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INFORMATION INCLUSION: A CHALLENGE FOR CREATIVE CITIES
An Analysis of Inequalities in Access to Information and their Implications for Urban Development

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KEYWORDS

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ABSTRACT

The objective of this research is to analyse the barriers encountered by individuals with intellectual disabilities when attempting to access information in an environment that is becoming increasingly digitalised. The study will examine how these limitations affect their social participation and ability to exercise their rights as citizens. The study is based on the hypothesis that people with intellectual disabilities experience significant difficulties in understanding and using available information. The aim of the study is to identify the main barriers and propose strategies to overcome them, with a view to promoting informational inclusion in creative cities.

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1. Intellectual Disability and Social Context

The debate on disability has undergone a significant transformation since the end of the 20th century, moving from an approach based on the medical model to a social perspective. Authors such as Mike Oliver (1990) have emphasized that disability should not be understood as an individual condition derived from an impairment, but as the result of social structures that generate exclusion. From this perspective, disability is "a social problem, derived from the failure of a society to provide adequate services for this population sector and to erect barriers that prevent their full social participation". (Oliver, 1990b, p. 3).

This paradigm shift has made it possible to rethink the understanding of intellectual disability, emphasizing that it is not an isolated individual condition, but a social construction that limits the opportunities of those who have it. This approach proposed by Verdugo and Schalock (2010), in line with the ideas of Oliver (1990), concept by shifting the focus from individual impairments to the social and environmental barriers that hinder the full participation of individuals with intellectual disabilities. Within the context of creative cities, individuals with intellectual disabilities encounter further challenges in accessing information and participating in cultural and social life. The lack of accessibility in physical spaces, the complexity of languages used in media, and the scarcity of adapted resources are some of the barriers that limit their autonomy and their ability to exercise their rights as citizens (Schalock, et al., 2010).

The contemporary Spanish socio-political landscape is characterised by a growing complexity, and the role of the media, despite the credibility issues that have been prevalent in recent years, is becoming increasingly pertinent for citizens to comprehend and interpret this reality. The prevailing notion, one which is widely accepted, is that the primary function of the media is to facilitate effective citizens' right to information. The media exercise discretion in the selection of news items they choose to report, thereby influencing the extent to which citizens are informed. This contributes to the creation and construction of a particular social reality, through which citizens engage in debates and establish their positions. Consequently, information can be regarded as a pivotal component in the creation and comprehension of a particular reality, in addition to being a necessity for citizens to integrate into and participate in society. This is a society that knows, debates, and acts.

From this standpoint, it is imperative for individuals to have access to and comprehend information, as it is crucial to be aware of global occurrences and to understand the world in which they reside (A la Par and FAPE, 2020). It is only through such access to information that individuals can establish their own identities and participate as active members of their communities. It is therefore vital to emphasise that these two elements make information an essential service for citizens, and in particular, for people with intellectual disabilities, as a means to achieve social inclusion and an enhanced quality of life (García et al., 2020).

In addition to the general barriers to accessing information that are faced by many people, individuals with intellectual disabilities encounter specific challenges. These include complex language, unclear visual and auditory formats, ambiguous instructions and a paucity of practical examples (Rodriguez Fuentes, 2008). These difficulties are further compounded by the paucity of training among information and communication professionals, who frequently lack the capacity to adapt content to the needs of people with intellectual disabilities.

ICTs offer significant potential for overcoming barriers to access to information for people with intellectual disabilities. Tools such as screen readers, subtitles, audio description and accessible web design allow digital content to be adapted to the needs of people with intellectual disabilities. Furthermore, mobile applications and online platforms have the potential to provide personalised information and facilitate social interaction. However, it is crucial to emphasise that the development of these technologies must be conducted with an inclusive approach, ensuring their universal accessibility to individuals irrespective of their financial circumstances.

The training of information and communication professionals is identified as a key factor in ensuring the accessibility of content. It is imperative that professionals possess a comprehensive understanding of the characteristics of intellectual disabilities, the barriers to accessing

information, and the available tools to overcome them. Furthermore, it is imperative to raise societal awareness about the significance of inclusion and accessibility. Awareness-raising campaigns and training programmes are instrumental in cultivating a culture of respect and tolerance towards people with intellectual disabilities.

Ensuring the right to information for people with intellectual disabilities requires a joint effort on the part of different actors, including governments, educational institutions, civil society organisations and businesses. The development of public policies that promote universal accessibility, invest in the training of professionals and the development of accessible technologies, and encourage the participation of people with intellectual disabilities in decision-making, is therefore necessary. It is only through a comprehensive and collaborative approach that we can build fairer and more inclusive cities for all.

2. Sustainable Cities: Do they Communicate with all Citizens?

The right to information is recognised as a fundamental human right in various international instruments, including the Universal Declaration of Human Rights (United Nations Organization, 1948). This right is designed to guarantee access to accurate, timely and comprehensible information for all individuals, irrespective of any distinctions. However, people with intellectual disabilities often encounter difficulties in exercising this right due to barriers to access and understanding.

Universal accessibility, defined as the design of products, environments, programmes and services that can be used by all people, without the need for special adaptations or designs, is a fundamental principle to guarantee the right to information for people with intellectual disabilities (UN-CRPD, 2006). Cognitive accessibility, on the other hand, involves adapting information to make it comprehensible for individuals with diverse cognitive abilities (Charkoudian, 2001).

Ensuring the accessibility of information for individuals with intellectual disabilities is not only an ethical imperative but also contributes to the promotion of their social inclusion, the enhancement of their quality of life, and the fostering of their autonomy. By adapting the formats and content of information to their specific needs, these individuals are empowered to participate in decision-making processes, access services, and fully develop their capacities. As Shakespeare (2006) observes, the absence of access to information considerably restricts the capacity of individuals with intellectual disabilities to engage with society and make independent decisions.

The concept of a sustainable city is predicated on the establishment of a communicative environment that is both effective and accessible to all its inhabitants, irrespective of factors such as age, origin, educational level or physical condition. The following elements are fundamental to this concept:

- Channel diversity: The utilisation of a diverse array of communication channels is imperative to ensure the reach of all demographics, encompassing both traditional methods such as posters, brochures, radio, and television, and contemporary digital platforms including social media, mobile applications, and websites.
- Clear and simple language: The employment of lucid, concise language, eschewing jargon and technicalities, is paramount to ensure the comprehensibility of information for all citizens.
- Accessible formats: The adaptation of information formats to accommodate diverse needs, through the use of visual resources such as images, graphics, and videos, is instrumental in facilitating comprehension.
- Inclusion of people with disabilities: Ensuring that information is accessible to people with visual, hearing, motor or intellectual disabilities, using assistive technologies and alternative formats (Braille, audio description, etc.) is vital.
- Citizen participation: Encouraging the active participation of citizens in decision-making related to sustainability, creating spaces for dialogue and consultation.

- Intercultural communication: Addressing the cultural diversity of the city and adapting messages to different communities is essential.

In order to achieve the ideal sustainable city, inclusive education plays a pivotal role in promoting information accessibility for people with intellectual disabilities. By equipping individuals with the necessary tools and strategies for developing reading, comprehension, and information-seeking skills, the autonomy of those with intellectual disabilities in their own learning is enhanced. The scope of inclusive education must extend beyond the mere adaptation of content; it is imperative to foster the active involvement of individuals with disabilities in the construction of their own knowledge.

As previously mentioned, effective communication is essential to ensure accessibility to information. This entails the utilisation of clear and unambiguous language, eschewing jargon and technical jargon, and the incorporation of visual elements such as images, graphics, and pictograms to accompany messages. Furthermore, it is imperative to adapt the tone and style of communication to the characteristics and needs of each individual.

Families and carers play a crucial role in supporting people with intellectual disabilities to access information. They can assist in locating and selecting suitable materials, utilising technological tools, and devising personalised learning strategies. It is imperative to provide them with training and resources to enable them to provide effective support to their family members in this process.

Despite significant advancements in accessibility, numerous challenges persist. These include a paucity of resources, a lack of awareness, and a reluctance to embrace change. However, new technologies and collaborative initiatives between different actors offer great opportunities to improve information accessibility for people with intellectual disabilities. It is therefore essential to emphasise the necessity of ongoing research, training and the development of public policies that promote inclusion and equal opportunities for all.

2.1. The Challenge of Information Accessibility for People with Intellectual Disabilities

The media have been shown to play a crucial role in constructing social reality and shaping public opinion (Califano, 2015). Nevertheless, media content is frequently devised for a general audience, which can impede the comprehension of individuals with intellectual disabilities.

The depiction of individuals with disabilities in the media is frequently characterised by stereotypes and stigmatisation, thereby contributing to the perpetuation of prejudice and discrimination (Shakespeare, 2006). Furthermore, the formats and languages employed in both traditional and digital media are frequently intricate and inaccessible to individuals grappling with comprehension difficulties (Livingston, 2020).

New technologies offer significant opportunities to improve access to information for people with intellectual disabilities. However, it is essential to develop tools and applications that are truly accessible and tailored to the needs of this group. As noted by Hernández Sánchez et al. (2020), it is crucial that information and communication technologies (ICT) are designed with the particularities of people with intellectual disabilities in mind to ensure their effective inclusion.

Individuals with intellectual disabilities encounter distinctive challenges in comprehending information presented in various media formats. The linguistic complexity, the presence of visual and auditory elements that are not universally accessible, and the lack of adaptation of content to different levels of cognitive comprehension, collectively serve as significant barriers that limit their access to information (Schuurmans, 2015). In the specific case of information about cities, the abundance of data, the diversity of formats, and the speed with which information is updated can be overwhelming for this group.

The media has a key role to play in the development of citizenship and the promotion of social inclusion. Nevertheless, individuals with intellectual disabilities are frequently underrepresented in media discourse, and when they do feature, they are often the subject of stereotyping or depictions of dependency (Shakespeare, 2006). This underrepresentation can impede their capacity to identify with the content and to feel a sense of belonging within the community.

Universal design is an approach that can contribute to making information more accessible to all people, including those with disabilities. The application of universal design principles to media content creation involves the development of content that is comprehensible, navigable and usable by as many people as possible, obviating the necessity for further adaptation. This encompasses the utilisation of straightforward language, the incorporation of unambiguous and succinct visual components, and the capacity to customise the presentation of information (Moore, 2007).

Cities, as public and dynamic spaces, offer numerous opportunities for social participation and inclusion. Nevertheless, individuals living with intellectual disabilities frequently confront architectural, social and communication barriers that impede their mobility and access to urban services. The failure to design information about cities in an accessible way can reinforce these barriers and hinder their full participation in urban life.

Universal Design, a concept originating from the work of architect Ron Mace, is predicated on the notion that all human beings possess an inherent right to participate fully in society (Mace, 1998). This design approach aims to create products and environments that are intuitive, flexible and adaptable to the needs of a wide range of users. By addressing barriers and promoting inclusion, Universal Design enhances the quality of life for individuals with disabilities, while also benefiting society as a whole through optimised usability and accessibility for all.

There is a clear need for in-depth research into the information formats that are most understandable and accessible to people with intellectual disabilities, especially in the urban context. What form do visual representations, language structures and media take to facilitate a more profound comprehension of information concerning services, events and public spaces? Addressing this question is imperative to ensure the effective and comprehensive inclusion of people with intellectual disabilities in urban life.

3. Methodology

The methodological approach adopted in this research was informed by a qualitative study, following the lines proposed by Guerrero (2016), with the objective of conducting a comprehensive exploration of the experiences of individuals with intellectual disabilities concerning their access to information. As the author notes, this methodological approach, underpinned by in-depth interviews and *focus groups*, has facilitated a profound comprehension of the perceptions, sentiments and experiences of the participants within their own context, thereby offering a comprehensive and nuanced perspective on their reality. Furthermore, in order to ensure the inclusion and meaningful participation of people with disabilities, we had the collaboration of a group of experts in cognitive accessibility, who validated the research questions asked in both the in-depth interviews and the *focus groups*. Guerrero (2016) emphasises that qualitative research facilitates the articulation of participants' experiences, thus enabling the construction of knowledge derived from their lived experiences. This is imperative for a comprehensive understanding of their needs and challenges.

The study's sample comprised 50 individuals with intellectual disabilities residing in the Community of Madrid. The inclusion criteria were as follows: individuals with intellectual disabilities over the age of 18 years who demonstrated adequate reading comprehension skills. A purposive sample was selected to ensure a diversity of experiences and perspectives.

The principal data collection technique employed was semi-structured interviews. The interview schedule encompassed the following topics:

- Barriers to accessing information: Difficulties in understanding information, lack of accessibility to different formats, etc.
- Support needs: Type of support required to access information (subtitles, simple language, etc.).
- Information consumption preferences: preferred formats, sources of information used.
- Interest and motivation: Interest in being informed, importance of information in their lives.

With regard to the procedure, the interviews were conducted individually, in a comfortable and familiar place for the participants, and lasted an average of 60 minutes. Prior to participation, informed consent was obtained from the participants or their legal representatives. The interviews were recorded and subsequently transcribed.

Data analysis was conducted through a process of open and axial coding. Emerging categories and subcategories of the data were identified and related to the theoretical framework. The ethical principles of the research were respected at all times, guaranteeing the confidentiality and anonymity of the participants. Prior to conducting the interviews, informed consent was obtained from the participants, and they were informed of their rights.

4. Objectives

The primary objective of this research endeavour is to enhance the quality of life of individuals with intellectual disabilities within urban environments. It aims to identify the cognitive and linguistic barriers that impede their access to information, as well as to determine the most efficacious communication formats and channels for this demographic. The findings of this research will facilitate the development of more accessible and personalised communication strategies, thereby promoting autonomy, social participation and well-being among individuals with intellectual disabilities in urban settings.

Despite advances in the promotion of inclusion, individuals with intellectual disabilities continue to encounter substantial impediments to accessing information autonomously. These barriers not only impede their involvement in social and community activities but also hinder their personal and professional growth. Consequently, it is imperative to investigate and comprehend the distinct requirements of individuals with intellectual disabilities to formulate interventions that facilitate their comprehensive and effective inclusion within urban settings.

In addition to the overarching objective of enhancing the quality of life of individuals with intellectual disabilities, the present research will concentrate on the following specific objectives:

- Identify: The most common cognitive and linguistic barriers that hinder access to information for people with intellectual disabilities.
- Analyse: The formats and channels of communication currently employed by public institutions and bodies to address this group.
- Evaluate: The effectiveness of these formats and channels in terms of comprehension and retention of information.
- Propose: Innovative and accessible communication strategies to overcome the identified barriers and to promote the active participation of people with intellectual disabilities in the life of the city.

This research will be situated within the domain of inclusive communication and universal accessibility. The principles set out in the Convention on the Rights of Persons with Disabilities, as well as previous research in the field of intellectual disability and communication, will be taken as a reference. Concepts such as cognitive accessibility, easy reading and universal design for information will be explored in order to identify best practices for adapting messages and formats to the needs of this group.

5. Information Inclusion of Cities

The present study was based on two distinct hypotheses:

Firstly, the cognitive inaccessibility of information in the local media hinders the full exercise of the right to information by people with intellectual disabilities in cities that call themselves inclusive, thus limiting their participation in local life and decision-making processes. The United Nations Convention on the Rights of Persons with Disabilities (2006) asserts that individuals with ID have the right to equal access to information. However, articles 9 on accessibility and articles 29 and 30 on participation in public and cultural life reveal a clear contradiction with the current situation. The cognitive inaccessibility of information in local media, as highlighted by Gómez-

García and López-Gómez (2019), hinders the full exercise of these rights, thereby limiting the participation of people with intellectual disabilities in local life and decision-making processes.

Secondly, the under-representation of people with intellectual disabilities in the local media, coupled with the use of non-accessible language, contributes to the propagation of misinformation and the dissociation of this group from their urban environment. This, in turn, perpetuates their social exclusion in cities that espouse inclusive principles.

5.1. Results

The findings of this research demonstrate the presence of numerous barriers that impede the access of individuals with intellectual disabilities to information. A thorough analysis of the formats and channels of communication currently employed by public institutions and bodies of the Community of Madrid, specifically the City Councils of Madrid, Leganés, Móstoles and Alcorcón, as well as the Community of Madrid to address people with intellectual disabilities, has revealed a general picture that is less than encouraging. Despite the progress made in terms of inclusion, the communication strategies employed by the aforementioned institutions and public bodies demonstrate a significant deficit in terms of adaptation to the needs of this group.

Formats: The communication formats employed are often complex and inaccessible. Written texts are characterised by an overabundance of language and intricate grammatical structures, which hinders their comprehension. Audiovisual materials frequently lack essential components such as subtitles, audio description, and clear visual elements, thereby impeding access to information for individuals with visual or hearing impairments. Printed materials are often characterised by unattractive design and the use of typefaces that present a challenge to the reader.

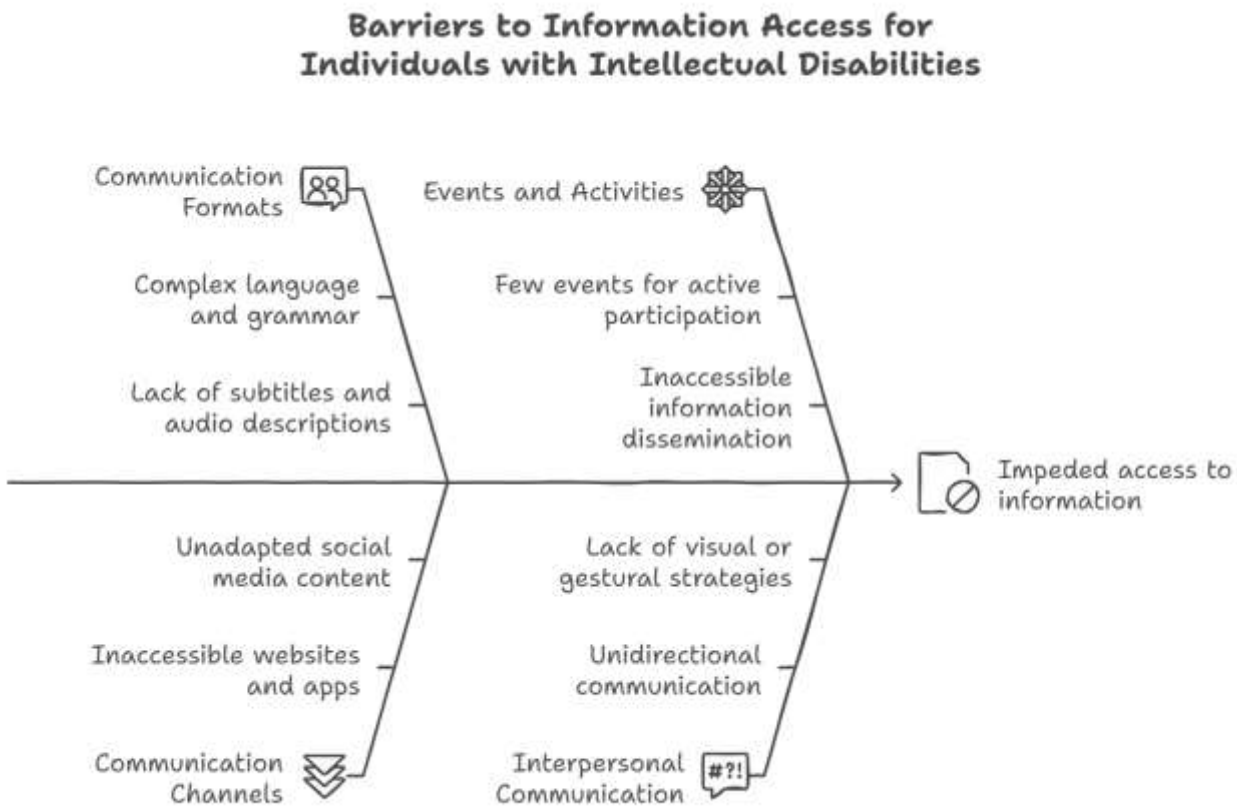
Channels: The communication channels utilised are limited and not very accessible. Websites and applications present architectural barriers that make navigation difficult for people with motor or visual disabilities. Despite the growing popularity of social networks, there is still a lack of adapted and accessible content.

Events and activities: Events and activities specifically designed for individuals with intellectual disabilities are often limited in number and do not encourage active participation. Information regarding these events is disseminated through channels that are not very accessible, and no adaptations are offered to facilitate the participation of all people.

Interpersonal communication: Interaction with professionals and other social agents is frequently unidirectional and ambiguous. The language employed is often technical and complex, with a paucity of visual or gestural communication strategies to facilitate understanding.

Regarding local media formats, television remains the primary source of information for individuals with intellectual disabilities. However, the rapid pace of journalists' speech and the intricacy of television discourse can present significant challenges in terms of comprehension for this group. Conversely, the burgeoning interest in new technologies, such as the internet and social networks, presents a plethora of opportunities to develop assistive tools and platforms tailored to the needs of this demographic, including videos with subtitles, audio description and simplified visual content. These observations align with the findings of Cabero and Ruiz-Palmero (2018), who underscore the significance of information and communication technologies, along with the formulation of strategies and public policies, in ensuring the right to information for this demographic and, consequently, fostering their social inclusion.

Figure 1. Barriers to Information Access for Individuals with Intellectual Disabilities



Source: Own elaboration, 2024.

The speed of journalists' speech and the complexity of the languages used in traditional media represent a significant barrier to access to information for people with intellectual disabilities. These individuals have a marked preference for more visual and auditory formats, such as images and sounds, and require a slower pace and simpler explanations to understand messages. To address this challenge, it is imperative that communication professionals undergo specialised training in inclusive communication, empowering them to adapt their content to meet the needs of this demographic. Moreover, it is crucial to raise societal awareness about the significance of accessible communication that respects diversity.

Training for media professionals should include learning clear and simple communication techniques, the use of inclusive language and the adaptation of content to different formats. Furthermore, it is imperative for media outlets to implement editorial policies that prioritise accessibility and inclusion, in collaboration with disability advocacy organisations to ensure the comprehensibility of their products for all audiences.

A fundamental aspect that must be emphasised throughout the research process is the recognition that individuals with intellectual disabilities are the foremost experts on their own needs. It is therefore vital that they are actively involved in all stages of the process of creating accessible content. Co-creation, defined as the joint participation of professionals and users in the design of products and services, is a key strategy to ensure that content is truly useful and relevant. The active involvement of people with intellectual disabilities in focus groups, workshops and pilot tests provides invaluable insights into their preferences, challenges and recommendations for enhancement. This approach will guarantee that content is not only accessible, but also engaging and motivating for this audience.

In addition to their involvement in the creation of content, individuals with intellectual disabilities have the capacity to function as key disseminators of information. By sharing their personal experiences and insights, they can contribute to raising awareness about the barriers they encounter and promote inclusivity. For instance, they can contribute to the creation of video tutorials, blogs, or podcasts that elucidate how to access information more readily and utilise diverse technological tools. This contributes not only to the personal empowerment of individuals with intellectual disabilities, but also to the creation of a more inclusive and accessible society for all.

To facilitate the active involvement of people with intellectual disabilities in the creation of accessible content, it is essential to provide them with the requisite training and resources. This involves the development of training programmes in digital and communication skills, empowering individuals to articulate their ideas and requirements with clarity and efficacy. Furthermore, it is imperative to empower individuals with intellectual disabilities to become agents of change and advocates for their own rights. By fostering their autonomy and decision-making capacity, a more inclusive and fairer society can be built.

The involvement of people with intellectual disabilities in the creation of accessible content is mutually beneficial, resulting in a win-win scenario for all parties. By engaging with their perspectives and experiences, we can develop more innovative and creative products and services. Furthermore, fostering collaboration between people with and without disabilities is instrumental in the development of more cohesive and supportive communities.

New technologies offer significant potential to encourage the participation of people with intellectual disabilities in the creation of accessible content. Digital platforms, including wikis, blogs and social networks, facilitate the dissemination of experiences and knowledge among individuals with intellectual disabilities in a straightforward and immediate manner. However, as previously mentioned, it is essential to provide these individuals with the necessary training to ensure effective utilisation of these tools. The implementation of training programmes tailored to the specific needs of each individual has been identified as a pivotal strategy to enhance their digital competencies and promote autonomy. In this regard, individuals with intellectual disabilities can act as valuable consultants, contributing their unique perspective and experience to enhance the accessibility of content. It is incumbent upon the media to heed their contributions and assimilate them into their production methodologies. This approach not only ensures the quality and relevance of content but also promotes inclusion and diversity.

The findings of this study provide a basis for a more comprehensive evaluation of the initial hypotheses formulated at the study's inception. Regarding the initial hypothesis, the results substantiate that the cognitive inaccessibility of information constitutes a substantial impediment to the realization of the right to information by individuals with intellectual disabilities. As Van der Laan et al. (2015) have previously indicated, the linguistic complexity of media communications hinders message comprehension and restricts active public engagement. However, it is important to note that participants also highlighted the importance of having information tailored to their needs, suggesting a genuine interest in being informed.

The second hypothesis is partially supported by the findings. While it is true that the underrepresentation of people with intellectual disabilities in the media and the use of non-accessible language may lead to disinterest, the results also reveal that many participants actively seek information through different channels. This finding suggests that by providing adapted content and encouraging their participation, people with intellectual disabilities can become active consumers of information.

Taken together, these results provide new evidence for the digital divide theory by demonstrating that people with intellectual disabilities face specific barriers in accessing quality information. Furthermore, the findings challenge some of the existing generalisations about people with intellectual disabilities by demonstrating that people with intellectual disabilities have a genuine interest in being informed and participating in public life.

5.2. Contributions to the Theory

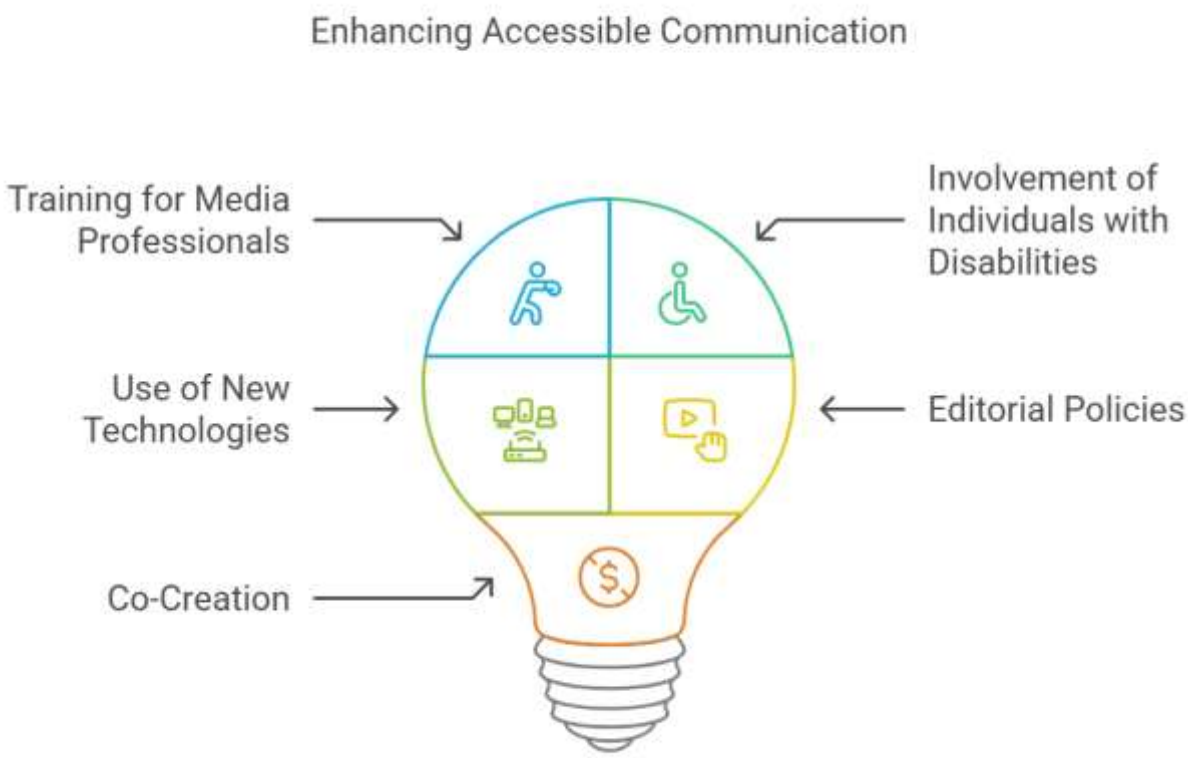
The results of this research make significant contributions to the field of communication and intellectual disabilities in the context of urban areas. Firstly, the findings refine the understanding of the digital divide by showing that the difficulties of people with intellectual disabilities in accessing information are not limited to physical access to technologies but involve deeper cognitive and social barriers. This finding underscores the necessity for the development of more sophisticated models that can account for the unique characteristics of each group.

Secondly, the research emphasises the significance of cognitive accessibility as a fundamental component in ensuring the right to information within urban settings for individuals with intellectual disabilities. The results obtained emphasise the necessity to adapt information content and formats to the specific needs of this group, as well as to promote training in digital skills and the use of assistive technologies.

Finally, the study contributes to the greater visibility of the need for greater inclusion of people with intellectual disabilities in local information production processes. The active involvement of this group in the creation of adapted content can foster their empowerment and enhance the quality of the available information.

The findings of this research provide a foundation for further exploration of the nexus between intellectual disability, digital literacy and citizen participation. Future studies could explore the potential of social networks as empowerment tools for this group. Furthermore, the findings suggest the need to develop specific training programmes for communication professionals in local media and education, with the aim of improving their skills to create accessible content and promote the inclusion of people with intellectual disabilities.

Figure 2. Enhancing Accessible Communication



Source: Own elaboration, 2024.

5.3. Comparison with Other Studies

The results obtained in this research are largely consistent with the findings of previous studies that have explored the digital divide in people with intellectual disabilities. As Van der Laan et al. (2015) found, significant barriers are presented by difficulties in understanding complex information and assessing the credibility of sources. However, in contrast to these studies, our research delves deeper into the analysis of format preferences and the importance of cognitive accessibility.

In comparison with the findings of Gómez-García and López-Gómez (2019), our results substantiate the cognitive inaccessibility of conventional media formats. However, they also demonstrate a heightened inclination among individuals with intellectual disabilities to proactively seek information. This finding suggests that by offering adapted content and encouraging their participation, people with intellectual disabilities can become an active and demanding audience.

In contradistinction to the findings of preceding studies, which have chiefly concentrated on technological impediments to information access, our research underscores the significance of social and cultural barriers to information access. Furthermore, the incorporation of a more

heterogeneous sample of participants has been demonstrated to provide a more comprehensive representation of the needs and experiences of individuals with intellectual disabilities.

5.4. Study Limitations

Despite the efforts made to ensure the methodological rigour of this study, it is important to recognise certain limitations that could influence the interpretation of the results.

Firstly, although the questions used in the questionnaire were validated by a group of cognitive accessibility experts from Fundación Amás, there is a possibility that some participants may not have fully understood some of the questions, which could have biased the answers.

Secondly, the challenge of recruiting young people with disabilities and internet access led to the decision to widen the age range of the sample. While this approach ensured a sufficient number of participants, it may limit the generalisability of the results to young people with disabilities.

Finally, as this is a qualitative study, the interpretation of the data depends largely on the perspective of the researcher. Despite the steps taken to minimise interpretative bias, it is acknowledged that other researchers may reach slightly different conclusions.

5.5. Future Research Lines

The development of sustainable cities is not solely reliant upon the implementation of green infrastructure and clean technologies; the promotion of an inclusive and equitable society is also of paramount importance. In this context, the present research explores the relationship between intellectual disability and digital literacy, identifying the barriers that limit access to information and the development of digital skills in this group.

The findings of this research reveal a complex picture in relation to the digital literacy of people with intellectual disabilities. Beyond the technical challenges, the results underscore the necessity to address this issue from multiple perspectives. The ensuing sections will methodically explore the theoretical, practical, and policy implications of this study, with the objective of delineating a course towards more equitable digital inclusion.

Theoretical implications: The results of this research suggest that the relationship between intellectual disability and digital literacy is more complex than was previously thought. While the study suggests that socio-cultural factors and family environment are key determinants, further research is necessary to understand the mechanisms underlying this process. It is imperative to explore the role of emotions, motivations and cognitive strategies employed by individuals with intellectual disabilities when engaging with digital technologies. Furthermore, the impact of different types of technologies and applications on the development of their digital skills requires investigation.

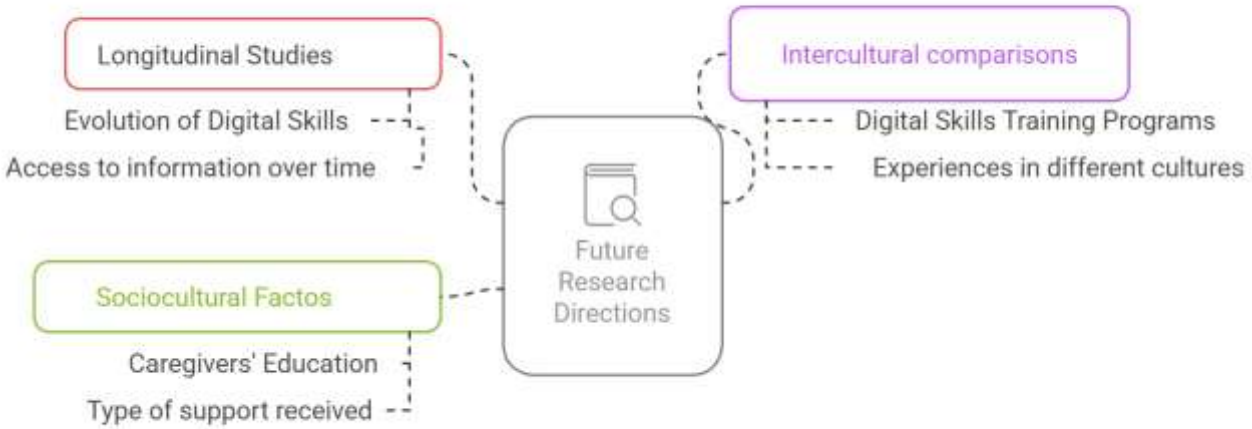
Practical implications: In terms of practical implementation, it is imperative to devise and implement digital skills training programmes that are tailored to the specific needs and characteristics of individuals with intellectual disabilities. These programmes should include the development of basic internet navigation skills, the use of search tools, the assessment of the credibility of information, and the creation of digital content.

Policy implications: At the policy level, it is necessary to promote digital inclusion as a fundamental right and to ensure that people with intellectual disabilities have equal opportunities to access technologies and develop their digital skills. This necessitates the allocation of financial resources for training and technological equipment, as well as the creation of regulations that promote the accessibility of digital content.

Finally, the results obtained in this study open up several lines of research that deserve to be explored in future studies. Specifically, the conduction of longitudinal studies to analyse the evolution of access to information and the development of digital skills in people with intellectual disabilities over time would be a fruitful avenue for future research. Furthermore, exploring the influence of socio-cultural factors, such as the educational level of caregivers and the type of

support received, on the access to information of this group would be relevant. Finally, a comparison of the results obtained in this study with those from other cultural contexts is recommended in order to ascertain whether there are significant differences in the needs and experiences of people with intellectual disabilities.

Figure 3. Future research directions



Source: Own elaboration, 2024.

In conclusion, digital literacy for people with intellectual disabilities is a complex issue that requires a multidisciplinary approach. The findings of this research underscore the significance of collaboration among researchers, education professionals, technology designers and people with intellectual disabilities to develop innovative and effective solutions. It is only through such collaboration that we can ensure equal opportunities for all individuals to participate in the digital society. The identification of barriers and the specific needs of people with intellectual disabilities is the foundation for the development of innovative interventions and the construction of more inclusive societies. The findings of this study should therefore be considered a starting point for future research and for the implementation of public policies that promote digital inclusion within cities.

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