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Digital skills training and professional profiles: the audiovisual sector as an inclusive environment for people with disabilities

Formación en competencias digitales y perfiles profesionales: el sector audiovisual como entorno inclusivo para las personas con discapacidad

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Abstract

The audiovisual sector is undergoing a period of growth and development. The employment of persons with disabilities in this professional field is an opportunity of inclusion for this group, as long as training in digital skills is aligned with the professional demands of the market. This research reveals the most requested competencies and profiles in the communication industry. The research methodology is of a mixed nature. It is based on qualitative techniques (focus group, with eight participants) and quantitative ones (Delphi method, with forty informants), using two

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questionnaires distributed in two phases to four groups: audiovisual companies; specialized employment portals; associations of persons with disabilities and researchers. A mismatch was detected between the basic training received by the group with disabilities and the profiles most in demand by the audiovisual sector, which are: web designer, content creator, and virtual community manager. There is a lack of knowledge about this group and their accessibility conditions to this specialized training. New technologies become a possible ally to guarantee the acquisition of this training.

Keywords: digital skills; professional profiles; audiovisual sector; persons with disabilities; training; technologies.

Resumen

El sector audiovisual vive momentos de crecimiento y desarrollo. La incorporación laboral de personas con discapacidad a este ámbito profesional es una oportunidad de inclusión para este colectivo, siempre que la formación en competencias digitales esté alineada con las demandas profesionales del mercado. Esta investigación revela las competencias y perfiles más solicitados en la industria de la comunicación. La metodología de investigación posee un carácter mixto. Se apoya en la técnica cualitativa (focus group, con ocho participantes) y cuantitativa (método Delphi, con cuarenta informantes), empleando dos cuestionarios difundidos en dos oleadas a cuatro grupos: empresas audiovisuales; portales de empleo especializados; asociaciones de personas con discapacidad e investigadores. Se detecta desajuste entre la formación básica recibida por el colectivo de personas con discapacidad y los perfiles más demandados por el sector audiovisual, que son: diseñador web, creador de contenidos y gestor de comunidades virtuales. Se evidencia falta de conocimiento sobre este colectivo y sus condiciones de accesibilidad a esta formación especializada. Las tecnologías se convierten en un posible aliado para garantizar la adquisición de esta formación.

Palabras clave: competencias digitales; perfiles profesionales; sector audiovisual; personas con discapacidad; formación; tecnologías.

Introduction

The training of people with disabilities in Spain

The level of education is one of the main reasons why people with disabilities are marginalised. According to the Employment and Disability Survey (2022) of the National Statistics Institute (INE), among people with disabilities of working age, 8.8% have only primary education and 62.7% have secondary education or vocational training. Only 28.5% have a university education, compared to 43.7% of the rest of the population (INE, 2022, p. 2). If we transfer these parameters to those who have a job, it is the one with the highest gap (31.4%). As the INE itself states, among people with disabilities, "there is a lower

representation of unemployed people with higher education" (2022, p. 3). This data suggests that training contributes to the labour market insertion of this group. This is confirmed if we look at the education of unemployed people with disabilities: most of them have completed secondary education (67.4%) and only 18.15% have a degree (p. 3).

In global terms and according to sex, women have slightly higher academic qualifications, having passed university in 22.2% of cases, compared to 16% of men (Odismet, 2023, p. 77). Other INE studies corroborate this fact: the Olivenza Report of the State Disability Observatory (OED) includes the survey EDAD-Hogares2 , according to which more than half of disabled people between 16 and 24 years of age who are still in education are women (OED, 2022, pp. 88-89). They represent a lower percentage in the overall unemployment figures than men (45.1 compared to 54.9) (INE, 2022, p. 3).

The above provides a necessarily synthetic and global vision of the educational level and employment situation of a group, which presents different situations depending on the type of disability.

Obstacles to disability training: overcoming prejudice and addressing accommodations

There are still underlying perceptions in society that wrongly place people with disabilities on a plane of inferiority. The discourse of 'ableism' is a result of a failure to embrace difference, which makes it impossible to imagine being human in any other way (Brown and Leigh, 2018, 2020; Campbell, 2009; Dolmage, 2017; Singer and Bacon, 2020). Inclusion is negatively affected by a range of material and financial shortcomings, but there is probably no more limiting cause than simple prejudice. It is society itself that reduces opportunities for participation in all areas, including education, where standards 'prioritise outcome over process' (Oliver and Barnes 2010, p. 555). This bias is accentuated in higher education, making it difficult for people with disabilities to access higher education (Dolmage, 2017).

To overcome prejudice, Cureton (2021) proposes teaching the Convention on the Rights of Persons with Disabilities in schools,[3] in the same way that civil rights or feminism are explained. This author defends the need to reinforce the ethics of students and teachers to prevent rejection, false compassion or indifference from affecting students with disabilities. Proof of the stigma suffered by this group is that students with a non-visible disability choose to hide it so as not to be labelled, thus losing the support to which they are entitled (Claiborne et al., 2011; Moriña-Díez, 2022).

[2] Survey on Disability, Personal Autonomy and Dependency Situations in Households. Conducted by the INE.
[3] United Nations Treaty in force since 2008. It devotes its article 24 to equal opportunities education for persons with disabilities (UN, 2023).

Three key factors are identified as determining success in academic education for these individuals, especially at higher levels: personal characteristics and attitude, social environment (especially family and socio-economic status) (Qian et al., 2020) and adaptations (Kutscher and Tuckwiller, 2019), whether curricular, infrastructural or technological (Pivik et al., 2002). We focus on the latter.

While progress has been made in removing architectural barriers, there are still elements in the facilities that prevent a student with a disability from being able to function independently, such as doors, stairs/steps and excessive height of resources such as lockers or switches (Spassiani et al., 2017). These infrastructural issues require institutional support and funding (Fernández-Batanero et al., 2022), but their adaptation is probably less complex than transformations related to methods and curricula.

Rodríguez-Herrero et al. (2021) point to the rigidity of methodologies, which do not take diversity into account and become an obstacle to learning. Strnadová et al. (2015) point to the resistance of certain teachers, while more recent studies consider that the teaching staff tend to be collaborative, but lack information and specific qualifications to implement suitable educational experiences for students with disabilities (Fernández-Batanero et al., 2022). López-Gavira et al. (2021) consider that teacher involvement is vital for the implementation of inclusive practices that promote diversity and collective belonging (Reeves et al., 2022). Equally, the full participation of students with disabilities in the training activities created by schools is essential, so that they acquire skills for their subsequent professional development (Bumble et al., 2019).

In terms of the technological component, there are still major constraints on accessibility, which limit quality training, as indicated in the following section.

The impact of technologies on the training of people with disabilities

The influence of technology on the daily lives of people with disabilities has been analysed from multiple perspectives, but there is no complete agreement on its real benefits for their social inclusion (Macdonald and Clayton, 2013; Ministry of Social Rights and Agenda 2030, 2023; Tsatsou, 2021;). It seems to be accepted that digital tools contribute to increased participation of this group in various fields, including education. Mikropoulos and Iatriaki (2023) conducted a systematic review of the relevant literature published between 2013 and 2021 and concluded that technologies increase motivation and academic achievement. In Spain, Medina-García et al. (2021) recognise their usefulness for the integration of students with disabilities in educational centres, improving the teaching-learning experience. All of the above refers to formal education, without prejudice to the fact that it can be extended to any training.

In our country, the disability community's perception of technological resources is positive, but it is necessary to point out certain nuances. A report published by the Adecco

Foundation (n=300) reveals that 75% of those consulted improve their network of contacts and support with the help of technology, especially social networks. Moreover, technology helps them to achieve important goals such as "completing their studies on equal terms", thanks to the use of adaptations such as virtual mice, keyboards with covers, Braille printers, augmentative zooms, screen readers, etc. (2022, p. 12). This favourable result introduces one of the essential aspects for the use of these tools by people with disabilities, which has to do with their accessibility. The aforementioned study also shows that more than half of the respondents encounter barriers in the use of digital devices, considering them too complex (44%) or not accessible (32%) (p. 14).

Accessibility is therefore an essential factor in avoiding the digital divide and the risk of exclusion that it entails (Lindsay, 2011; Mañas-Viniegra et al., 2023; Palmer et al., 2012). This objective involves the management of adaptations (Pivik et al., 2002), but is based on a design that takes into account the needs of this group from the outset (International Labour Organisation - ONCE Foundation, 2021). Ostiguy (2018) insists on the importance of consulting people with disabilities, and in particular learners, during the development of any new educational tool. The goal is to arrive at so-called "universal design", which makes technologies inclusive for the greatest number of users, without the need for adaptations. This also benefits the elderly or those who are temporarily impaired in their faculties, as well as being more cost-effective in the long run for companies (Herrero-De-la Fuente et al., 2022).

Accessibility is essential for people with disabilities to improve their digital skills, which are in demand in booming employment sectors in Spain, such as the audiovisual industry (with an expected growth of 3.3% until 2024, according to Pricewaterhouse Coopers, 2020). The social inclusion of these people involves raising their academic qualifications, which would be possible if stigmas are overcome (Shpigelman et al., 2022) and the conviction prevails that all students, without distinction, are capable of learning when the right attitudes and conditions are present (Moriña-Díez et al., 2020).

The technological revolution transforms production processes in the audiovisual sector (Suárez-Rodríguez, 2016), giving rise to new professional profiles with advanced digital skills (Miguel-San Emeterio, 2018). The impact of COVID-19 boosted novel areas such as data management and analysis, artificial intelligence (AI) and cloud computing (ONTSI, 2022, p. 5), generating new professions with a hybrid character (Grijalba-de la Calle et al., 2022) and a very marked technical component (Saavedra-Llamas et al., 2020). Skills are required in areas such as digital *marketing*, *big data*, cybersecurity or robotics and AI (Socarrás-García, 2022), all of which are related to communication and the audiovisual environment. The opportunities are aimed at professionals qualified in these skills that may be within the reach of this group, although the suitability depends closely on the degree and type of disability (Herrero-De la Fuente et al., 2022). "It is necessary to bear in mind the

wide range of situations included in the field of disability and to focus on what everyone can do, in order to promote it" (Herrero-De-la-Fuente and Jiménez-Narros, 2023, p. 112).

Objectives

The main objective of this research is to find out the opinion of experts regarding the training of people with disabilities, how they value the possibilities of acquiring digital competences and skills and which are the most demanded in the audiovisual field to promote the social inclusion of this group.

The specific objectives are as follows:

- To explore the perceptions and attitudes towards the education of people with disabilities by employers in the audiovisual communication sector, specialised job portals, disability organisations and researchers with expertise in the field.
- To investigate the most sought-after professional profiles in the audiovisual field and to define the associated digital competences and skills.
- To study in depth the impact of technologies on the qualification possibilities of this group.
- Determine whether the digital tools[4] are accessible to these people and therefore favour their training.

Method

In order to achieve the purpose of the study, a mixed methodology is designed with both a qualitative and quantitative approach . The former provides information from the discourse produced by the participants, and the latter provides objective numerical data referring to the reality designed in the questionnaire.

This methodological design is developed in two sequential stages: the first, qualitative, exploratory stage serves as a basis for the subsequent elaboration of the Delphi questionnaire. The second, quantitative stage provides a more objective description of the researched reality based on the assessments of a panel of experts.

The instruments, participants and procedures that were carried out are detailed below. For the collection of information, the focus group technique was chosen because of the need to know, prior to the Delphi, the reality as it is experienced by the experts and the social meaning of our object of study.

4 We refer to the most widely used *software*, applications and digital tools in the audiovisual industry. Video and audio editing software (Avid, Premier, Audacity), image design and manipulation (Photoshop), or website creation (WordPress). Tools for data analysis (R, Phyton, Google Analytics) and social network management (Publish, Advertise, Audience, Hootsuite). Also to the networks themselves, among others.

The choice of this technique is supported by authors such as León-Barrios (2007, p. 7) who, following Jesús Ibáñez, emphasises: "the product of the focus group is information that speaks from the social". Hernández-Sampieri et al. (2010) consider this tool to be especially valuable because of the interactions generated among participants, who "construct meanings in groups" (p. 426).

The discussion guide for the group is built around three main questions, facilitating spontaneous interaction between participants at all times: perceptions and attitudes towards the world of disability; training and employment opportunities for the group; and the influence of digital technologies on the social inclusion of these people.

On the basis of these open questions, the aim was for the participants to focus on the aspects they considered most relevant, in order to specify ideas and proposals as the discussion progressed.

The *focus group* was conducted *online* on 8 February 2023, lasting approximately two hours. The information collected is recorded in audio and video for subsequent transcription and analysis.

The choice of the Delphi technique is based on the collection of expert opinions and knowledge in order to reach a consensus on a specific topic. This tool "allows the prioritisation of the ideas that emerge from the participants and favours a reflexive and confidential exchange of different points of view" (Cabero-Almenara and Infante-Moro, 2014, p. 5). It is, based on Landeta's (2006) reflection, a "systematic and iterative process aimed at obtaining opinions, and if possible consensus, from a group of experts" (García-Ruiz and Lena-Acebo, 2018, p. 113).

The Delphi is designed in two waves of questionnaires, which are considered sufficient to achieve consensus, according to the advice of the researchers of the research institute selected to organise the expert panel. The first wave is based on the conclusions of the *focus group*. It focuses on disability-related issues and incorporates socio-demographic data, activities and roles of the participants.

After the analysis of the answers provided in the first round, the second round is followed by a second round, in which the informants share the results obtained, inviting them to revise their original positions. In this way, the arguments provided by the other members of the panel are considered in the search for consensus. In addition, new questions are added focusing on professional profiles, competences and skills related to the audiovisual sector and the potential of digital technologies.

Both waves use a semi-structured questionnaire with single response, multiple choice, open questions and Likert scale questions from 1 to 5.

The initial Delphi phase provided forty valid questionnaires, as they were answered by the total number of experts (ten) selected for each sector. This is a representative sample, although the scientific literature consulted does not offer agreement on the optimum number of participants in the application of the method. Authors have expressed differing

opinions on the size of the panel (Cabero-Almenara and Infante-Moro, 2014; Ortega-Mohedano, 2008).

In the second round, 35 valid questionnaires were obtained. There were some drop-outs from media companies (seven participants) and job portals (eight).

Quality criteria are maintained at all times in the application of the Delphi technique, such as anonymity among the participants of the panel of experts and control of the iteration and feedback in the administration of the questionnaire to reach agreement among panellists.

Both tools, *focus* and Delphi, meet the criteria of validity and reliability; validity, in that the data collection instruments serve to measure what was intended; reliability, in that the responses in the two rounds of the Delphi provide consistency and agreement among the participants.

The selection of experts, both for the *focus group* and the panel of experts, is based on an extensive database developed by the COMPENSA Project. An *ad hoc* recruitment filter is used to ensure that the experts meet the required characteristics/variables. Recruitment is carried out by the research institute, under the supervision of the research team that is the author of this study.

The expert profile for the group and the panel of experts coincides: men and/or women, with experience in the field of disability in four sectors: companies in the audiovisual sector, job portals specialised in disability, associations of people with disabilities and researchers in the field.

The focus group consisted of eight participants, with two experts per field (Table 1).

Table 1

Expert members of the focus group

Sectors	Profiles	Entity	Participant
Audiovisual companies	Human Resources Manager	Canal Trece TV	P1
	Human Resources	Mandarin Productions	P2
Specialised job portals	Project Manager	ManPower Group	P3
	Audiovisual Services Coordinator. Human Resources	Adecco	P4
Association of people with disabilities	Human Resources Manager. Employment Coordinator	COGAMI	P5
	Director and Coordinator Employability	John XXIII Foundation	P6

Researchers	Specialised researcher accessibility	UDIT	P7
	Researcher specialising in accessibility	Carlos III University and CESyA	P8

For the Delphi, a selection of experts (forty) was made (Table 2).

Table 2

Panel of experts for the Delphi

Audiovisual companies	Specialised job portals	Associations of people with disabilities	Researchers
Corporación Radio e Televisión de Galicia, S.A.	HOME - ETIC	ASEPAU, Spanish Association of Universal Accessibility Practitioners	Catholic University Murcia
Radio Televisión de la Región de Murcia, 7 TV	ETT - Foundation a la Par	AICE Federation, Spanish Associations of Cochlear Implantologists	CEU Cardenal Herrera University (Valencia)
Neighbourhood Productions	ETT - Triangle Auxiliary Services	Down Spain	Complutense University of Madrid
Radio and Television Andalusia	ETT - LABORPLUS	FIAPAS, Spanish Confederation of Families of Deaf Persons	Murcia University
Antena 3	ETT - Plena Inclusión	PREDIF, Plataforma Representativa Estatal de Personas con Discapacidad Física (State Representative Platform of People with Physical Disabilities)	Salamanca University
LOLA - MullenLowe	ETT - Down Madrid	Association of Families and Deaf People	Valladolid University
Thirteen TV	ETT - Recruitment and Labour Integration	ASPACE, Spanish Confederation of Organisations for the Care of People with Cerebral Palsy and Related Conditions	University Zaragoza
Boomerang TV	ETT - Disabled Associates Marketing	Plena Inclusión, Spanish Confederation of Organisations in Favour of	University of the Basque Country

	Employment	People with Intellectual Disability	
Corporació Valenciana de Mitjans de Comunicació (Valencian Media Corporation)	ETT - IMAN	ALCER, Federación Nacional de Asociaciones para la Lucha contra las Enfermedades del Riñón (National Federation of Associations for the Fight against Kidney Diseases)	Antonio Nebrija University (Madrid)
Ente Público Radio Televisión Canaria	ETT - JUAN XIII Foundation	FAE, Asperger's Federation Spain	Rey Juan Carlos University (Madrid)

In relation to the socio-demographic characteristics of the participants in the Delphi survey, a greater representation of women was observed. The predominant age group is between 45 and 64 years old and the geographical area most present is the Community of Madrid. Regarding the professional profile, most of them work in relevant organisations (with more than 100 employees) and hold positions of high responsibility. On the other hand, only 12.5% of the informants (five) indicate some form of disability, mainly of a sensory nature.

Regarding the people with disabilities working with the respondents, physical and intellectual disabilities predominate. Their average age is between 35 and 44 years, they have varying levels of education and are mainly in administrative roles.

The Delphi conducted by the partner research institute involves an *online* survey using CAWI (*Computer-Assisted Web Interviewing*). Due to the small universe of experts, a census survey is carried out on the databases provided by the COMPENSA Project and the funds of the partner company are also used, in compliance with the Organic Law 3/2018 on the Protection of Personal Data and Guarantee of Digital Rights and the European Regulation 2016/679 (GDPR).

The Delphi fieldwork takes place between 9 and 26 May (first wave) and between 15 June and 6 July (second wave).

The qualitative analysis for the *focus group* is of a structural type based on the analysis of the group discourse. In the Delphi, a descriptive analysis is carried out, using percentages and averages.

Results

The data obtained in this research, through the perceptions offered by the four profiles on training, competences, profiles and digitalisation, describe the daily reality of people with disabilities.

In relation to training, the Delphi data are revealing, because only three out of ten professionals surveyed think that training plans take into account the type of disability. This perception is only one point higher in media companies and job portals. Despite this, the attitude is rated as positive or very positive in 80% of responses. In the case of audio-visual companies, this assessment rises to 100%, while it drops to half in the case of associations and organisations. It is important to note that those with medium and high previous experience in recruitment (22 cases) have some doubts in this respect. The disparate results obtained in these two variables show that the willingness of this group to be trained is good, but not very effective, because the different types of disability are insufficiently considered. Our research does not include this specific objective; however, this aspect should be addressed in future projects, because some needs and accessibility are linked to their typology.

During the *focus group*, the audiovisual companies expressed their lack of knowledge about the capabilities of this group when it comes to carrying out their work, given the different types and levels of disability:

> *We recently came up with a subtitling position that we have outsourced and we would like to hire people with disabilities for this department, because we think it is a job that they could do and we don't know how to do it, we don't know how to describe that profile for an offer, nor what kind of training they could give you to do this job* (P1).

Regarding the accessibility of training tools, more than half of the experts (57.5%) are of the opinion that if *software*, applications and other digital resources are not accessible, they become an obstacle to training. Professionals from disability associations are the most sceptical (70%), followed by job portals and researchers (60%), with audiovisual companies (40%) observing the least difficulties in accessibility. The researchers in the focus group questioned themselves about this problem: "*are these courses adapted, do the teachers who give these courses know that they can have students with disabilities and that what they learn can be developed by people with disabilities"* (P8).

The digital context transforms the required training. This research investigates the work carried out by disability organisations and finds a notable agreement on the contents taught: basically *Office* package and user-level management of social networks. There is more disagreement on other training alternatives proposed, such as web design, basic programming, advanced social networks, audiovisual editing or web measurement and analytics. The results allow us to conclude that the qualification received in digital tools is not sufficient, as it does not respond to the skills most in demand in the audiovisual sector. It should be noted that professionals from audiovisual companies also consider that training is provided in programming at a basic level, and the associations highlight web design. However, the latter perceive that training is more varied (Figure 1).

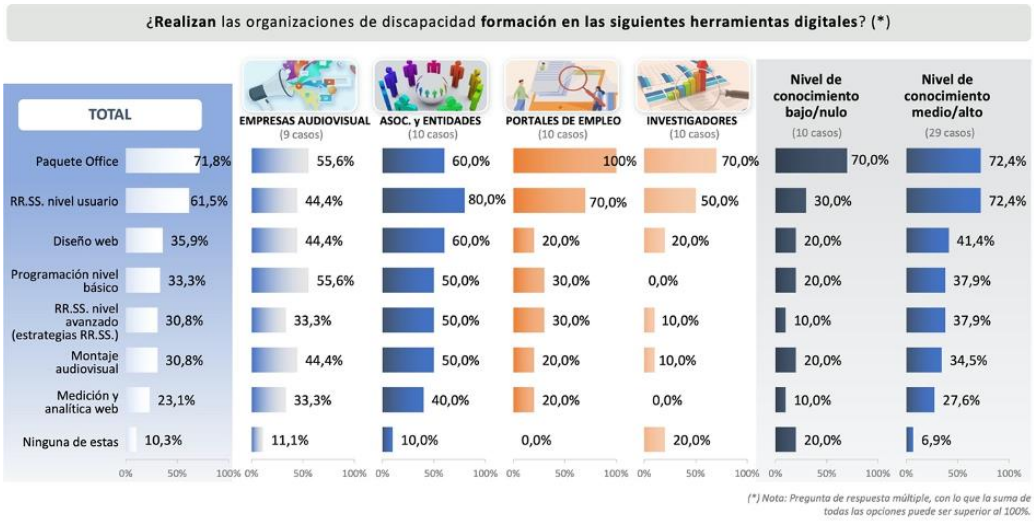

Figure 1. Training offer in digital tools of disability organisations. Results of the first wave of the Delphi.

This aspect of the need for specific and technical training is in line with what the companies in the audiovisual sector mentioned in the *focus group*, when referring to the difficulties they face in recruiting people with disabilities *"we receive profiles with more basic or general training, but then in reality they are not prepared or have not received the training to perform certain more specific or technical positions"* (P1). The associations clarify that the offers of technological profiles are absorbed by the market itself and do not require their intermediation: *"The reality is that a programmer who can really join the labour market finds work in the ordinary market, he/she does not need to come to an entity such as ours, because the market itself absorbs him/her"* (P5).

Regarding the most in-demand profiles in audiovisual communication, the findings of the first Delphi wave reveal that the first option is web designer (50%), followed by virtual community manager (37.5%), and very close in percentage, content creator and graphic designer. If we look at the four groups consulted, there are differences. Companies in the audiovisual sector confirm that web designers are among the most sought after, together with graphic designers. Special mention should be made of the computer programmer profile, which is in great demand according to the disability associations, although this view is not shared by the rest of the experts. Something similar happens with the SEO *professional;* while 50% of the researchers mention him/her as one of the main ones, the other experts do not consider him/her to be practically unknown.

In the second wave, the eight professional profiles most highly valued in the first wave are once again being considered. The participants in the study reiterated that the three most

in demand in the sector are web designer, content creator and virtual community manager. However, the results are heterogeneous in the four groups consulted; audiovisual companies prioritise content creators, computer programmers or graphic designers. The associations particularly emphasise the search for web designers. In the same proportion, the researchers mentioned that the most sought-after people in this field are virtual community managers. Finally, the job portals distance themselves from this trend; their majority opinion is for video game designers.

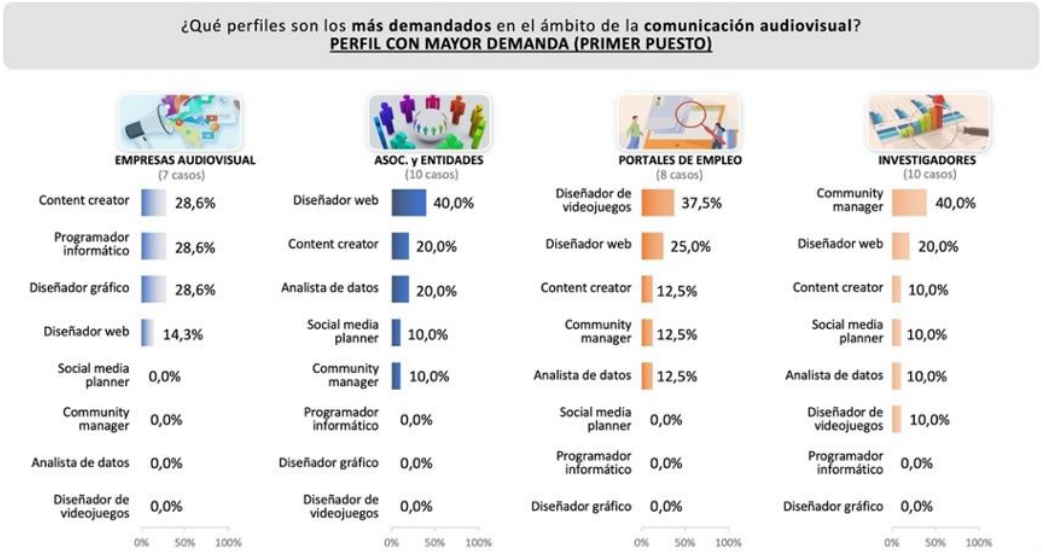

Figure 2. Most in-demand professional profiles according to experts in each area. Results of the second wave of the Delphi

In line with the previous results, we observe that the most sought-after skills in the audiovisual sector, almost one in three, are related to websites: design, architecture, graphic elements and usability. This skill is followed by content creation in different formats and software development. Web design is the most frequently mentioned skill, both by media companies and job portals. Associations, on the other hand, place more emphasis on *big data* analysis and software development.

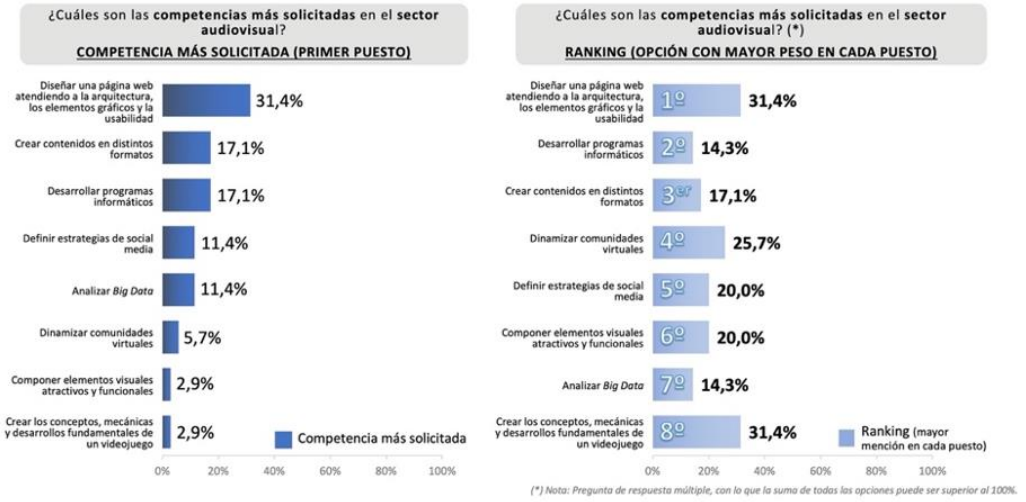

Figure 3. Skills most in demand in the audiovisual sector. Results of the second wave of Delphi

In order to explore the aforementioned skills in greater depth, the experts were asked about how easy it would be for people with disabilities to acquire these skills. The skill with the lowest barrier to entry is web design, followed by content creation in different formats and software development. Audiovisual companies, while noting the above skills, opt for the definition of social media strategies and the creation of video games (Figure 4).

Figure 4. Possibility for people with disabilities to acquire skills.
Results of the second wave of Delphi

In the focus group, the expert researchers observed that, depending on the type of disability, integration in the sector can be more of an opportunity than an obstacle. *"Who could do better sound effects than a blind person?"* (P7); *"I would put hearing impaired people mainly to do audio descriptions, they are super strict when it comes to speaking and always know the exact word... Or to do the scripts"* (P8). However, it is only when it is suggested that job portals realise the value that certain types of disabilities can bring:

> *It's something I had never thought about before. Perhaps a person with some kind of blindness, and who because of that blindness had a slightly more developed sense of hearing, could do the sound design for a series, for a film, I think it could add value [...] bring a different sensitivity and depth.* (P4)

In addition, these types of more specific or technical profiles are very scarce among people with disabilities, as they require a qualification more typical of vocational training or a university degree. Despite the fact that personnel selection is increasingly carried out through blind CVs, finding university graduates with disabilities is very complex because there are few of them and sometimes they are not identified as such in the offers specifically aimed at these audiovisual profiles. When the candidate has sufficient training, he/she does not always go to job portals specialised in disability because he/she prefers the ordinary channels. A person in charge of a job portal explains:

> *I always told them, take advantage of the positive discrimination, of the opportunity you get for having that disability certificate, and it doesn't differentiate you from anyone else, you are just like any other student. But maybe in this multinational they wouldn't have given you the opportunity without having that disability certificate* (P3).

Another expert, however, points out:

> *It is one thing if you enter a company as a qualified professional on equal terms and another if that employment comes from a quota with an imposed label (...). It is an opportunity, but it must also be very humiliating. I mean, I think it is good to make quotas, especially because it is going to be the only way, but I also understand that a person with sufficient capacity does not want to enter with the label* (P7).

Technologies can be a key factor in access to training and the acquisition of professional skills for people with disabilities. When asked about this, there is a clear consensus (85.7%) that 'digital technologies can increase the employability of these people', especially on the part of audiovisual communication companies, which fully support this. When asked about the importance of making technology accessible, there is general agreement across all four groups, especially among audiovisual companies, associations and job portals, with over 80%.

The percentages are lower when addressing the role of AI in improving the employment of the group (54.3%), with job portals (75%) and employers in the audiovisual field (71.4%) being the most supportive. In relation to the use of AI in the recruitment process, there is a lack of confidence due to possible discriminatory effects (51.4%). In the *focus group* prior to the Dephi, researchers were the most hopeful. They say that technologies democratise, because they favour physical and cognitive accessibility and improve the employability of this group. One of the interviewees pointed out that in any audiovisual product, we cannot forget people with disabilities:

> *You are missing out on three million people, audiences, who can give you money, who can go to see your films, who can do many things; so if you don't include accessibility, if you don't know what it is, you are missing out on a target audience that you can reach* (P8).

Finally, during the research we found a clear agreement towards teleworking as a facilitator for the inclusion of people with disabilities in the labour market (77.1%), which reinforces the idea that technology contributes positively to their inclusion.

Discussion and conclusions

The results confirm that the training in digital tools that people with disabilities receive from organisations is not sufficient in relation to the skills required. There is a need to promote specific skills in the audiovisual sector, i.e. software, applications and digital tools specific to this industry, within formal education, without distinguishing between the different levels, as this is not the main purpose of this research. The main problem detected among the four groups consulted is the existing lack of knowledge about people with disabilities and their possible difficulties in acquiring and developing professional competences for this field of work. This complexity increases when considering the different types and degrees of disability. This research is in line with Brown and Leigh (2018, 2020), Campbell (2009), Claiborne et al. (2011), Dolmage (2017), Moriña-Díez (2022), and Singer and Bacon (2020), as there is still a certain stigma attached to this group. When a person has a disability that is not visible (detectable) and has the appropriate training, to the required profile, they sometimes choose to hide it, renouncing the possible social benefits. If we consider the type of disability for their training, accessibility to content would improve in order to cater for specific professional profiles in audiovisual communication.

Among the findings, it is evident that there is a mismatch between the training in digital tools offered by disability organisations (*Office* package and basic management of social networks) and the profiles demanded by audiovisual companies, which request training in web design, content creation and management of virtual communities. In line with this, the most sought-after skill is knowing how to design a website. This skill is most popular with media companies and job portals. Moreover, it coincides with being the skill that experts

consider the easiest to acquire. Authors such as Bumble et al. (2019) have already pointed out that in addition to assuming basic skills, it is essential for this group to be incorporated into the development of other activities in training centres in order to acquire skills that are essential in their professional environment.

There is a clear consensus that people with physical disabilities are those who can adapt more easily to the audiovisual sector, while the difficulties increase with intellectual and mental disabilities. These data are in line with those provided by the INE, both in terms of access to training and subsequent labour market insertion.

Finally, with regard to technologies, the study reinforces what Medina-García et al. (2021) pointed out, recognising that they lead to improvements in learning and integration. In the audiovisual sector, digital skills are essential for the management of a wide range of tools associated with their multiple professional profiles. This, as experts point out, can increase the employability of people with disabilities. In this sense, teleworking facilitates their inclusion, as our results show, provided that the digital tools are accessible and have a universal design. Herrero-De-la-Fuente and Jiménez-Narros (2023) recently advanced that AI makes it possible for any web page to make its contents easy to read, overcoming some of the barriers encountered by people with cognitive (intellectual) disabilities. The study by the Ministry of Social Rights and Agenda 2030 (2023) also expresses this ambivalent, optimistic and at the same time cautious vision, warning that the interesting thing about the development of this technology is that no one is left behind and that it promotes inclusion. At the same time, this document encourages the issuing of certificates of inclusivity for AI systems. Under no circumstances can these technologies lead to an increase in the digital divide in relation to people with disabilities.

In conclusion, it should be noted that this research is based on a global approach to technologies and the group, so that no specific results are obtained for the different disabilities. It is therefore desirable to undertake similar research focused on the different typologies and digital tools.

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