Hotel Adaptation for Travelers with Disabilities (TWD): A Design Oriented Analysis

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ABSTRACT
The rapid growth of the elderly population coupled with the a socially responsible approach to ensure equal service and quality of life for people with disabilities (PwD), has triggered a global attempt to adapt hotels to the emerging needs of these populations. The purpose of this study is to analyze the legal requirements vs. reality in hotels from an interior design perspective. Specifically, the study attempts to illustrate how the interior designs of hotels may be planned in order to guarantee accessibility for people with diverse disabilities including those using crutches or walkers, wheelchair users, the visually challenged and the hearing impaired.

The study's results indicate that many hotels modify their interior designs for the sake of appearances but, in fact, such adjustments are not suitable for PwD. Moreover, such interior design modifications may trigger negative attitudes on the part of PwD, increasing feelings of societal marginalization. The study is based on the analysis of several hotels in the popular resort city of Antalya, Turkey.

Keywords: People with Disabilities (PwD), Travelers with disabilities (TwD), Design constraints, Hotels interior design.

INTRODUCTION
Challenges faced by people with disabilities (PwD) are almost as ancient as the history of mankind. The plethora of challenges concerns the person with disabilities, as well as the individual's family and social structure. It is often believed that the level of social and economic development of a country affects the physical, psychological and social developmental related toPwD. Clearly, this analysis also holds true for the tourism sphere. For example, the idea of "tourism without obstacles" is increasingly popular, as reflected inthe Convention on the Rights of Persons with Disabilities of United Nations (Kilimci, 2008). The number of PwD around the world was estimated asover 600 million in 2008 (TÜRSAB, 2008); over 650 million in 2009 (Darcy and Pegg, 2001) and as over 785 million in 2011 (WHO and WB, 2011). Furthermore, as life expectancy increases, the number of the PwD increases accordingly. The main assumption of the social-political approach to PwDs is that it is the responsibility of tourism businesses as well as NGOs to provide all members of society with the opportunity to exercise their right to be tourists (Higgins-Desbiolles, 2006). This paper's specific focus is the level of readiness of hotels to physically accommodate the unique needs of travelers with disabilities (TwD, interchangeably used with PwD).

1. LITERATURE REVIEW
As noted by Poria, Reicheland Brandt (2009), since the late-1970s, tourism research has increasingly focused people with disabilities (Shaw and Coles, 2004), although until the late-1980s and early 1990s, researchers merely "flirted with this issue" (McKercher et *al.,* 2003). Poria and colleagues (2009) concluded that PwD tourism literature focuses on three main issues. First, several studies examined the characteristics of people with disabilities who are involved in the tourist experience and the economic potential of the disabled market (Israeli, 2002).For example, it was estimated that 70% of the PwD population travels. Considering that PwD tend to travel with one or more companions, it

is further estimated that the potential number of PwD and companion travelers in Europe is 130 million people and their expenditures amount to more than 80 billion Euros (TÜRSAB, 2008). Second, attention was directed at legislation dealing with service provision to PwD (e.g. Disability Discrimination Act and Americans with Disability Act of 1990). Third, the academic literature attention was turned to disenfranchised segments of society, and thus the PwDtourist experience has come an integral part of academic research (Yauet*al.,*2004). However, few studies explored the specific components and dimensions of tourism and leisure experiences for PwD, especially in terms of the facilities that are expected to serve them.

As noted earlier, the general economic development trend seems to be highly related to the welfare of PwD. This interest is correlated with a prevailing social-ethical approach that calls for preventing exclusion of PwD from tourist experiences, recognizing the "civic right to holidaying" (Wilkens, 1997) of all members of society.This perspective entails recognizing and addressing the constraints limiting PwDs from fully enjoying their tourist experiences. According to Crawford and Godbey (1987) and Smith (1987) constraints can be classified into structural, interpersonal, and intrapersonal barriers. Knudson, Cable and Beck (1995) referred to three major barriers for PwD: intrinsic barriers, communication barriers and environmental barriers. Intrinsic barriers result from an individual personal limitation (e.g. physical, psychological, or cognitive disabilities). Communication barriers result from the failure to interconnect effectively with other people. Environmental barriers are external forces that constrain the individual (e.g. architectural structure and natural and topographical obstacles). These physical obstacles encountered by PwD clearly restrict their travel opportunities.

Another conceptualization is evident in the United Nation's (2006) Convention on the Rights of Persons with Disabilities. According to Darcy and Buhalis (2011), this convention focuses on the following dimensions of disability as an outcome of their access needs: mobility, vision, hearing, intellectual/cognitive/learning, mental health, sensitivities (including respiratory, food and chemical) and others. Clearly, it is necessary to design the service cape in an appropriate way to accommodate for the accessibility needs of all individuals, including PwD. Such planning requires careful design of accommodation facilities as well as other hospitality structures (Kaplan, 2010).However, there remain numerous practical and social obstacles that may prevent PwDs and their companions from experiencing a satisfactory hospitality experience (Yauet*al.,*2004).

Several scholars have explicitly stated that the responsibility to provide the legal framework that protects the rights of PwD to fully utilize hotel facilities lies with government policy makers and industry leaders (Poriaet*al.,*2010). Indeed, legislation such as the Americans with Disabilities Act (1990) and the Disability Discrimination Act (1995) implemented in the United Kingdom played significant roles in the adaptation of the hospitality industry to the needs of PwD (Öztürk et *al*.,2008). Since then, many countries that previously neglected imposing efficient legal regulations for PwD needs, have implemented special hotel design features accommodating PwD needs. Statistics indicate the positive impact of these regulations in terms of the increasing number of PwD travelers (TÜRSAB, 2008).

The focus of the current study is on environmental and structural barriers, specifically: architectural considerations that limit hotels' abilities to appropriately serve their PwD guests or tourists with disabilities (TwD) from legal and ethical perspectives. The study's main premise is that when one studies the wellbeing and comfort of TwD in hotel service areas, or services capes, it is important to examine reality as opposed to merely the legal frameworks or regulations.

According to Hoffman, Kelley and Chung (2003), services capes refer to the environments in which services are delivered and where the firm and customer interact

(Bitner 1992; ZeithamlandBitner 1996;Poriaet*al.,*2009, 2010, 2011). In broad terms, "servicescape" consists of three components:
(1) *facility exterior* – exterior design, signage, parking, landscaping, and the surrounding environment;
(2) *facility interior* – interior design, equipment used to serve the customer directly or used to run the business, signage, layout, air quality, and temperature; and
(3) *other tangibles* – such items as business cards, stationery, billing statements, reports, employee appearance, uniforms, and brochures (Bitner, 1992; Hoffman et *al.,* 2003).

According to the authors, the "…services cape plays a multifaceted role within the service encounter as package, facilitator, socializer, and differentiator" (Zeithaml and Bitner, 1996). As facilitator, the services cape often dictates the flow of the service delivery process by incorporating design elements such as signs and cueing formats that communicate to customers how the service production process works (Hoffman et *al.,* 2003).The current study focuses on the facility exterior and facility interior components of hotel services cape, as related to accommodating for the needs of PwD.

2. THE TURKISH CONTEXT

Turkey is ranked 50th in the world and 29th in Europe in terms of tourism competitiveness (Yilanci and Eris, 2012). As of 2011, 31,456,000 foreign tourists visited Turkey, with Germany being the number one source of tourists (15.4% followed by Russia: 11.0%) (TURSAB, 2012). Tourism accounts for nearly 5% of Turkish GDP (Yilanci and Eris, 2012). The country is noted for its blend of spas, cultural, archeological and rural tourism. From a European perspective, Turkey is a relatively close and inexpensive destination. The role of the hospitality industry as a major driver for economic development and employment was recognized by the government, which in 1982 legislated the Tourism Encouragement Law.

Since 1991, the Turkish Ministry of Tourism has implemented regulations to ensure an appropriate level of quality of life and comfort for PwD in hotels. Within the framework of certain laws, design criteria for PwD are explicitly defined for the accommodation buildings and service areas. In The Construction Law dictates that "*To make the physical environment accessible and habitable for the disabled, the municipal plans and urban, social, technical infrastructure areas and buildings must fit the related standards of Turkish Standards Institution."* Such legislation ensures the application of accessibility principles to the existing and future infrastructure projects and buildings (Kaplan, 2010).
In terms of the hospitality industry, the ranking of hotels conducted by the Turkish Ministry of Culture and Tourism includes specific qualifications that the facilities should provide, as well as special arrangements for PwD. Thus, it seems that the current approach toward the basic rights of PwD to free mobility and fully enjoy tourism and hospitality has been internalized and accepted by regulatory bodies representing the government. However, a cursory examination of the situation in Turkey's hotels in terms of PwD requirements raise the possibility that regulations are not fully enforced, thus, preventing PwD in exercising their rights as expected according to various legislations in Europe and the United States. Hence, the purpose of this study is to examine the PwD services cape regulation implementation in hotels in Turkey. Our basic hypothesis is that there are major gaps between the legal requirements for services cape arrangements for PwD versus the present, real-time situation in hotels. In other words, accepting the prevailing modern approach to PwD and enacting rules and regulations to guarantee it, does not promise strict enforcement.

3. METHOD

This current study utilizes a multiple case study approach as its main methodology. Each hotel was analyzed according to the "Local Regulations for Accessibility Handbook" of the Turkish Prime Ministry Administration for Disabled People, and the "Regulations for the

Physically Disabled", which is part of the legislation related to "Licensing and Qualifications of Turkish Tourism Facilities".

The location for the study was Antalya, the city with the most beds in terms of tourism capacity in Turkey. Antalya is major tourism and resort destination situated on the Mediterranean shore. As of 2009, Antalya had 686 licensed tourist operations, offering 306,535 beds (TURSAB, 2012). Accordingly, the number of visitor reached more than 11 million in the year 2011, including both foreign and domestic tourism. The ratio of foreigners to domestic is around 4:1. The annual occupancy rate for the destination is around 59%. Most foreign and domestic tourists stay in hotels, although motels and other types of accommodation are available.

Seven properties were randomly selected for this exploratory study from the Antalya list of registered hotels: Five city hotels and two resort hotels. In each hotel the general manager or owner were interviewed, as well as several tourists who were randomly selected in the lobby at the time of the visit. Forty-two guests were approached in order to capture the essence of an exploratory study that searches for authentic responses rather than random samples. Each property was methodologically examined according to the listed below PwD hotel accessibility criteria. Also, sample photographs were taken to serve as the main database for this study.

4. DEFINING THE INTERIOR SERVICESCAPE CRITERIA FOR TwD

When designing interior services cape, various obstacles faced by people with different disabilities should be taken into account. Examples include TwD who face movement difficulties, the blind, the deaf and the hard of hearing.Apart from the expectations of fair and respectable attitude of service providers, guests require an appropriate design of the services cape (Poria et *al.,* 2009, 2010, 2011). There seem to be two main design options: either several especially designed and reserved "TwD rooms" or a flexible universalized design (Pehlivanoğlu, 2012).

Preiser and Ostroff (2001) and the Center for Universal Design (2009) suggested seven principles for universal design: equitable use; flexibility in use; simple and intuitive use; perceptible information; tolerance for error, low physical efforts; and size and space for approach and use. As noted by Darcy and Buhalis (2011), the universal design approach implies that access would become central to design, rather than an add-on for compliance reasons.

The most difficult challenge in developing a universal design is mediating the different expectations of diverse stakeholders. For example, the hearing impaired (or hard of hearing) often refrain from staying in rooms designed for people with physical disabilities. Such preferences encourage the concept of "diversification" according to the nature of the disability. This approach calls for designing some rooms for the hearing impaired; some for the visually challenged; and some for the physically disabled guests, thus eliminating the generic category of "rooms for the disabled". Such an endeavor might be possible by instituting little minor changes in the room details and by equipping rooms with appropriate electronic systems (Pehlivanoğlu, 2012).

Before designing for TwD, it is crucial to understand their needs and their mobility restrictions (Poria et *al.,* 2011).This process requires identifying mobility restrictions, including sitting down, standing up, using the toilet, lifting and carrying objects, moving hands and arms, climbing stairs, eating and drinking, getting dressed, taking a bath, talking, watching, listening, problem solving and coping with emergency situations, as well memory and orientation problems are included. These requirements may seem trivial or mundane to a person without disabilities however, they are major determinants of the TwD to fully enjoy the hotel experience. In other words, careful planning should ensure appropriate *accessibility* (parking, access road, entrance, ramps and steps),*circulation*(elevator, stair handrails, corridors) and *usability* (reception, toilet,

bathroom, shower, bedroom, kitchen, restaurant, T.V. set, and the buffet) (Ossate Disabled Report, 2006).

Different and somewhat simpler designing rules are presented in the *Improving Developing Information on Accessible Tourism for the Disabled People Handbook* prepared by the European Commission in 2004. Accordingly, there are four main factors for hotel design for PwD: how to get there; getting in; using the facilities; and getting out in case of emergency. Similar to the previous report (Ossate Disabled Report, 2006), the design of the interior services cape should take into consideration the functions of accommodation; accessible WCs and bathrooms,restaurants, cafés and bars, shops, conference facilities, audio/visual presentations, exhibitions and outdoor attractions, and the details on routes throughout the facility.

An equally important aspect of the services cape addresses the required training of hospitality staff. As noted by Arola, Cooper and Cooper (2011)and Poria, Reichel and Brandt (2011), service providers must be trained to raise their awareness about and pay attention to TwD special needs. This implies learning how to relate to the PwD with respect using an accepting approach. Such behavior is crucial for customer satisfaction in addition to the vital services cape regulations.

As noted earlier, the current research carefully examines seven randomly selected hotels in Antalya, Turkey. The research question involves the examination of reality vs. the above presentation of design regulation. Each criterion for PwDservicescape will be first presented, followed by our findings.

4.1. Car Parking

According to the principles of the European Commission, 6% of the common car parking of a hotel facility must be reserved for PwD. In cases of in-door parking, an elevator must provide accessibility to the lobby. The reserved slots for PwD must be located close to the entrance, marked by universally understood parking signs. In addition, visible signs should direct the guests into the direction of the hotel elevator (see Figure I). Note that wheelchair users need wider car parking slots than other TwD in order to land their chairs.

Figure I. Signs of PwD parking slots. However, space used for storage, possibly due to the winter season (TekirovaCorinthiaClup Hotel, Antalya).

Arrangements for the PwD must exist not only within the accommodation parameter, but also at other services capes areas. For example, ensuring accessible means of transportation from the airport to the hotel.

4.2. Hotel Entrances

The Turkish *Regulations for the Physically Disabled of the Legislation*relevant to *Licensing and Qualifications of Turkish Tourism Facilities*explicitly declare that the hotel entrance

must be at least 90 cm wide. In addition, if there is a pavement, a ramp should be installed (see Figure II).

Figure II. The pavement ramp of entrance at Ramada Hotel, Antalya

Revolving doors obstruct the entrance for PwD, so alternative wide doors that are opened at 90° must be installed. It should be noted that in all seven hotels there were appropriate doors for TwD, in addition to revolving doors (see, for example, Figure III). Note however, that revolving doors can also be designed for PwD usage. However, our examination indicated that the hotel staff was either unaware of this option, or did not know how to operate such doors.

Figure III. Entrance door and the step is not supported by a ramp, Revolving doors obstruct the entrance for PwD, so alternative wide doors that are opened at 90° must be installed (Porto Bello Hotel, Antalya).

4.3. Hotel Reception and Waiting Lounges

Waiting lounges should be designed in a way that meets the situations of both PwD and other hotel guests. It is often seen as more elegant or appealing to design homogenous and identical sitting and lounges areas. However, designing one type of sitting area excludes many of the hotel guests. This is especially relevant to service cape with various levels that may be reached by stairs. Another requirement refers to designing sitting areas with differing heights and widths.

In addition, many designers neglect to ensure that the hotel entrance area near the reception has an alternative check-in desk at wheelchair height. In numerous cases, the reception desk is too high for wheelchair users. The reception desk's underside should be at least 70 cm to accommodate a wheelchair. The height of the table can be 75 cm as well (European Commission, 2004). Note however, that the Regulations on Certification

and Qualifications of Tourism Facilities for the physically disabled stipulates that the reception desk must be designed to allow access by wheelchairs and be at most at the height of 90 cm. It should be noted, however, that our observations indicated that this is a most inconvenient height for wheelchair users. There are similar rules for the maximal height of that desk. This special desk is to be stacked with informative brochures for PwD, demonstrating how to use the phone, fax and e-mail tools, as well as introducing the specially designated serviceape areas.
The check in area is made accessible to people hard of hearing through voice systems that enable smoother communication.

4.4. Ramps and Elevators

The Turkish regulations require the following features for elevators:

1. The elevator door must be controlled by a photocell that detects entering or disembarking people, and hence controls the door's opening and closing. The opening-closing interval of the door should not be shorter than 5 seconds.
2. Control buttons should be located at a height between 90 cm to 120 cm above the floor and should allow accessibility for wheelchairs users.
3. Handrails should be installed at about 85 cm. above the floor in the cabin.
4. The cabin floor should not be carpeted.

The elevator walls should not be fully covered by mirrors to prevent vision disorder and disorientation (see: Figure IV). Although Figure 4 illustrates a problematic case, in all other hotels the elevators were usually the most properlydesignedhotelelements. This findingis probably the result of manufacturers' careful considerations to follow the pre-defined standards for elevators, including the use of Braille, handrail dimensions, and cabin and door width.

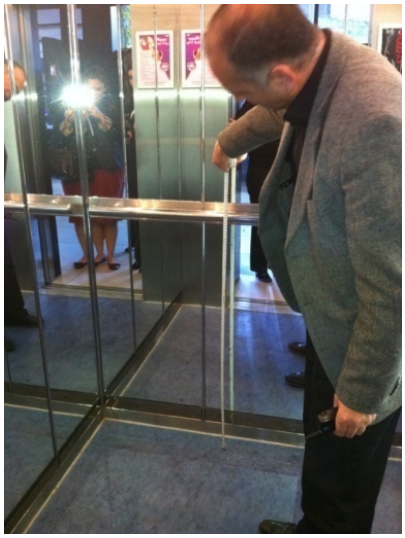

Figure IV. An elevator cabin covered with mirrors on three walls is not the right choice. The elevator walls should not be fully covered by mirrorstop revent vision disorder and disorientation. However, the elevator meets the standards in terms of measurements (Limak Artlantis Resort, Belek).

The public service cape in hotels should also include ramps, especially for wheelchair and crutches users. If the ramps are longer than 10 meters, they should be supported by a landing. There are also specific instructions related to the ramps' angles (no greater than 8%). The steps may be 18 cm, but the ideal height is 15 cm in order to increase accessibility for the elderly (European Commission, 2004) (see: Figure V about ramps).

Figure V. The exterior ramp of Tekirova Corinthia Hotel is unexpectedly interrupted by a pillar; also tiled buffers should be installed to protect against possible sliding.

Guests with a walking disability have difficulties using any kind of stairs or ramps. Thus, our examination clearly indicated that most hotel service capes should be designed without stairs at all, preferably as a flat space.

4.5. Room Design Requirements

It is recommended that rooms intended for TwD use be situated in the hotel's main quarters and possibly on the ground level. The rationale behind this recommendation is to facilitate easy accessibility to the hotel food, drink and entertainment outlets, as well as ensuring accessible emergency exits (Pehlivanoğlu, 2012).

Room doors are of particular importance. As noted in previous research (see Poria et *al.,* 2011), in some hotels the guest room entrance is too narrow for wheelchairs, as are many bathroom entrances. These entrance requirements vary from one country to another, and may differ even among regions, as noted in the case of Belgium. In the Flemish part of Belgium, the net door width for the disabled is defined as 90 cm, whereas it is 93 cm in the capital city Brussels, and 85 cm in the Walloon region (Ossate Disabled Report, 2006).

In the Turkish case, the regulations explicitly state that "…The door of a room must be at least 85 cm wide and it is not recommended to place doorsteps, and if placed, they must be at most 1.5 cm high and chamfered"(Regulations on Certification and qualifications of Turkish Tourism Facilities,2012).

For visually impaired guests, the door number should be placed in a manner creating considerable contrast with the door. In addition, the door's peephole must be located at a suitable height for a wheelchair user.

The room's closets and power switches must be between the heights of 90-140 cm, aligned with the position of wheelchair users. Note however, that not all hotels adhere to this requirement, as depicted in Figure VI. depicting closet hangers that are beyond the reach of a wheelchair user. Note that the regulations require closet doors to be sliding and the height of the hangers must be at most 140 cm.

Figure VI. PwD rooms with too high to reach hangers. Moreover, sliding wardrobe's doors would have been a better fit (Crown Plaza Antalya Hotel).

The power switches and electric sockets are to be installed at least 40 cm above ground level, up to 120 cm. There must also be a central lighting switch at the bedside. The ideal width of the corridor when first entering the room has a lower limit value of 90 cm and an ideal value of 120 cm (European Commission, 2004). An emergency help button located in the room in order to establish communication with the reception desk is a necessity. Moreover, emergency means should also include special fire alarm systems for the hearing impaired. Such a system functions either as alarming flashing lights, or as vibrating pads installed in the pillows. Again, for the hard on hearing, a flashing light installation indicates a doorbell. Emergency issues also include noticeable boards describing evacuation procedures that must be written with a minimum 14 font size, and also in Braille.

Clearly, PwD should be informed in advance about emergency procedures as well as about buttons for standard messages such as "please do not disturb" or "please clean the room"---all such messages should be accessible from the guest bed. Rooms with induction loop systems are suggested for hearing impaired guests. Such systems enable the hearing impaired to watch TV and serve as loudspeakers for most of the hearing aide models available on the market, as well as cochlear implants. They are also recommended to be installed in all public areas.

The attempts to meet the needs of most disabilities are also demonstrated in the case of the blind and sight impaired, to whom the arrangement of the room furniture must be presented during check-in. It is recommended to designate a particular space in the roomfor PwDwho are accompanied by guide dogs. Moreover, people with allergies of pets should be warned in advance, before checking into these rooms.

There are some managerial-architectural dilemmas concerning the issue of wheel chairs beyond the aforementioned considerations. Specifically, it is important that rooms are wide enough for wheelchairs. PwD rooms that are built in standard sizes are bound to create space problems. Also, thick carpets may disturb wheelchair mobility. Simultaneously, carpets provide a secure feeling for PwD using crutches. In conclusion, thin carpets are preferable for interior service capes (Poriaet*al.,* 2011).

There are special provisions related to showers and bathrooms. Bathroom doors must outwards to provide extra space for the wheelchair. This regulation reflects the approach that PwD should be able to access the toilet or shower without the help of a companion. Accordingly, there must be safety handles and enough space to place the wheelchair near

the toilet pan. The height of the toilet pan needs to be at minimum 45 cm, and ideally 50cm (European Commission, 2004). Furthermore, the shower should be designed without a doorstep and not as a bathtub. The shower unit should also include a folding seat and handles.

There are specific regulations concerning washrooms in terms of sink height as well as details about faucets, soap dishes, hair dryers and towel hangers. Mirrors are to be placedat a particular angle (10-15 degrees leaning toward the front). However, in at least two cases (see Figures VII) TwD regulations were not followed.

Figure VII. A well designed shower unit, but unsuitable sink height with a non-inclined mirror (Rixos Downtown, Antalya).

The rooms' interior design should take the following points into consideration in order to ensure a more comfortable holiday for the disabled:

1. Rooms should have wide corridors, bathroom doors should open out into the corridor, doorsteps should be eliminated and any existing doorsteps need to be supported by ramps.
2. The peep-scope, power switches, door handles, clothes hangers and shelves should be placed at a height, reachable by a sitting person. The furniture,Including the bed, should be wheelchair accessible. The bathroom's center should have sufficient space fora wheelchair to rotate, and the sink and toilet must be at wheelchair accessible heights. The shower unit should be without any steps and there should not be a bathtub.
3. In addition to meeting the needs of wheelchair users, the designs for the disabled must address the needs of the visually-hearing impaired and people with movement disabilities as well.

4.6. Restrooms for PwD in Common Service capes

Restrooms for TwD must be available, easily accessible and noticeable in common service cape areas such as the hotel lobby conference halls and outdoor spaces (e.g. cafés, restaurants and pool areas). There are specific requirements for their design. For example, the restroom door must open out to allow for extra internal space and also to ensure emergency exit security. The sink's height must be at least 70 cm so that a wheelchair can fit under it. The restroom's internal configuration should be similar to the personal restrooms, as noted in the previous section. For example, the space on either left or right side of the toilet seat must accommodate a wheelchair and railings must be installed. Moreover, the restroom stall should be equipped with an emergency button.
It is interesting to note that when PwD were asked to comment about restrooms, a frequent remark was: "Are disabled people unisex?"In all seven hotels studied here,

there was only one restroom for all PwD in public servicecapes. There were also complaints about the concave sinks:"When we approach these sinks with our wheelchairs, we get wet". Our observations indicated that in two out of seven hotels,the public servicecape restrooms for TwD were kept closed.

4.7. Restaurants, Cafes, Bars and Social Servicecapes

The dining space for PwD should be arranged in a flexible configuration that enables accessibility for various types of disabilities, including details such as a 70 cm space under the tables for wheelchair users. If possible, designated PwD dining areas should be as close to the entrance door as possible. It is also recommended that menus be printed using larger than usual fonts in order to accommodate the needs of people with impaired vision. Menus written in Braille alphabet should also be designed and available for the blind.

The social model of disability (Darcy and Buhalis, 2011) considers PwD expectations of vacation as no different than those of the rest of the population. However, TwD often encounter difficulties finding appropriate facilities although they have the required purchasing power (Israeli, 2002; Dwyer and Darcy, 2011). At the same time, the social theory of disability recognizes a state of isolation and social stigmas as major hurdles for social integration. Clearly, a vacation is one means of breaking norms and re-examining beliefs (Uriely and Belhassen, 2006; Wickens,1997). Hence, there is an apparent need to invest in service capes that facilitate social interaction and integration. The often-felt social isolation at home can be broken down while being away.

The accessibility and flexible design of public servicapes can be enhanced by technology. Recent electronic developments to design spaces can be offered for the benefit of the PwD as well (Michopoulou and Buhalis, 2011). For example, visually impaired can be supported by GPS (Global Positioning System) integrated mobile phone systems for for locating the hotel and defining the exterior space of the hotel. Radio frequency systems may also be suggested for the interior spaces as GPS systems can be used only outdoors. This system works with headphones and defines interior spaces by locating transmitters and receivers. For instance, such a system can give informative messages like such as "You have just entered the restaurant. The tables on your left side when entering the restaurant are reserved for you. You can choose either the open-buffet food service or the a la carte menu". In addition, a table help button should be included to alert for service needs. With today's technology, a visually impaired customer should easily be able to find his/her way throughout the hotel.

Technological development include the aforementioned induction cycle systems that help people using hearing aids and people with cochlear implants in conference rooms, meeting halls, cinemas, theaters, concert halls and sports centers where cultural and athletic activities are performed and in the interior and exterior places where broadcasting is performed through sound systems.

5. DISCUSSION AND IMPLICATIONS

This exploratory study, conducted in the resort city of Antalya, Turkey, included an in-depth analysis of seven hotels from the perspective of accommodating the needs of PwD. The study is conducted in light of the growing awareness about the importance of meeting the needs of people with disabilities. Going beyond the accepted perspective in most western societies that PwD are a viable, vibrant, resourceful community characterized by a relatively solid purchasing power for tourism purposes (Israeli, 2002), the current study adopted the social approach to disability (Darcy and Buhalis, 2011) that calls for legal means and regulations for assuring the PwD rights to fully enjoy tourism activities. Moreover, the social approach advocates the interaction with and integration of PwD into the rest of the population. However, as was observed in the current study, while the legal and regulatory processes in the realm of hotel design are relatively advanced, most hotels included in our examination have yet to assure the

implementation of these principles. Apparently, In Turkey, designing accommodation sites for TwDis still perceived as just placing handrails in the washrooms, designing ramps to the servicecape, and placing washrooms in the public spaces of the hotel. This minimalistic approach was echoed through interviews with some of the hotels' owners, managers and customers who thought that,"…it is too much to develop designs for the disabled for beaches or spas". It can be speculated that this restrictive view is anchored in old values that predetermine the pristine life style of PwD: they are destined to live a simple, non-demanding life, while the concept and sense of "luxury" are reserved and accessible to only able people. In other words, PwD are perceived as a marginal group whose needs do not necessarily deserve our special attention. Another explanation is embedded in Arola et al. (2011) study:"…less than 15% of the companies …had ever met their disabled customers. Therefore, they did not believe they understood the special features and requirements….management was more or less seeking shelter in legislation…However, the answers of the management may seem more prejudice than they really were due to their lack of direct contact with disabled customers". Our exploratory study clearly indicates that hotels' accommodations to PwD needs were limited to basic functions. The aesthetic values of design along with creating a sensory satisfying experience are kept at minimum. Moreover, even when installing specially designated features for PwD, these are often flawed in terms of design, measures and functionality. Ample gaps are apparent between regulations and reality. In many cases, haphazard design is apparent. Such flaws often emanate from a failure of managers, planners and designers to consider the design of a room for PwD as a challenge to meet the real needs of the guest. Instead, the PwD special rooms are viewed simply as an annex to standard rooms and not as a solid, separate design concept. Consequently, the design principles of "regular" rooms are adopted with only minor variations to fit the needs of the PwD. The lack of attention to design issues from the perspective of PwD has an impact on other population segments as well. Specifically, interior design for the needs of PwD may also have an impact on children, who are clearly of different anthropometric measures than most adults. For example, ramps near stairs may protect children from accidents. Note also that some design arrangements for PwD may help no-disabled persons as well such as the elderly and pregnant women e.g. entrances without doorsteps, wide corridors, clear signs, and handrails.

It should be noted that according to the aforementioned Regulation on certification and Qualifications of Tourism Facilities issued by the Ministry of Culture and Tourism of Turkey, the rooms for TwD constitute only 1% of all hotel rooms in Turkey. It is obvious that this number inadequate. The "Improving Information on Accessible Tourism for the Disabled People" booklet published in 2004 by the European Commission, suggested that the car parks for TwD should account for 6% of the total lot. As noted earlier, even the one percent of all rooms allocated to PwD is often not properly designed.

PwD who are welcomed by properly designed facilities ensuring full accessibility and a pleasurable visit may become loyal customers. This perspective is especially relevant for resorts like Antalya that attract repeating visitors. Also, most managers, planners and designers tend not to take into account the fact that PwD usually travel with companions. Most often PwD are accompanied by family members or friends. Thus, their potential as income generating repeat guests is very high. Clearly, hotels that recognize this untapped potential can gain a competitive advantage vis-a-vis other hotels.

Although not the focus of this study, one cannot underestimate the crucial impact of service providers. Design considerations are necessary, but they lose their value if not accompanied by an appropriate attitude of the hotel staff. As noted by Poria, Reichel and Brandt (2010), who interpreted their data according to the social model of disability, challenges PwD confront derive from the physical design of the hotel environment as well as staff behaviors. Consequently, it is necessary to educate hotel staff on how to relate to TwD. Such training can be carried out in-house, or in industry-sponsored seminars.

Finally, while this study was exploratory in nature, it surfaced major challenges for hotels in Turkey regarding the accommodation of the needs of TwD. Focusing on official hotel design criteria, it is clear that minimal measures were adopted. Increased attention to design considerations for PwD in hotels will benefit both the hotel guests and management. Future, larger scale studies focusing on diverse destinations are recommended, as the current sample size limits the current study's generalizability.

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