	4	5
Sobreprotección por parte del personal.	1	2	3	4	5
Exceso de amabilidad de los otros clientes a causa de la condición del menor.	1	2	3	4	5
Prejuicios	1	2	3	4	5
Miedo a la exclusión social del menor.	1	2	3	4	5

*Nivel de información disponible:*

Información de los servicios adaptados.	1	2	3	4	5
Opiniones sobre la experiencia de otras familias en el hotel.	1	2	3	4	5

Información sobre el nivel de formación del personal en relación a la discapacidad.	1	2	3	4	5
Certificación específica de calidad sobre accesibilidad del hotel.	1	2	3	4	5

*Otros factores:*

Precios asequibles.	1	2	3	4	5
Soporte a personas con discapacidad.	1	2	3	4	5
Acceso a Wifi.	1	2	3	4	5
Nivel de ocupación del hotel.	1	2	3	4	5
Formación del personal.	1	2	3	4	5
Confianza en el establecimiento.	1	2	3	4	5
Cantidad de posibles estímulos sensoriales (luces, ruidos...).	1	2	3	4	5
Información disponible en la página web del hotel.	1	2	3	4	5
Dificultades de sueño.	1	2	3	4	5
Contraindicaciones médicas.	1	2	3	4	5

**21.** De las siguientes afirmaciones, marque aquellas con las que se sienta identificado:

- Viajaríamos más si pudiéramos encontrar establecimientos accesibles más fácilmente.
- Viajaríamos más si los alojamientos turísticos hicieran esfuerzos por adaptarse a los huéspedes con alguna discapacidad.
- Nos hemos alojado en establecimientos que a pesar de denominarse accesibles no eran suficientes para satisfacer las necesidades de mi familia.
- Alguna vez me he sentido discriminado en un alojamiento por la condición de discapacidad de mi hijo/a.
- Hemos tenido alguna experiencia estresante o angustiada en un alojamiento turístico.
- Nunca hemos tenido ningún problema durante nuestros viajes en familia. (pase a la pregunta 25)
- Otros:

**22.** Por favor, especifique incidentes ocurridos o dificultades encontradas mientras se alojaba en un establecimiento turístico relacionados con la discapacidad del menor:

**23.** Por favor, describa como solucionaron la situación descrita en la pregunta anterior:

**24.** Por favor, indique algunas recomendaciones que usted haría a la dirección de establecimientos hoteleros con el fin de mejorar la experiencia turística de familias como la suya:

Perfil Sociodemográfico del encuestado

**1. Género:**

Hombre  Mujer

**2. Número de miembros de la unidad familiar:**

2  3  4  5  
 Más de 5

**3. Estado civil:**

Soltero/a  Casado/a  Separado/a  Viudo/a

**Nivel de estudios:**

Educación Obligatoria  Formación  
Universitaria  Postgrado  Grado superior

**4. Situación laboral:**

Desempleado/a  En activo

**5. Renta familiar mensual:**

Inferior a 1000€  Entre 1.000€ y 2.999€  Superior a 3.000€

**6. Porcentaje de la renta mensual dedicado a actividades de ocio:**

Inferior al 10%  Entre 11% y 25%  Superior al 25%

**7. Coste medio por día de sus últimas vacaciones:**

**8. Coste medio diario destinado a:**

Transporte:

Restauración:

Alojamiento:

Atracciones turísticas:

Perfil del menor

**1. Edad del miembro de la familia que presenta TEA**

Entre 0 y 5 años  Entre 6 y 10 años  Entre 11 y 15 años  Entre 16 y 18 años  
 Mayor de 18 años

**2. Género del menor:**

Hombre  Mujer

**3. Tipo de trastorno:**

Sensorial  TEA  TDA  Hiperactividad  
 Otro:

**4. Grado de discapacidad:**

Inferior al 33%  Entre el 34% y 65%  Superior al 65%



## Appendix 2: Contingency Tables and Sommers' Delta Results

### Contingency Tables

#### Summary of data processing

	Valid		Cases Lost		Total	
	N	Percentage	N	Percentage	N	Percentage
Check in promptness * Degree of disability	63	90.0%	7	10.0%	70	100.0%
Accessible rooms * Degree of disability	63	90.0%	7	10.0%	70	100.0%
Silent rooms * Degree of disability	63	90.0%	7	10.0%	70	100.0%
Food delivery promptness * Degree of disability	63	90.0%	7	10.0%	70	100.0%
Specialized menus * Degree of disability	62	88.6%	8	11.4%	70	100.0%
Trained Staff on ASD * Degree of disability	63	90.0%	7	10.0%	70	100.0%
Personalized attention * Degree of disability	63	90.0%	7	10.0%	70	100.0%
Leisure activities * Degree of disability	64	91.4%	6	8.6%	70	100.0%

### 1. Check in promptness \* Degree of disability

		Degree of disability			Total
		Less than 33%	Between 34% & 65%	More than 65%	
Check in Promptness	Completely Disagree	3	3	0	6
	Disagree	1	1	1	3
	Neither agree nor disagree	1	2	0	3
	Agree	2	6	3	11
	Completely Agree	3	24	13	40
Total		10	36	17	63

			Value	Error tip. asint.	T approximated	Sig. approximated
Ordinal per ordinal Sommer's D	Symmetric		.287	.106	2.540	.011
	C/I promptness dependent		.281	.105	2.540	.011
	Degree of disability dependent		.293	.110	2.540	.011

### 2. Accessible rooms \* Degree of disability

		Degree of disability			Total
		Less than 33%	Between 34% & 65%	More than 65%	
Accessible rooms	Completely disagree	3	3	0	6
	Disagree	0	1	1	2
	Neither agree nor disagree	2	8	1	11
	Agree	4	12	4	20
	Completely Agree	1	12	11	24
Total		10	36	17	63

			Value	Error tip. asint.	T approximated	Sig. approximated
Ordinal per ordinal Sommer's D	Symmetric		.343	.096	3.455	.001
	Accessible rooms dependent		.384	.105	3.455	.001
	Degree of disability dependent		.310	.090	3.455	.001

### 3. Silent rooms \* Degree of disability

		Degree of disability			
		Less than 33%	Between 34% & 65%	More than 65%	Total
Silent rooms	Completely disagree	2	1	0	3
	Disagree	1	1	1	3
	Neither agree nor disagree	2	8	4	14
	Agree	3	10	3	16
	Completely agree	2	16	9	27
Total		10	36	17	63

			Value	Error tip. asint.	T approximated	Sig. approximated
Ordinal per ordinal	Sommer's D	Symmetric	.182	.114	1.574	.115
		Silent rooms dependent	.201	.125	1.574	.115
		Degree of disability dependent	.166	.105	1.574	.115

### 4. Food delivery promptness \* Degree of disability

		Degree of disability			
		Less than 33%	Between 34% & 65%	More than 65%	Total
Food delivery promptness	Completely disagree	3	2	0	5
	Disagree	0	0	1	1
	Neither agree nor disagree	0	4	0	4
	Agree	5	13	3	21
	Completely agree	2	17	13	32
Total		10	36	17	63

			Value	Error tip. asint.	T approximate	Sig. approximate
Ordinal per ordinal	Sommer's D	Symmetric	.340	.100	3.259	.001
		Food delivery promptness dependent	.354	.102	3.259	.001
		Degree of disability dependent	.328	.101	3.259	.001

### 5. Specialized menu \* Degree of disability

		Degree of disability			
		Less than 33%	Between 34% & 65%	More than 65%	Total
Specialized menu	Completely disagree	2	2	0	4
	Disagree	1	2	1	4
	Neither agree nor disagree	0	4	1	5
	Agree	1	9	5	15
	Completely agree	6	18	10	34
Total		10	35	17	62

			Value	Error tip. asint.	T approximated	Sig. approximated
Ordinal per ordinal	Sommer's D	Symmetric	.075	.117	.637	.524
		Specialized menu dependent	.078	.122	.637	.524
		Degree of disability dependent	.072	.112	.637	.524

### 6. Trained staff on ASD \* Degree of disability

		Degree of disability			
		Less than 33%	Between 34% & 65%	More than 65%	Total
Trained staff on ASD	Completely disagree	3	2	0	5
	Disagree	0	2	1	3
	Neither agree nor disagree	0	6	0	6
	Agree	3	7	9	19
	Completely agree	4	19	7	30
Total		10	36	17	63

			Value	Error tip. asint.	T approximate	Sig. approximate
Ordinal per ordinal	Sommer's D	Symmetric	.080	.109	.726	.468
		Trained staff on ASD dependent	.086	.118	.726	.468
		Degree of disability dependent	.074	.101	.726	.468

### 7. Personalized attention \* Degree of disability

		Degree of disability			
		Less than 33%	Between 34% & 65%	More than 65%	Total
Personalized attention	Completely disagree	3	2	0	5
	Disagree	0	1	1	2
	Neither agree nor disagree	1	4	0	5
	Agree	4	20	8	32
	Completely agree	2	9	8	19
Total		10	36	17	63

			Value	Error tip. asint.	T approximated	Sig. approximated
Ordinal per ordinal	Sommer's D	Symmetric	.272	.111	2.361	.018
		Personalized attention dependent	.286	.118	2.361	.018
		Degree of disability dependent	.258	.106	2.361	.018

### 8. Leisure activities \* Degree of disability

		Degree of disability			
		Less than 33%	Between 34% & 65%	More than 65%	Total
Leisure activities	Completely disagree	3	2	0	5
	Disagree	0	4	1	5
	Neither agree not disagree	0	1	0	1
	Agree	4	11	4	19
	Completely disagree	3	19	12	34
Total		10	37	17	64

			Value	Error tip. asint.	T approximated	Sig. approximated
Ordinal per ordinal	Sommer's D	Symmetric	.261	.103	2.442	.015
		Leisure activities dependent	.272	.108	2.442	.015
		Degree of disability dependent	.252	.101	2.442	.015

### Appendix 3: Spearman's Correlation Test Table Results

#### 1. Check In Promptness

				P18_C/I Promptness	P19_C/I promptness offer
Rho Spearman	P18_Check promptness	In	Correlation coefficient	1.000	-.275
			Sig. (bilateral)	.	.023
	P19_Check promptness offer	In	Correlation coefficient	-.275	1.000
			Sig. (bilateral)	.023	.
			N	68	68
			N	68	69

#### 2. Accessible Rooms

				P18_Accessible rooms	P19_Accessible rooms offer
Rho Spearman	P18_Accessible rooms		Correlation coefficient	1.000	-.178
			Sig. (bilateral)	.	.153
	P19_Accessible rooms offer		Correlation coefficient	-.178	1.000
			Sig. (bilateral)	.153	.
			N	67	66
			N	66	68

#### 3. Silent Rooms

				P18_Silent rooms	P19_Silent rooms offer
Rho de Spearman	P18_Silent rooms		Correlation coefficient	1.000	.097
			Sig. (bilateral)	.	.432
	P19_Silent rooms offer	rooms	Correlation coefficient	.097	1.000
			Sig. (bilateral)	.432	.
			N	68	68
			N	68	69

#### 4. Food delivery promptness

			P18_Food delivery promptness	P19_Food delivery promptness offer
Rho Spearman	P18_Food delivery promptness	Correlation coefficient	1.000	-.070
		Sig. (bilateral)	.	.575
		N	68	67
	P19_Food delivery promptness offer	Correlation coefficient	-.070	1.000
		Sig. (bilateral)	.575	.
		N	67	68

#### 5. Specialized menus

			P18_Specialized menus	P19_Specialized menus offer
Rho Spearman	P18_Specialized menus	Correlation coefficient	1.000	.355
		Sig. (bilateral)	.	.003
		N	67	66
	P19_Specialized menus offer	Correlation coefficient	.355	1.000
		Sig. (bilateral)	.003	.
		N	66	68

#### 6. Trained staff on ASD

			P18_Trained staff on ASD	P19_Trained staff on ASD offer
Rho de Spearman	P18_Trained staff on ASD	Correlation coefficient	1.000	-.142
		Sig. (bilateral)	.	.256
		N	67	66
	P19_Trained staff on ASD offer	Correlation coefficient	-.142	1.000
		Sig. (bilateral)	.256	.
		N	66	68

## 7. Personalized attention

			P18_ Personalized attention	P19_ Personalized attention offer
Rho de Spearman	P18_ Personalized attention	Correlation coefficient	1.000	-.230
		Sig. (bilateral)	.	.062
		N	68	67
	P19_ Personalized attention offer	Correlation coefficient	-.230	1.000
		Sig. (bilateral)	.062	.
		N	67	68

## 8. Leisure activities

			P18_ Personalized attention	P19_ Personalized attention offer
Rho de Spearman	P18_ Leisure activities	Correlation coefficient	1.000	-.207
		Sig. (bilateral)	.	.090
		N	69	68
	P19_ Leisure activities offer	Correlation coefficient	-.207	1.000
		Sig. (bilateral)	.090	.
		N	68	68



Appendix 4: Frequencies Tables of Barriers

**P20\_Fear of not interacting with anyone**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid				
Completely disagree	10	14,5	14,7	14,7
Disagree	19	27,5	27,9	42,6
Neither agree nor disagree	22	31,9	32,4	75,0
Agree	8	11,6	11,8	86,8
Completely agree	9	13,0	13,2	100,0
Total	68	98,6	100,0	
Lost	1	1,4		
Total	69	100,0		

**P20\_Fear of being overwhelmed by the requirements of the trip**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid				
Completely disagree	5	7,2	7,2	7,2
Disagree	14	20,3	20,3	27,5
Neither agree nor disagree	11	15,9	15,9	43,5
Agree	23	33,3	33,3	76,8
Completely agree	16	23,2	23,2	100,0
Total	69	100,0	100,0	

**P20\_Fear of being a nuisance**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid				
Completely disagree	2	2,9	2,9	2,9
Disagree	12	17,4	17,4	20,3
Neither agree nor disagree	14	20,3	20,3	40,6
Agree	24	34,8	34,8	75,4
Completely agree	17	24,6	24,6	100,0
Total	69	100,0	100,0	

**P20 Fear of needing to ask for help**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	3	4,3	4,3	4,3
Disagree	9	13,0	13,0	17,4
Neither agree nor disagree	16	23,2	23,2	40,6
Agree	23	33,3	33,3	73,9
Completely agree	18	26,1	26,1	100,0
Total	69	100,0	100,0	

**P20 Fear to have medical emergencies**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	3	4,3	4,3	4,3
Disagree	15	21,7	21,7	26,1
Neither agree nor disagree	17	24,6	24,6	50,7
Agree	14	20,3	20,3	71,0
Completely agree	20	29,0	29,0	100,0
Total	69	100,0	100,0	

**P20 Fear of others staring at us**

	Frequencies	Percentages	Valid percentages	Accumulate Percentages
Valid Completely disagree	13	18,8	18,8	18,8
Disagree	14	20,3	20,3	39,1
Neither agree nor disagree	12	17,4	17,4	56,5
Agree	14	20,3	20,3	76,8
Completely agree	16	23,2	23,2	100,0
Total	69	100,0	100,0	

**P20\_Fear of being ignored**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	14	20,3	20,3	20,3
Disagree	20	29,0	29,0	49,3
Neither agree nor disagree	20	29,0	29,0	78,3
Agree	11	15,9	15,9	94,2
Completely agree	4	5,8	5,8	100,0
Total	69	100,0	100,0	

**P20\_Fear of being the centre of attention**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	10	14,5	14,5	14,5
Disagree	17	24,6	24,6	39,1
Neither agree nor disagree	10	14,5	14,5	53,6
Agree	18	26,1	26,1	79,7
Completely agree	14	20,3	20,3	100,0
Total	69	100,0	100,0	

**P20\_Overprotection by the hotel staff**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	17	24,6	24,6	24,6
Disagree	19	27,5	27,5	52,2
Neither agree nor disagree	27	39,1	39,1	91,3
Agree	5	7,2	7,2	98,6
Completely agree	1	1,4	1,4	100,0
Total	69	100,0	100,0	

**P20 Exces of fellow customers' kindness due to the child condition**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Completely disagree	18	26,1	26,1	26,1
Disagree	18	26,1	26,1	52,2
Valid Neither agree nor disagree	27	39,1	39,1	91,3
Agree	6	8,7	8,7	100,0
Total	69	100,0	100,0	

**P20 Prejudices**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Completely disagree	15	21,7	22,1	22,1
Disagree	13	18,8	19,1	41,2
Valid Neither agree nor disagree	18	26,1	26,5	67,6
Agree	10	14,5	14,7	82,4
Completely agree	12	17,4	17,6	100,0
Total	68	98,6	100,0	
Lost	1	1,4		
Total	69	100,0		

**P20 Fear of child's social exclusion**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Completely disagree	11	15,9	15,9	15,9
Disagree	14	20,3	20,3	36,2
Valid Neither agree nor disagree	14	20,3	20,3	56,5
Agree	13	18,8	18,8	75,4
Completely agree	17	24,6	24,6	100,0
Total	69	100,0	100,0	

**P20\_ Information regarding adapted services**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	4	5,8	5,8	5,8
Disagree	7	10,1	10,1	15,9
Neither agree nor disagree	14	20,3	20,3	36,2
Agree	27	39,1	39,1	75,4
Completely agree	17	24,6	24,6	100,0
Total	69	100,0	100,0	

**P20\_ Other families' reviews regarding their experiences in the hotel**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	2	2,9	2,9	2,9
Disagree	3	4,3	4,3	7,2
Neither agree nor disagree	9	13,0	13,0	20,3
Agree	29	42,0	42,0	62,3
Completely agree	26	37,7	37,7	100,0
Total	69	100,0	100,0	

**P20\_ Available information regarding staff training on disability**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	4	5,8	5,8	5,8
Disagree	8	11,6	11,6	17,4
Neither agree nor disagree	18	26,1	26,1	43,5
Agree	24	34,8	34,8	78,3
Completely agree	15	21,7	21,7	100,0
Total	69	100,0	100,0	

**P20 Existence of a specific certificate regarding hotel accessibility**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	5	7,2	7,2	7,2
Disagree	5	7,2	7,2	14,5
Neither agree nor disagree	25	36,2	36,2	50,7
Agree	18	26,1	26,1	76,8
Completely agree	16	23,2	23,2	100,0
Total	69	100,0	100,0	

**P20 Affordable prices**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	2	2,9	2,9	2,9
Disagree	2	2,9	2,9	5,8
Neither agree nor disagree	4	5,8	5,8	11,6
Agree	29	42,0	42,0	53,6
Completely agree	32	46,4	46,4	100,0
Total	69	100,0	100,0	

**P20 Hotel support to disabled guests**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	4	5,8	5,9	5,9
Disagree	3	4,3	4,4	10,3
Neither agree nor disagree	20	29,0	29,4	39,7
Agree	23	33,3	33,8	73,5
Completely agree	18	26,1	26,5	100,0
Total	68	98,6	100,0	
Lost	1	1,4		
Total	69	100,0		

**P20\_WIFI access**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	4	5,8	5,8	5,8
Disagree	5	7,2	7,2	13,0
Neither agree nor disagree	12	17,4	17,4	30,4
Agree	27	39,1	39,1	69,6
Completely agree	21	30,4	30,4	100,0
Total	69	100,0	100,0	

**P20\_Hotel occupancy level**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	2	2,9	2,9	2,9
Disagree	7	10,1	10,1	13,0
Neither agree nor disagree	34	49,3	49,3	62,3
Agree	14	20,3	20,3	82,6
Completely agree	12	17,4	17,4	100,0
Total	69	100,0	100,0	

**P20\_Staff training**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Validos Completely disagree	2	2,9	2,9	2,9
Disagree	5	7,2	7,4	10,3
Neither agree nor disagree	22	31,9	32,4	42,6
Agree	29	42,0	42,6	85,3
Completely agree	10	14,5	14,7	100,0
Total	68	98,6	100,0	
Perdidos Sistema	1	1,4		
Total	69	100,0		

**P20\_Trust on the property**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	2	2,9	2,9	2,9
Disagree	2	2,9	2,9	5,8
Neither agree nor disagree	6	8,7	8,7	14,5
Agree	35	50,7	50,7	65,2
Completely agree	24	34,8	34,8	100,0
Total	69	100,0	100,0	

**P20\_Potential sensorial stimulus**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	2	2,9	2,9	2,9
Disagree	4	5,8	5,8	8,7
Neither agree nor disagree	21	30,4	30,4	39,1
Agree	22	31,9	31,9	71,0
Completely agree	20	29,0	29,0	100,0
Total	69	100,0	100,0	

**P20\_Available information on the web page**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid Completely disagree	2	2,9	2,9	2,9
Disagree	2	2,9	2,9	5,9
Neither agree nor disagree	4	5,8	5,9	11,8
Agree	28	40,6	41,2	52,9
Completely agree	32	46,4	47,1	100,0
Total	68	98,6	100,0	
Lost	1	1,4		
Total	69	100,0		



**P20\_Sleep difficulties**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid				
Completely disagree	2	2,9	2,9	2,9
Disagree	7	10,1	10,3	13,2
Neither agree nor disagree	22	31,9	32,4	45,6
Agree	16	23,2	23,5	69,1
Completely agree	21	30,4	30,9	100,0
Total	68	98,6	100,0	
Lost	1	1,4		
Total	69	100,0		

**P20\_Medical contradictions**

	Frequencies	Percentages	Valid percentages	Accumulate percentages
Valid				
Completely disagree	3	4,3	4,4	4,4
Disagree	8	11,6	11,8	16,2
Neither agree nor disagree	33	47,8	48,5	64,7
Agree	11	15,9	16,2	80,9
Completely agree	13	18,8	19,1	100,0
Total	68	98,6	100,0	
Lost	1	1,4		
Total	69	100,0		