

Ableism and adaptive preferences in digital uses and skills: Social and cultural conditioning factors¹

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Abstract

This theoretical paper aims to highlight interactions between ableism and adaptive preferences that involve persons with disability with the purpose of identifying social and ideological conditioning factors in using digital media and developing digital skills. These factors encompass the availability of resources for accessing and using digital media as enabling tools capable of generating positive outcomes at an economic, social, political/civic, cultural and personal levels. Given that digitalization processes encompass concepts of citizenship, autonomy, individual capabilities and social capital, then digital media and skills become crucial tools for equalizing opportunities and reducing inequalities. The pandemic emergency and the shift to distance learning revealed forms of digital education poverty that had a specific impact for persons with disability. Analysing the digital disability divide and inequality requires considering technological and economic variables, Universal Design principles, as well as social stratification, cultural influences, and material and symbolic resources. Digital inequalities and adaptive preferences are thus examined in their relations with social, cultural and ideological aspects that may affect expressed and perceived needs, attribution of meanings, motivation and aims which, in turn, affect access and usage of digital media as well as the development of digital skills. Taking into account these factors and their interconnections, the contribution aims to provide some guidelines for further future research aimed at deepening the socio-technical, cultural, and ideological matrices of digital inequalities affecting persons with disabilities.

1. Introduction: Key concepts and implications of ableism

The main goal of this theoretical paper is to identify social and ideological conditioning factors in using digital media and developing digital skills by persons with disability and to highlight interactions between ableism (Oliver, 1990; Berger, 2013; Goodley, 2014) and

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adaptive preferences (Kahder, 2009; Begon, 2015; Nussbaum, 2000, 2006) in this field. The purpose is indeed to identify some cultural and ideological matrices of the digital divide and digital inequalities involving people with disabilities. The premises of these considerations are traced here from a theoretical framework of ableism, with particular reference to its implications in the educational context. The digital inequalities that emerged in this area during the pandemic emergency have led to a further problematization of the relationship between disability and digital technologies, opening spaces for reflection that involve different levels of analysis. On the one hand, the article will show how the correct implementation in the Italian context of the principles of Universal Design for all can be a way to ensure inclusion, with a focus on practical principles relating to technology; on the other hand, it will extend the analysis to the interconnection between ableism and digital inequalities by examining the role of adaptive preferences in access, use of digital technologies, and the development of digital skills. This paper draws than links between ableism and adaptive preferences in digital uses e development of digital skills, while arguing that understanding this mutually interacting relationship depends on analysing a multitude of social, technological, and cultural contexts and influences, and individual preferences that impact and are impacted by those contexts.

It will be shown how the context and cultural matrices of these interconnections are to be traced back to ableism, of which it is therefore necessary to first define the concept.

The concept of ableism describes and reflects a social group tendency to consider certain abilities as essential to the individuals. It takes the form of an ideological phenomenon, steeped in an over-valuation of ability or capacity that concerns the way in which able-bodied norms find legitimacy in social policy, laws and cultural values. The term has its genesis within the disability rights movement (Wolbring, 2008) and is further developed through Campbell's (2009) research, it is grounded in an understanding of the link between sociocultural production and ability. Two elements form the basis of a cultural system based on ableism: the concept of normativity, i.e. the conception of the existence of a 'normal' individual; and the thought that there can be a binary through which the person can develop with the most appropriate characteristics according to the standards of the dominant society (Campbell, 2015).

In this sense, the focus is shifting from processes that maintain disablism, understood as a negative concept of disability, i.e. oppression of those with perceived impairments, to those that, on the contrary, aim to develop ableism understood as extreme enhancement of possessed abilities (Campbell, 2009).

In fact, the recently formed concept has often been used to justify the maintenance of certain historical and cultural inequalities, in every sector of social life, in an attempt to flatten individual specificities. Ableism, from this perspective, is a political term capable of guiding choices in the field of post-secondary education, both at the individual and institutional level, even more in its connotation of internalised ableism, which comes in three distinct forms:

- 1) dispersal tactics (the distancing of diverse able-bodied people from each other);
- 2) emulation of the norm through 'defensive alteration' ('there are others to whom this applies, but not me'); and disembodied imitation (imitation of the normative body through technology).
- 3) the strategic adoption of the disability label to obtain social, political and financial benefits and the satisfaction of unrecognised needs (Hutcheon and Wolbring, 2013).

Often, the perception associated with the internalised concept of ableism risks damaging individual capabilities (Prilleltensky and Prilleltensky, 2005), threatening the ability to challenge oneself.

A study on the subject (Hutcheon and Wolbring, 2012) has shown that there is a kind of 'ableist hegemonism' based on the rejection of individual difference which, on this basis, recognises only certain ways of living as valid, in this way linking expectations of disability to those associated with other minorities (e.g. gender, sexual). To fully understand the extent of the study, it is necessary to connect it to the concepts of the body and the barrier, which are essential aspects that disabled individuals are constantly confronted with. After listening to the students' voices, the authors realized that university policies need to be significantly restructured. This restructuring must take place through a linguistic evolution that holds political implications. It is essential for broader participation in social life by this group of individuals, considering that the first medium of cultural diffusion of ableism is often found in the rhetorical device of language, combined with images and systems of representation (Cherney, 2011). To date, this process has not yet been fully realised, it would therefore be appropriate to deconstruct the concept of ableism in order to reinterpret the concept of "typicality" and "normality", in order to do so, the university community and all its members, should agree to question their own conceptions of what is meant by "diversity", instead of continuing to justify their institutional ableism, basically summarised in the inability to provide adequate services to people with disabilities or difficulties (Tomlinson, 2017). For this process to be successful, students who experience the context of ableism should be involved personally (Hutcheon and Wolbring, 2012). By way of example, some practical actions could be: promoting awareness-raising activities and reformulating the university curriculum, adopting a diversity-conscious perspective that favours the entry of university researchers with disabilities who have the tools to concretely act out the critical culture of difference, in the academic field.

Continuing the critical analysis of this concept and its implications for the lives of students with disabilities, it is appropriate to reiterate what was mentioned at the beginning of this section, i.e. the assumption that differences, in terms of ability or functioning, inherently constitute vulnerability (Young *et al.* 2008), in this complex framework resilience is often mistaken for the concept of health. Framing it in this light precludes alternative ways of thinking about difference that deviate from the concept of deficit, so any subjective attempt at resilience that is not strongly related to the biomedical dimensions of pathology is incomprehensible. However, as we have already seen, this dimension often has a negative correlation with the concept of inclusion that would be essentially reversed if we thought of resilience in constructivist terms (Ungar, 2004).

Negatively correlated with the concept of inclusion is also the aforementioned concept of disablism, which attempts to blame only the disabled student for the inability to grasp the educational opportunities offered by the institutions (Van Aswegen and Shevlin, 2019), in terms of agency, i.e. the ability of individuals to have the power and resources to realise their potential, however, according to this view, the disabled person would not necessarily have it, being excluded beforehand.

To conclude, one of the main objectives of the promoters of the concept of social justice is found in the elimination of both disablism and ableism, as its extremities are in no way generative of inclusion (Rauscher and McClintock, 1997), but tend to perpetuate a pervasive

system of discrimination and exclusion, aimed at oppressing people with mental, emotional and physical disabilities.

2. Disability, ICT and Universal Design

In social, historical and cultural contexts characterised by an increasing level of digital mediation, systems of discrimination and exclusion also invest on the uses, design, content and communication mediated by technology. In light of this, the role of technology should be reviewed and interpreted with references to other concepts, such as the lack of growth of digital cultural capital, the digital divide, and related digital exclusion. The latter is to be understood as a lack of access to the use of ICT, but this concept may be extended to several fields because of its implication in different environments and areas of social life (Antonelli, 2023)

Different environments can have different impacts on the same potential individual, e.g. settings with facilitators can positively influence the individual's performance, compared to those in which facilitators - among which digital can be counted, however we will outline its ambivalent contours in the article - are completely absent. In light of this, a functional definition of disability can be conceived as 'the consequence or result of a complex relationship between an individual's health condition and personal factors, and the environmental factors representing the circumstances in which he or she lives' (WHO, 2001: 32) The concept of disability (Nocera, 2016) can be delimited by considering different perspectives of analysis and study, which correspond to multiple aspects that contribute to the development of a complex and dynamic phenomenon. The latter can be directly related to specific areas: health, social, legal and psychological.

Digitalization processes affect at different levels of analysis all these areas, so that it is important to consider the way the relationships between disability and digital technologies has been thought and problematized. One of the most frequently discussed topic concerns the accessibility of ICT in terms of Universal Design.

Universal Design (UD) is an innovative approach to the design of places, services and tools, with the aim of making them usable and accessible to all categories of people, with a broad scope and without the need for adaptations or special solutions, which, however, does not constrain the provision of assistive devices for specific needs, where necessary (Imrie, 2014). The term universal design was coined by architect Ronald Mace who, in 1985, challenged the conventional approach of designing for the average user (Burgstahler, 2007), proposing "the elimination of architectural barriers for people with physical disabilities" (Orr and Hamming, 2009: 182).

Universal design for all, in its branches (Universal design for Instruction (UDI), Universal design for Learning (UDL), Universal design for Information and Communication Technology (ICT) and Universal design for architecture) has the following basic principles, which can be summarised as:

1. Equity: usable by all members of the university community, regardless of any diversity. E.g. museum information available in different languages;
2. Flexibility: extreme adaptability to individual abilities. For example: providing different approaches for interaction between lecturers and students;

3. Simplicity: tools and instructions that are simple and intuitive to use, such as software that provides easily understandable directions;
4. Perceptibility: accuracy in the transmission of sensory information. E.g. captions and subtitles;
5. Error tolerance: minimising risks or unintended and unexpected actions, e.g. providing guidance, including computerised guidance, to avoid error;
6. Effort containment: reducing energy expenditure. For example: providing comfortable laboratory equipment;
7. Sufficient size and space: space suitable for access and use by the entire university community. For example, equipment that can be used by students with any physical deficit.

Some researchers point out that Universal Design, however, may not be the panacea in solving the problems posed to people with disabilities by poorly designed environments, in fact, there is still much to be done to develop the basis of practical applicability of the universal approach in order to overcome disablism by design (Imrie, 2014). In the same study, then, reference is made to the technical dimension of UD, which, in order to be a real response to the needs of people with disabilities, cannot ignore the political understanding of the social and cultural issues in which they are immersed.

To date, no such investigation has been conducted, and there is little knowledge of the genesis and development of UD, the role of key actors and their organisations in shaping its core concepts, values and practices. While aware of this, proponents of UD believe that it is aimed at continuous improvement with the full inclusion of all students as its ultimate goal (*ibidem*).

For the purposes of this article, a specific focus on Universal Design for ICT will be presented, attempting to provide a precise definition of the concepts involved. It is useful to spend a few words to illustrate the concept of Universal design for Information and Communication Technology, i.e. «an approach to the design of technologies that pays more attention to the concept of universal usability», in this perspective «buildings and tools should be conceived, designed and constructed in a way as to be usable by all» (Fiocco and Martinati, 2002: 232), inspired by the following principles (WAI):

1. perceptibility: information and user interface components must be presented to users in a way that they can be easily perceived;
2. operability: user interface components and navigation must be operable;
3. understandability: the information and operation of the user-interface components must be easily comprehensible;
4. robustness: content must be robust enough to be reliably interpreted by a wide range of user programmes, including assistive technologies.

The role of technology should be reviewed and interpreted linking it to other concepts, such as the lack of growth of digital cultural capital, the digital divide, and related digital exclusion. The latter is to be understood as a lack of access to the use of ICT (Information and communication technologies). This term refers to a range of technologies, including desktop and laptop computers, Internet connections, mobile phones, smart TVs, and assistive technologies (Macdonald and Clayton, 2013). Regarding the other terms analysed, Selwyn (2004) outlines digital (or technological) cultural capital by considering the relationship

between capital, technology, and exclusion, further expounding on how it can be acquired, essentially summarised as investing time to improve technological knowledge and skills through informal or formal learning; this acquisition, however, is also possible through socialisation in the use of technology, implemented through sharing with established online support networks (e.g. family, friends, tutors).

These practices are, to date, obstructed by the persistence of the digital divide, which is even stronger for certain groups at risk of social exclusion, among which it is possible to include persons with disabilities. The concept just mentioned is well defined by Norris (2001) concerning gaps in access to ICTs, focusing on differential patterns of use and skills for their use (Warschauer, 2004; Ragnedda and Muschert, 2013; Van Deursen and Van Dijk, 2014). One way to close this gap, from a practical point of view, is well exemplified in the theories concerning the implementation of universal Design for ICT (Burghstaler, 2015), which offer practical solutions to reduce the divide and increase the adaptive preferences of persons with disabilities, through the implementation of the following practices: home-page of the site accessible to persons with disabilities; declaration, not only of intent, to adopt the UD principles; clear instructions on how to obtain material in digital format; for Web programmers consider accessibility guidelines/standards and resources; provide training for designers on design for all; adhere to the accessibility guidelines; follow training courses for problem-solving on the subject; adhere to the monitoring system for an ongoing evaluation to enable concrete implementation of the UD principles.

In this sense, an accessible digital environment should be designed following the principles of the World Wide Web Consortium (W3C) organisation, which has the task of developing protocols for the interoperability of the Web worldwide. Currently, WCAG 2.0 (WAI) is widely regarded as the current international standard for digital accessibility and may represent a practical example or good application of anti-discrimination theory in practice. Despite numerous advances in this field, stronger anti-discrimination legislation, and increasing knowledge of Web accessibility standards, the Internet world remains inaccessible for many people with disabilities (EC, 2008; Adam and Kreps, 2009; Vincente and Lopez, 2010; Easton, 2013).

This statement is confirmed by the research report of the National Telecommunications and Information Administration (NTIA, 2013) of the United States, where it can be read that 53% of people with disabilities owned a computer, 48% used Internet, and 46% had a high-speed broadband connection; however, these numbers are lower than those of able-bodied users, which stand at 79% for owning a PC, 76% for Internet access, and 73% for a high-speed connection. The same trend can also be seen from an in-depth reading of Eurostat 2016 data, which shows that disability condition is associated with lower-than-average levels of basic Internet access, in all European countries (Eurostat, 2016). The literature on the topic invites us to reflect on the fact that access to the Web as an enabling factor, for people with disabilities, is strongly associated with different levels of exclusion from traditional education in EU countries (Grammenos, 2015).

Today, access to Internet has become a 'sine qua non' condition of everyday life, potentially offering new pathways to economic and social inclusion for people with disabilities and SLD (Specific Learning Disorders). Indeed, those who remain disconnected from technology are more likely to also be excluded from mainstream social, economic and political activities. From this perspective, increased access and use of technology is to be understood as the answer to inhibiting potentially exclusionary factors, as suggested by research on the digital divide,

which shows that social factors influence access to the Internet. However, within the broad theoretical framework presented, disability understood as a social condition, is often neglected (Scholz et al., 2017), although it is a relevant factor which, if not adequately addressed, can contribute to further discriminatory conditions.

3. Disability and digital inequalities in light of the pandemic in Italy

Conditioning factors affecting usage and access to digital media encompass both individual characteristics (such as age, gender, ethnicity, personality, mental faculties, and health) and positional categories such as labour position, education, social and family capital, territorial location (van Dijk, 2020). These factors influence the availability of temporal, material, mental, social and cultural resources for using and acceding to digital media and developing digital skills that are also enabling skills to an effective use, able to produce positive outcomes at an economic, social, political/civic, cultural and personal level (*ibidem*).

If we consider digital as one of the variables of the social capital that can affect both skills development and ways and opportunities for social participation (Cortoni, 2016), within socially and territorially marginalized contexts, digital inequalities (Krumsvik, 2008; Di Maggio and Hargittai, 2001) can significantly limit the development of capabilities and basic rights (Sen, 1999, 2005; Nussbaum 2003, 2011), such as education, participation in public space, social relationships.

Disability is recognized as a digital divide factor (Dobransky and Hargittai, 2016; van Dijk, 2020). Digital inequality presents various barriers for persons with disability: use, access, connectivity (Dobransky and Hargittai, 2016), which hinder their ability to fully benefit from digital media the opportunities they provide (Dobransky and Hargittai, 2006): “They have technology but do not have full access to all of the benefits it delivers to others” (Burgstahler, 2005). The relationship between technological development and meeting effective human needs has always been a challenging issue. Horkheimer already observed that: “The world now has more raw materials, machines, and skilled workers, and better methods of production than ever before, but they are not profiting mankind as they ought. Society in its present form is unable to make effective use of the powers it has developed and the wealth it has amassed” (Horkheimer, 1932: 4).

The pandemic emergency has been a powerful driver of accelerated change in various areas of social life, shedding light on the needs for technological innovation that has been acknowledged by governments, production forces, and institutions. The new context has required the acceleration of digitalization processes, often appearing as an emergency and prompting interventions from national and European institutions through measures aimed to both enhance digitalization processes and reduce various forms of digital divide that have emerged or been amplified by the changing map of digital needs. The significant shift of social practices from physical spaces to digital platforms has revealed, particularly in educational contexts (Istat, 2020, 2021; Save the Children, 2021), new areas of reproduction of inequalities (Bourdieu, 1979) in terms of access to infrastructures and competences (van Deursen, 2020; Hargittai, 2021). In Italy, within the realm of education, the transition to distance learning during the pandemic exposed inequalities at both the individual/family level and among different educational institutions as well as highlighting territorial disparity in digital connectivity. These factors have revealed problematic issues pertaining to physical, material,

and conditional access (van Dijk, 2020). Within the Italian context, inadequate technological equipment has hindered access to distance learning: 12,3% of minors (6-17 years old) were unable to benefit from useful digital tools, with peaks of 19% in the South of the Country (ISTAT, 2020), in which families are more impacted by the digital divide due to social, territorial and generational factors (*ibidem*). In Italian schools the implementation of distance learning during the pandemic has had notable impact on the school attendance of students with disability, because of the lack of specific educational and technological tools (9% of cases), the severity of their health condition (27%), organizational challenges faced by their families (20%), and socio-economic disadvantage (17%) (ISTAT, 2021).

This scenario has revealed unprecedented forms of “digital educational poverty” (Save the Children, 2021) and confirmed that “Today digital inequality not only reflects but also tends to reinforce social inequality. Digital media are powerful tools that support people who already have an advantage in a particular domain, while those who are already disadvantaged in certain respects benefit less [...] Digital divide cannot be closed without reducing existing social inequalities” (van Dijk, 2020).

To gain a better understanding of the underlying causes and complex factors contributing to digital inequalities and the ways they involve persons with disability, it is crucial an analysis of digital divide and inequality factors not limited to technological and economic variables, but capable of integrating them within a framework that includes the interplay among various social and digital inequality causes, such as social stratification, marginality and cultural influences that are produced or reproduced by and within digital environment and highly mediatized contexts. Interpretative keys and research lines that analyse and interpret the relations between social and digital capital (Ragnedda and Ruiu, 2017; Cortoni and Lo Presti, 2018), as well as the connections between political, economic, personal, and cultural capital (Ragnedda, 2018) allow us to emphasize the ways and possibilities of turning (capitalize) resources and competences into social resources (*ibidem*). What in literature is known as the third-level digital divide (Ragnedda, 2017; van Dijk, 2020) encompasses the “participation outcomes” in various domains, including the economic and occupational sphere, social and interpersonal relationships, civic and political engagement and personal dimensions such as the perception and construction of identity, education, and health (van Dijk, 2020). In relation to all these dimensions, the social production of disability can have a strong impact. It is not sufficient to address the digital divide solely by increasing technological equipment and developing technical skills. Instead, it is necessary to intervene effectively in addressing the disparities in material resources and also symbolic resources. Digital media indeed have a distinct role. They play in fact a specific role as enabling technologies that contribute to the co-constructed spaces for social participation, integration and individual empowerment/flourishing. However, it is important to acknowledge that digital media can also be sites of social construction of disability (Ellis and Kent, 2011) both by representing disability itself and by reproducing cultural paradigms underlying media design and usage (Hamraie, 2017; Alper, 2017; Ellcessor, 2010; van Dijk, 2020). It is important than to highlight that public and institutional discourse surrounding digital innovation, skills, and innovation policies may perpetuate ableist paradigms as well as they align with neoliberalism (De Blasio, 2019), rationalist, and efficiency-driven framework, which share cultural similarity with ableist ideologies, that are oriented to marginalize, deny or suppress vulnerability (Nussbaum, 2006; Pulcini, 2016), and in which an “infrastructural” and economic paradigm prevails over a social and cultural one (Selva, 2020).

The connections between social and digital inequality that have surfaced during the pandemic crisis have raised important questions about “if and how the Covid-19 crisis highlighted the necessity to overcome a digital (and economic) model of development, focused just on infrastructures, in order to consider also a social perspective, that involves digital skills, media literacy and inclusion” (*ibidem*, own translation).

Given that digitalization processes encompass concepts such as citizenship, autonomy, individual capabilities, and social capital, digital skills, as tools for equalizing opportunities and reducing inequalities, require to be considered in conjunction with the expressed and perceived peoples’ needs and aims.

4. Digital disability divide and adaptive preferences

Ways of using digital tools and contents are influenced by various factors that are closely tied to how individuals assign purposes and aims within their social interactions and daily life environments (Silverstone and Haddon, 1996). These variables related to self-perception and perceived needs are themselves influenced by social, material and symbolic conditioning factors.

There are in fact cultural and properly ideological factors that may limit or impede the effectiveness of digital tools and their ability to meet social and individual needs in terms of inclusion and participation. Some social representations and practices in support of ableist ideologies (Oliver, 1990; Berger, 2013; Goodley, 2014) produce stigmas, prejudices and inequalities (Carey, 2002), and thus contribute to the social construction and production of disability (Oliver, 1990). By affecting self-perception, these elements may also affect both skills development, including digital skills. Digital media uses and the skills development themselves are in fact closely intertwined, on the one hand, with the ways individuals define digital media tasks through their social and daily life interactions (Silverstone and Haddon, 1996), and, on the other hand, with self-perception and representation that also play a significant role in shaping perceived needs and the attribution of tasks and gratifications to digital media (Blumler and Katz, 1974; Ruggiero, 2000). For example, digital media can offer opportunities for political participation. Political participation is a fundamental capability of human beings. The link between capacity of political decision and full possession of rational and physical faculties conducive to productivity – as emerges in political traditions such as contractualism (Nussbaum, 2006) – reflects the social perception of people with disabilities as unfit for political participation and the ableist perspective of this attitude. This perception can be internalized both by people with disabilities and by their social context and may also constitute one of the elements linked to the infantilization by the caregiver (non-adult individuals are excluded from the public space of political decision-making). Furthermore, persons with disability are often “infantilized” by caregivers who consider the Internet as dangerous for them (Chadwick et al., 2013). Such dynamics may be stronger or more frequent in contexts characterized by lower levels of education, thus with a reduced capacity for critical understanding of cultural influences, their impact on rights, and the tools to assert them. All these factors can affect the self-perception of a person with disability as someone unfit for political participation and, therefore, uninterested in it. In such a context, a person with disability may not be interested/motivated to use digital tools for political participation or to develop the skills that could contribute to translating his/her capability for political participation into functioning through the use of digital media. According to Aleixo et al.

(2012: 222) inclusion means “the effective participation of individuals and communities in all dimensions of the knowledge-based society and economy through their access to ICT, made possible by the removal of access and accessibility barriers, and effectively enabled by the willingness and ability to reap social benefits from such access”. As innovation processes require to develop digital skills, it becomes necessary to bridge the gap between capabilities and perceived needs (Nussbaum, 2006) in order to foster motivation in developing such skills. This can be achieved by promoting awareness of personal abilities and needs. The relationship among willingness, ability (*ibidem*) and motivation (van Dijk, 2020) in order to access and derive benefits from digital media is complex. These dimensions are then influenced by personal attitudes, personal goals, feelings, beliefs, and representations that can be conditioned by social, symbolic and ideological factors that, in turn, encompasses individuals’ self-perception, social relations and the perception of their own needs. Adaptive preferences (Kahder, 2009; Begon, 2015; Nussbaum, 2000, 2006) should be taken into account when considering access, usage and development of digital skills. This perspective helps shed light on various forms of inequalities and social condition factors that underlie the digital divide. Adaptive preferences refer to how “in conditions of great hardship or deprivation individuals may cope with their circumstances by claiming to prefer and, indeed, coming to prefer, their situation to any alternative” (Begon, 2023: 166). This question, as it is known, pertains to social conditionings factors in individual choices and preferences in light of the inadequacy of the public space in order to provide actual opportunities for autonomy and social participation to all citizens (Nussbaum, 2006). Considering that the Internet is established as a public space (Camp and Chien, 2000), Universal Design becomes a crucial aspect: adaptive preferences can in fact arise from a lack of inclusive design of digital media. However, the formation of adaptive preferences is closely tied to individuals’ perceptions of their own functionings possibilities, needs and satisfaction of needs.

The main reasons for non-use of digital media that are summarized by van Dijk (2020) as “I do not want it”, “I do not need it” “I reject the medium”, “I’ve not computer or Internet connection”, “I do not know how to use it; it is too complicated”; “It is too expensive”; “I have no time/I am too busy” may reflect adaptive preferences of individuals who chose not to use digital media. As observed by van Dijk himself, the reasons for non-use “can be understood as explicit needs, motives, attitudes or expectations, though they may hide some implicit reasons. Someone who says that they don’t want a computer or smartphone might not genuinely like such tools, but it may be that they are not able to afford them or do not know how to work them” (*ibidem*). So the expressed reasons for non-use of digital media can be related to lack of resources which, in turn, depend on other contextual factors related to positional and/or personal categories: van Dijk reports that disabled people are less motivated due their position (“on average only half of the disabled people in the world are in the workforce, and many are isolated socially (OECD, 2010; WHO, 2011)” and because the “interfacing aids for the disabled are underdeveloped and that many organizations do not follow official web guidelines of accessibility for such individuals (Velleman, 2018)” (van Dijk, 2020). If we consider the positive outcomes of digital media for persons with various disabilities, we may than found a gap between needs and motivation in rejecting tools or skills to which they have difficulties to accede (Dobransky and Hargittai, 2016; van Dijk and van Deursen, 2014), even if we should also consider the possibility that such preferences may also

be expression of specific and legitimate view and position (Begon, 2023)². Other factors that may be consider with reference to the van Dijk's model concern cultural factors that may affect motivations, such as ideology and social construction of personal categories.

Adaptive preferences are indeed the result of complex factors of a social and cultural nature. Digital inequalities include in fact not only access and skills, but also other factors that are particularly relevant for persons with disability such as autonomy, availability of support and purposes of Internet use (Hargittai and Hsieh, 2013). Especially when it comes to the purposes in digital media uses, it becomes evident that adaptive preferences can be induced not only by the lack of possibility to use digital media to meet one's needs but also by the attachment of meanings and purposes that can be affected by various forms of social and ideological conditioning.

In this perspective, an important aspect to consider is the role of digital skills and how individual (Villalba, 2016) and cultural factors can either facilitate or hinder the development of digital skills.

Although has been observed that persons with disability "make use of the Web at least as much as those without disabilities do in several domains of Web use" (Dobransky and Hargittai, 2016: 26), it should also be considered that disability culture (and therefore awareness about needs, aims and abilities) "has been characterized as a White, middle/upper class phenomenon. Those from lower socioeconomic status and racial/ethnic minorities often do not share the resources, experiences, relationships, or concerns that underly disability culture" (*ibidem*; see Devlieger, Albrecht and Hertz, 2007). These aspects can be enhanced or limited by access or non-access to digital tools and usage. Their limitation may imply adaptive preferences because of the lack of knowledge and awareness supported by collective dimension of social support, sharing and action. Some key elements in countering adaptive preferences have indeed been identified in providing information about potential and uses of digital tools, promoting awareness about risks and safety of online activities, and encouraging these activities aimed to collective action and social change (Poveda, 2015). Research and reflections about ICT for Development (ICT4D) likewise clearly showed that is necessary to "go beyond addressing people's immediate practical needs for access to ICT tools and skills, to also address their strategic interest in identifying and tackling the root causes of disadvantage" (Poveda and Roberts, 2017). This also implies awareness about social, ideological and cultural factors that may affect the social perception and construction of age, gender, ethnicity, intelligence/literacy, personality, health, disability, and, therefore, affect their relations to some positional categories (labour, education, household, social network), resources, and motivation, that, in turn, condition access, digital skills and usage.

5. Conclusions

Digital inequalities are the result of a complex set of technological, social, and cultural factors. During the pandemic period, there were forms of digital educational poverty that had a specific impact on persons with disabilities. Improving digital inclusion for this category,

² "we should be cautious about simply ignoring the preferences and beliefs of a group who are already subject to considerable injustice. The unjustified silencing or mistrust of already underrepresented groups may constitute a serious epistemic injustice, quite apart from the possibility of being used to justify interference in their lives and choices" (Begon 2023: 166).

means to support active citizenship, autonomy, increase of individual capabilities and social capital. A way in this direction can be represented by technological solutions, as well the implementation of Universal Design for all and its principles, but also by cultural policies aimed to contrast ableism at both cultural and institutional level.

Ableism, as an ideology, has a broad range of action and effects at various levels, involving social stratification, institutions, values, beliefs, and attributions of meaning, as well as the implications of all this in the technological aspects that mediate social life. At an individual level, factors such as motivation, personal goals, perceptions of one's own capabilities and needs, and perceptions of digital technology itself play a significant role in shaping individuals' engagement with digital tools, also with reference to emerging differentiated digital cultures and the necessity to conjunct skills development with a cultural change of the digital environment and spaces in an inclusive and participatory way. Further research should delve into the connection of adaptive preferences with cultural and ideological factors that underlie digital inequalities and the digital disability divide. Considering these factors allows for identifying the matrices of adaptive preferences that hinder an effectively empowering, participatory, and inclusive use of digital technologies.

As authors of the contribution we are aware that there is still a long way to the implementation of the principles claimed by this article, however the contribution must be read as a practical attempt to open up reflection on these issues within the scientific community.

Keywords

Digital inequalities, Digital divide, Disability, Ableism, Inclusion, Adaptive preferences, Digital skills, Universal Design

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