Chapter 10
Museum Website Accessibility Examined Using Automatic Diagnostic Tools:
A Study in Portugal

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ABSTRACT

This chapter examines the website accessibility of museums located in Portugal (N = 575), based on the web content accessibility guidelines (WCAG 2.0), and on the three type of conformance levels (A, AA, and AAA), using two web diagnostic tools: AccessMonitor and TAW (Test de Accessibilidad Web). The results show that the average accessibility of museum websites is 5.80 on a scale from 1 to 10. However, while according to AccessMonitor, there are 14 websites (2.43% of the total) with a level of accessibility of 10 (excellent web accessibility practices); there are also some websites with a global index lower than 3 (classified as bad practice). The results obtained through TAW show that an average of 58.43 problems were identified in each website analyzed. These results highlight that several improvements should be introduced in the websites of Portuguese museums in order to make information available to all people.

INTRODUCTION

Despite all citizens having the right to participate in leisure and tourism activities (Kastenholz, Eusébio & Figueiredo, 2015; Yau, McKercher & Packer, 2004), there are some groups in our society that face several constraints to participation in these activities, mainly people with disabilities (PwD) (Smith, 1997). The literature on leisure constraints highlights three types (intrapersonal, interpersonal and structural) (Nyaupane & Andereck, 2008) which impede access to leisure activities. Some of these travel constraints prevent the creation of preferences (specifically intrapersonal constraints) while others, specifically the interpersonal and structural, make the transformation of preferences into participation difficult (Devile & Kastenholz, 2018). Some studies have used leisure constraints theory to examine travel constraints of PwD (e.g. Daniels, Rodgers & Wiggins, 2005; Devile & Kastenholz, 2018) revealing that PwD face considerable difficulties when participating in recreation and tourism activities. Of these three types of constraints, the absence of information (a structural type) prevents PwD from participating in recreation and tourism activities. However, there is a limited number of studies which have examined this kind of travel constraints.

Although several studies and data show that PwD are an important growth market, the majority of tourism supply agents have neglected them (Kastenholz et al., 2015). Museums are an important cultural attraction both for PwD and people without disabilities, contributing to increasing their cultural knowledge (Mesquita & Carneiro, 2016). Due to the high levels of risk that PwD face when visiting cultural attractions such as museums, these consumers need more information about the accessibility of these spaces (Handa, Dairoku, & Toriyama, 2010; Mangani & Bassi, 2019; Poria, Reichel & Brandt 2009). Thus, the lack of reliable information concerning accessibility may eventually prevent some PwD from visiting museums. With the proliferation of the Internet, the way in which people obtain information to plan their tourism trips changed (Dinis, Eusébio & Breda, 2020; Kim, Xiang, & Fesenmaier, 2015; Scholl-Grissemann & Schnurr, 2016). The Internet is nowadays one of the most important information sources used by PwD and people without disabilities to plan their trips (Almeida-Santana & Moreno-Gil, 2007; Luo et al., 2004; Zajadacz, 2014). Therefore, the websites of tourism supply agents, including the websites of museums, are important sources of information and should be accessible to the largest possible range of people, regardless of their needs, preferences, skills and personal access conditions (Handa et al., 2010; Langa et al., 2012; Mills, Han, & Clay, 2008; Williams & Rattray, 2005).

To increase website accessibility levels, the Web Content Accessibility Guidelines (WCAG) were developed by the World Wide Web Consortium (W3C, 2018) to help designers and developers to create websites which are more accessible to PwD. These guidelines are taken as a reference at a worldwide level.

Studies that examine the website accessibility level of the museums are of utmost importance to increase the participation of PwD in these cultural activities. However, only a limited number of studies analyzing the accessibility level of websites' museums (e.g. Langa et al., 2012; Leoporin & Norscia, 2008; Petrie et al., 2005). Moreover, the majority of studies published only examines the website accessibility of a very small number of museums. Despites, in Portugal there is already regulation that defines the requirements of websites' accessibility of public organizations (Decree-Law 83/2018), no study is known that examines the accessibility level of museums' websites.

Therefore, in order to increase knowledge in this field, it is the intention of this chapter to examine the website accessibility of the museums located in Portugal based on the Web Content Accessibility Guidelines (WCAG 2.0) and using two web diagnostic tools: AccessMonitor and TAW (Test de Accessibilidad Web).

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