

Chapter 10

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

Celeste Eusébio


 <https://orcid.org/0000-0002-2220-5483>

GOVCOPP, DEGEIT, University of Aveiro, Portugal

Maria João Carneiro

GOVCOPP, DEGEIT, University of Aveiro, Portugal

Leonor Teixeira

 <https://orcid.org/0000-0002-7791-1932>

IEETA, DEGEIT, University of Aveiro, Portugal

Diana Lemos

DEGEIT, University of Aveiro, Portugal

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 Accesibilidad 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.

DOI: 10.4018/978-1-7998-6428-8.ch010

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 (Deville & 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; Leopoldin & Norscia, 2008; Petrie et al., 2005). Moreover, the majority of studies published only examines the website accessibility of a very small number of museums. Besides, 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 Accesibilidad Web).

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/museum-website-accessibility-examined-using-automatic-diagnostic-tools/271075

Related Content

Assistive Technology to Promote Adaptive Skills in Children and Adolescents With Rett Syndrome: A Selective Review

Donatella Ciarmoli (2022). *Assistive Technologies for Assessment and Recovery of Neurological Impairments* (pp. 131-146).

www.irma-international.org/chapter/assistive-technology-to-promote-adaptive-skills-in-children-and-adolescents-with-rett-syndrome/288132

Coping with Accessibility and Usability Challenges of Online Technologies by Blind Students in Higher Education

Samuel Muwanguzi and Lin Lin (2014). *Assistive Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 1227-1244).

www.irma-international.org/chapter/coping-with-accessibility-and-usability-challenges-of-online-technologies-by-blind-students-in-higher-education/80670

Critical Behavior Monitoring for Children with Special Needs in Preventing Physical Injury Using Kinect

Ong Chin Ann, Lau Bee Theng, Henry Lee Seldon and Fernando Anddie Putra (2015). *Assistive Technologies for Physical and Cognitive Disabilities* (pp. 211-249).

www.irma-international.org/chapter/critical-behavior-monitoring-for-children-with-special-needs-in-preventing-physical-injury-using-kinect/122911

Hand Exercising Exoskeleton: An Aging Assistive Device for Rehabilitation

Soumya Kanti Manna, Prasanna Kumar Lenka and Subhasis Bhaumik (2016). *Optimizing Assistive Technologies for Aging Populations* (pp. 78-96).

www.irma-international.org/chapter/hand-exercising-exoskeleton/137789

Improving Socialization and Emotion Recognition for Children with Autism Using a Smartphone App

Cassidy Lamm, Lauren Lambert, Joshua Wolfe, Jeff Gray, Angela Barber and Gary Edwards (2014). *Innovative Technologies to Benefit Children on the Autism Spectrum* (pp. 125-142).

www.irma-international.org/chapter/improving-socialization-and-emotion-recognition-for-children-with-autism-using-a-smartphone-app/99564