Exploration of ICT Appropriation by Disabled People and Its Effect on Self-Perceived Normalcy:
Insights From France

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ABSTRACT

Information and communication technologies (ICTs) are omnipresent and define the interactions in society. Within society, there are vulnerable groups of people for whom ICT use is more challenging. Disabled people are the most vulnerable ICT users. To identify the digital divides of access and impact of ICT on disabled users, an exploratory qualitative study was conducted. Relying on a French national association for disability that grants unique access to disabled ICT users, two focus groups and 10 in-depth interviews were carried. The study proposes a model of ICT use and its effects for disabled people, integrating several types of disabilities. The results show that ICT appropriation by disabled users depends on their perceived self-efficacy in ICT. ICT use can lead to negative effects, including social exclusion and low perceived normalcy. To address societal interests and develop the literature, a research agenda is proposed.

KEYWORDS

Digital Divide, Disability, ICT Appropriation, Self-Perceived Normalcy, Vulnerability

INTRODUCTION

The modern world has been transformed by information and communication technologies (ICTs). ICTs are Internet-related "technologies that are used for accessing, gathering, manipulating and presenting or communicating information" (Toomey, 2001, para. 3). ICTs, such as Internet and other digital technologies, can bring multiple opportunities and benefits for people (Michel-Verkerke, Schuring, & Spil, 2005).

In Europe, ICTs have developed as well. They have long been recognized by European institutions as enablers of socio-economic progress, but the benefits of ICT are still not fully realized in every territory (e.g., rural areas) and for every citizen (e.g., the poor or the elderly do not easily benefit from ICT development). Thus, European institutions have taken actions to ensure that ICT should benefit to the greatest number of citizens. They support and fund ICT projects that aim to tackle important societal challenges defined in the Horizon 2020 European program, such as inequalities and exclusion.

Restricted access and usage of ICT is referred to as the digital divide and constitutes a social inequality (Ragnedda & Muschert, 2013). Barriers to the access and use of ICT lead to inaccessibility of crucial goods and services, social exclusion, and increased vulnerability. Among the most

vulnerable with regard to the digital divide are disabled people (Doh & Stough, 2010). According to the Convention on the Right of Persons with Disabilities (CRPD), disabled people are "those who have long-term physical, mental, cognitive or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (Art. 1, CRPD). More than 42 million European citizens are affected by a disability (Grammenos, 2018).

Indeed, ICT appropriation by disabled people is a major and growing issue (Chadwick, Quinn & Fullwood, 2016; Yu, Goggin, Fisher & Li, 2019). However, in spite of all legal actions that have been taken to ensure technology accessibility to disabled people, national statistics in some European countries show that disabled people use less ICT than non-disabled people. In European countries, only 52.2% of disabled people have home access to the Internet, compared to 73.6% for non-disabled adults (Scholz, Yalcin, & Priestley, 2017). Academic results have also confirmed that disabled people use less ICT than non-disabled people due to a lack of skills in ICT usage and to a lack of Internet access and equipment (Doh & Stough, 2010). As a consequence, disabled people might feel excluded from society and experience a reduced self-perception of normalcy (Baker, 2006).

Several gaps have been identified in the literature. First, existing ICT literature offers general frameworks on ICT appropriation that study ICT access and usage (van Deursen & van Dijk, 2015). However, few works apply these frameworks to disabled users (Doh & Stough, 2010). Disabled users might have specific ICT user experiences. Second, while existing frameworks focus on ICT access and usage (van Deursen & van Dijk, 2015), few studies have examined the consequences of disabled people ICT appropriation (Blank & Groselj, 2014). Third, existing findings on the topic are contradictory, showing both positive and negative outcomes (Darcy, Yerbury & Maxwell, 2019; Elms & Tinson, 2012; Kaufman-Scarborough & Childers, 2009). Therefore, it is necessary to clarify and enrich the outcomes of ICT appropriation by disabled people, considering concepts such as self-perceived normalcy (Baker, 2006). The normalcy concept was initially analyzed in the consumption context (Elms & Tinson, 2012) but could be expanded, as disabled people seek normalcy through their consumption and their daily activities. Therefore, it is important to discover the impact of ICT appropriation on self-perceived normalcy. Finally, it is important to note that to offer meaningful contributions, researchers should not focus on highly specific populations (e.g., people with visual impairment only): they should adopt a broader scope and study several types of disabilities (Childers & Kaufman-Scarborough, 2009).

Therefore, this study addresses the aforementioned research gaps by examining ICT appropriation by disabled people and investigating its outcomes, especially in terms of self-perceived normalcy. To address this question, an explorative qualitative study based on two focus groups and 10 semi-structured interviews with ICT users with various disabilities was conducted. Thus, this work contributes to the literature in three important ways. First, this paper shows that an existing framework on ICT usage can be applied to disabled users but should be subsequently enriched. Second, it specifically integrates in the framework the consequences of ICT usage and analyzes them in terms of perceived normalcy. Finally, this research studies multiple types of disabilities to offer a valuable framework and a research agenda on ICT appropriation and consequences for disabled people in general.

THEORETICAL BACKGROUND

Disabled People and the Digital Divide

The digital divide is defined as the unequal access and usage of ICT worldwide (Eke, 2011). In the least-developed countries, the lack of physical access (insufficient network coverage) and material access are the primary factors that create the digital divide. The challenges of affordability and the lack of digital skills in these countries also contribute to the digital divide (Aikins, 2019). Nevertheless, while a common opinion is that the digital divide is entirely solved when a country's Internet connection rate reaches saturation, recent works proved that the digital divide still exists

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