


## **Audiovisual media literacy in people with visual disabilities: audiovisual language and narrative as tools to improve the cinematic experience**

Alfabetización mediática audiovisual en personas con discapacidad visual: El lenguaje y la narrativa audiovisual como herramientas para mejorar la experiencia cinematográfica

Media literacy audiovisual em pessoas com deficiência visual: a linguagem e a narrativa audiovisual como ferramentas para melhorar a experiência cinematográfica

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## Abstract

Understanding audiovisual works and the quality of the viewing experience are two of the main challenges faced by people with visual impairments. This article addresses the importance of media literacy plans for this group and proposes the design of a training program that facilitates knowledge of the codes of language and audiovisual narrative as a tool to achieve an improvement in their critical capacity, facilitating learning more in line with the technological transformations of today's society.

Through a review of the scientific literature and a cross-sectional mixed methodological model that combines the use of surveys with interviews with experts, their needs, interests, and training demands with respect to audiovisual media were identified, contributing to optimizing the program's design.

The analysis of the data obtained confirms that this type of proposal contributes towards a significant improvement in the lives of people at risk of social exclusion, facilitates their interaction with the world, and collaborates in the elimination of barriers that interfere with the improvement of their digital and media skills.

**Keywords:** Audiovisual language; audiovisual narrative; film; media literacy; training program; visual impairment

## Resumen

La comprensión de las obras audiovisuales y la calidad de la experiencia de su visionado, son dos de los principales desafíos a los que se enfrentan las personas con discapacidad visual. El presente artículo aborda la importancia de los planes de alfabetización mediática para este colectivo y propone el diseño de un programa formativo que facilite el conocimiento de los códigos del lenguaje y la narrativa audiovisual como herramienta para lograr una mejora en su capacidad crítica, facilitando un aprendizaje más acorde a las transformaciones tecnológicas de la sociedad actual.

Mediante una revisión de la literatura científica y un modelo metodológico mixto transversal que combina el uso de encuestas, con entrevistas a expertos, se han identificado sus necesidades, intereses y demandas formativas en relación con los medios audiovisuales, contribuyendo a optimizar el diseño del programa. El análisis de los datos obtenidos nos confirma que este tipo de propuestas contribuyen a una mejora significativa

en la vida de las personas en riesgo de exclusión social, facilitan su interacción con el mundo y colaboran en la eliminación de barreras que interfieren en la mejora de sus habilidades digitales y mediáticas.

**Palabras clave:** Alfabetización mediática; cine; discapacidad visual; lenguaje audiovisual; narrativa audiovisual; programa formativo

## Resumo

A compreensão das obras audiovisuais e a qualidade da experiência de visualização são dois dos principais desafios enfrentados por pessoas com deficiência visual. Este artigo aborda a importância dos planos de alfabetização midiática para este grupo e propõe o design de um programa educacional que facilite o conhecimento dos códigos da linguagem e da narrativa audiovisual como ferramenta para alcançar uma melhoria em sua capacidade crítica, permitindo uma aprendizagem mais alinhada com as transformações tecnológicas da sociedade atual.

Por meio de uma revisão da literatura científica e de um modelo metodológico misto transversal que combina o uso de pesquisas com entrevistas a especialistas, suas necessidades, interesses e demandas de treinamento em relação aos meios audiovisuais foram identificados, contribuindo para otimizar o design do programa.

A análise dos dados obtidos confirma que esse tipo de proposta contribui para uma melhoria significativa na vida de pessoas em risco de exclusão social, facilita sua interação com o mundo e colabora na eliminação de barreiras que interferem na melhoria de suas habilidades digitais e midiáticas.

**Palavras-chave:** Alfabetização midiática; deficiência visual; cinema; Linguagem audiovisual; narrativa audiovisual; programa de treinamento

## 1. Introduction

According to the 2020 survey on disability, personal autonomy, and situations of dependence, from the Spanish National Institute of Statistics, there are more than one million individuals with some type of visual impairment Spain (INE, 2020). This number is increasing, due to the aging of the population and the proliferation of pathologies related with the use and abuse of digital screens. Therefore, we are presently facing a problem that must be acted upon, from different perspectives, especially from the area of education.

The Sustainable Development Goals from the Agenda 2030, established by the General Assembly of the United Nations in 2015, described the need to promote high quality, inclusive and equal education that would allow decreasing the digital divide, and which

would facilitate the social participation of disabled individuals, stressing the idea that media and technology must not isolate, but instead include (García Galera et al., 2018). From this perspective, medial literacy projects are an essential tool for the improvement of quality of life, by facilitating learning in accordance with the technological transformations of current society, to promote autonomy, and to broaden the possibilities of not only accessing greater knowledge, but also to enjoy the possibilities that could be provided by this new knowledge.

The cinema, as an audiovisual medium of information and entertainment, is a handicap for this collective, despite its potential as a vehicle for learning, as Hernández and Montes indicate: the mode of tactile access, the most immediate and adequate when trying to assess the properties of objects or to read text-based information with Braille, is discarded" (2002, p. 23), leaving the ear canal as the only access point to audiovisual information. Thus, audio description has become one of the main tools for the reception of audiovisual content, limiting the perceptual experience and the pleasure derived from it. However, media accessibility and education has been promoted from different institutions – particularly the Spanish National Organization of the Blind (Organización Nacional de Ciegos Españoles; ONCE)-, with an understanding that more can be done, and given the interests and needs of the collective, appropriate programs can be implemented.

Educators in the area of narrative and audiovisual language are aware of the possibilities provided by the knowledge of syntactic, semantic, and/or aesthetic elements in diverse areas such as the teaching of languages (Contreras Castillo, 2015), teacher training (Saavedra Munar et al., 2022), citizen education, or values education (Sell Trujillo et al., 2014). From this point of view, and based on our professional experience, we begin the task of researching the use of audiovisual media on collectives of individuals with different degrees of visual impairments, considering the limitations that were originally observed in a context with these characteristics. This is how the idea emerged to work in collaboration with the ONCE, with the idea of a media literacy program that will teach those who cannot see, how to watch movies. With backing from the Foundation, and the support from the CINESA group, as a representative of the cinematographic sector, the first stage of the project was performed, which will be presented in the following pages, and which describes the previous steps that need to be addressed before the implementation of a training program.

## **1.1. Technification of society, media literacy, and disability**

The flow of information that defines and models culture in the 21st Century is unavoidably configured by technologies and communication media. Both of them shape a complex and ever-changing media environment to which we must adapt, given that, as indicated by Bauman and Payás (2013), modern society lives in a liquid, unstable, and volatile environment, in which knowledge is transitory and in which the rules of creation,

distribution, and consumption of information have notably transformed (Villegas Simón, 2014).

This context demands a re-thinking of the concept of audiovisual literacy and digital competence, as we do not only have to acquire skills to understand the messages from the media and communicate in this hyper-connected society, but we also need to know how to use technologies –and we are living in times with metaverses, artificial intelligences, and augmented realities- in an effective, ethical, and responsible manner (García-Ruiz and Pérez-Rodríguez, 2018). For the same reason, any process of conscious and active immersion in these technologies, implies the prior training of citizens that will allow them to get to know, analyze, and generate this much needed critical spirit to deal with the vast amount of codes, symbols, signs, digital languages, or audiovisual creations with which we are in permanent contact.

Audiovisual literacy promotes understanding and helps in interpreting the context within which these languages are being utilized, fostering creation, analysis, and reflection, and ultimately, facilitating enjoyment related with the pleasure of being a participant in this context, especially when speaking in terms of a collective with some type of impairment or disability.

Dealing with audiovisual media, technification, and disability, implies entering into a necessary and conscious debate on the real level of access of these individuals, as well as the steps that have been taken by institutions and states to provide intervention policies for inclusive education (Aguaded, 2009). Thus, in the last twenty years, diverse regulations have been promoted nationally and internationally, in an attempt to facilitate their inclusion in public life, in order to convert universal access into something that is real and effective. Thus, in 2003, in Spain, the Law of Equal opportunities, non-discrimination, and universal accessibility of disabled individuals was approved, becoming the first general law on this respect. In 2007, the Regulation on the basic conditions for the access of people with disabilities, to technologies, products and services related to the information society and social media was approved (BOE, 2007), followed by the Convention on the rights of people with disabilities a few months later (BOE, 2008), and by the approval of the Revised text of the General Law on the rights of individuals with disabilities and their social inclusion (BOE, 2013).

With respect to the regulations specific to the audiovisual sector, different ones have been approved starting in 2003, such as the Law of Audiovisual Services, the Law on Telecommunications, the General Law on Audiovisual Communication, or the Film Law, which has had many modifications since its creation in 2007 (García Castillejo and CERMI, 2015).

As for the documentary analysis of the scientific literature, a growing concern has been observed with respect to the growing relevance of the educational use of the ICT with collectives of people at risk of exclusion. This matter has been addressed in proposals

on adaptive and personalized learning (González et al., 2022), universal accessibility, and digital divide (García-Prieto and Figuereo-Benítez, 2022), emergent technologies (Scolari et al., 2018) or even from the perspective of the analysis of its representation in discourses on fiction (Álvarez Moreno y Mora de la Torre, 2020). These data show that despite the underlying interest of researchers, it is still necessary to create practical strategies centered on overcoming barriers to access that promote the acquisition of audiovisual competences, and very importantly, that have an effect on the generation of motivation, as individuals with disabilities must face a complex world that is subjected to constant technological transformations.

The present project is based on this latter idea, of trying to make visible and give a voice to a collective such as individuals with different types of visual impairments with which communication media have little interaction, and therefore, for which there is a lack of projects or proposals for accessibility (Figuereo-Benítez and García-Prieto, 2021). It is understood that the aid and pedagogic proposals must not exclusively be adhere to the area of formal education, given that different actors must be involved. The family, as an indispensable nucleus in any education initiative, must be considered, given that a multiplier effect can be achieved from this context (Domínguez Martínez, 2010). Similarly, businesses, foundations, social organizations, and certainly, communication media themselves, must assume the responsibility for this task, by providing proposals that complement or reinforce this part of formal education that is conducted at education centers in their different levels (Aguirre Pérez y Vázquez Moliní, 2004). This is not a matter of Corporate Social Responsibility, it is a question of development, as indicated by Suárez Ibáñez and López-Catalán (2013), of “universalizing reciprocity” (p.71), a concept that refers to the process through which businesses become involved in the problems of a society to which they belong, giving back part of their success or profits as actions that improve the life of individuals, facilitating greater knowledge and/or more responsible and just consumption.

On the other hand, as stated by Camps (2009), education, not only as a right, but fundamentally as a process, is undergoing a process of transformation, as it must adapt to an environment full of screens or instruments and applications that until very recently were completely unknown, and “education cannot be addressed with the minimum realism by ignoring that this environment exists” (p.19). In the case of individuals with visual disabilities, media education is indispensable for ensuring that this environment does not become hostile or alienating, as audiovisual media are an active part of the construction of our relationship with the world, a spokesperson of culture, values, and even beliefs, as indicated by García Crespo et al. (2012), the omnipresence of audiovisual media “has become an element that shapes the senses, reality, the truth, and the utopias. Obtaining autonomy with respect to these contents and technologies, is fundamental for the exercise of citizenship” (p.9).

Ultimately, the world is in itself audiovisual, and results in an overwhelming consumption of images in an exercise of hyperstimulation of contents to which individuals with visual

disabilities do not have access to in conditions of equality, which is directly connected with the recommendations from the Education and Policies for Creativity Report from the UNESCO (2022) or the study on accessibility and equality of the World Health Organization (OMS, 2011). It is, within this context, that the present media action is proposed.

## **1.2. Accessibility of audiovisual contents of individuals with visual disabilities: audio description**

According to Belén Ruíz, the director of the Spanish Center of subtitling and audio description (CESyA), the blind or those with a degree of visual disability, as an audience, have traditionally been banned from accessing the cinema (Servicio de información sobre discapacidad, 2013) as they have not been provided with an adequate accessibility service. This problem is more strongly related with social awareness than the technology needed, as observed in every country in the world. In fact, Spain is one of the few with the AENOR UNE 153020:2005 standard, whose objective is to provide specific recommendations on how to create an audio description. As Mendoza (2016) indicates, this service works as a support for audiovisual communication, translating and explaining with words, everything that is occurring in the images. In this way, the spectator with a visual disability can appreciate the works in way that is the most similar to a person who can see, although the compliance with the guideline must be monitored to avoid an overload of information that hinders the comprehension of sound or interferes with the internal dialogues and internal voices, as indicated by the ONCE foundation.

This standard is the first step towards integration and accessibility in movie theaters, exhibitions, dances, opera, or other events, and can be equally applied to television channel programs, which have slowly but gradually added audio descriptions to fiction series and entertainment programs, somewhat similar to that observed in platforms with content streaming, which are currently undergoing a transition towards a more inclusive model (Ellis et al., 2016).

However, even though the greatest concern until a few years ago, with respect to media accessibility, was the quantity of material that was audio described or sub-titled, in the last few years, a much needed re-direction has been observed towards the quality of this material (Richart-Marset and Calamita, 2020), which has brought with it the appearance of new applications that aim to provide more precise and clear information with respect to the techniques for the capture and synchronization of sound, such as the case of AudescMobile. This free application, promoted by the ONCE and the Vodafone Foundation, allows following the audio descriptions available in its catalogue, wherever users desire – movie theaters, television, DVD/Blu-Ray- through the use of their own smartphones and headphone. As Ángel Luis Gómez, an R+D technician at ONCE-CIDAT explains: “I can go to any friend’s house or be anywhere, and I can access the same information about a movie as my friends who can see. I do not need to ask: what’s happening now?” (ONCE, 2016). This is,

without a doubt, an important qualitative jump, as it not about a blind person, or someone with a specific degree of visual disability going to a “special” session of adapted projection, but it is about this person being able to participate in and enjoy an audiovisual project in equal terms as a person who can see, as stated by those responsible at the Foundation.

Other experimental projects that are working in the same direction are the *ADLAB PROJECT: Audiodescription. Lifelong Access for the Blind* (<https://www.adlabprojet.eu/>) and the *HBB4ALL: Hybrid Broadcast Broadband For All* (<https://cordis.europa.eu/en>), both projects, funded by the European Commission, conduct research on technological solutions to ease the viewing of adapted audiovisual content in tablets, computers, or mobile phones (Fernández, 2019).

As for the technology of tactile and gesture-based interfaces as a soundless option for complementing audiovisual information, their commercial use has hardly been implemented, due to the cost of fabricating these devices for reading of images through dot-based codes, although prototypes of companies such as Dot Incorp (<https://www.dotincorp.com/>) allow glimpsing the technological horizon of great possibilities.

In the field of the experimental application of specialized audio descriptions, the study by Barnés Castaño y Jiménez Hurtado (2020) is relevant, for intersemiotic translations in the area of museums, when proposing a mode of application on images, both static and dynamic, that are automatically translated to words. Likewise, there are pilot programs with audio descriptions based on the use of virtual reality (Oncins et al., 2020), as well as mixed experiences in which a cognitive approach is utilized, based on the generation of mental images along with tactile support (Holsanova et al., 2015) so that we find ourselves in an empirical panorama open to innovation.

### **1.3. Narrative and audiovisual language as a tool for audiovisual media literacy**

Although we are subjected to a vast volume of audiovisual content in day-to-day life, this media over-exposure does not mean that were competent, audiovisually speaking. Although this subject is extremely interesting to address, it is not the object of study in the present article, so that we want to simply leave on the record, the social concern that exists on the effect of this overexposure in terms of consumption of information, detection of fake news, or the construction of stereotypes, among other diverse aspects (Delgado-Ponce and Pérez-Rodríguez, 2018), which provides us with an idea of the impact that narratives and audiovisual language could have in our conception and understanding of the world.

Considering our area of application, an audiovisual narrative is conceived, such as the articulation of all the language elements that shape an audiovisual work (Jiménez, 1993), those that shape an image –color, planes, visual composition, depth of field, angles, and

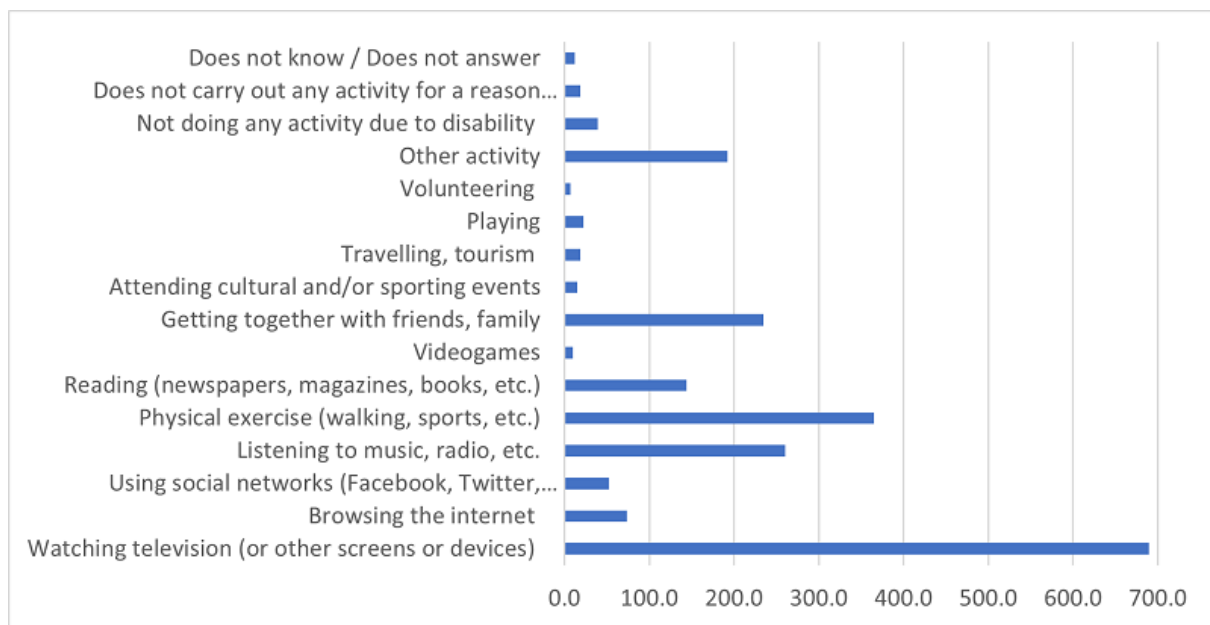


camera movement-, as well as those that make up the soundtrack –music, dialogues, effects, and silences- in an attempt to tell a story in an attractive manner, that excites, makes us feel, and transmit feelings to those who are the receivers of the discourses generated through it. This is not a simple sum of the elements ruled by some norms, but it is the art of audiovisual expression, and always aims towards a meaning (García and Rajas, 2011).

Time and space are also part of the elements that generate this meaning, to be able to not only communicate stories about the day-to-day present of an individual, but in the area of fiction as well, to transmit another reality, that of an imaginary universe, which, as it is being narrated, will have the appearance of being real. Audiovisual language is a tool that provides it with meaning, and for this, its recognition is indispensable in a society of information, digitalization, and technification, given that it allows us to interpret and interact with these types of stories (Portalés Oliva, 2019)

Starting with this theoretical foundations, it is necessary to establish audiovisual literacy programs that allow for the acquisition of critical knowledge about the messages and works created by this medium, especially if the audience to which they are aimed has some type of visual disability, as the process of narrative immersion, so necessary for enjoying a film, is extremely complicated to reach. In this sense, there is a scarcity of initiatives that have been conducted to this respect, as until today, the training has concentrated on audio descriptions (Vargas Vergara, 2013) However, in the survey about disabilities and dependence from the INE itself (2020) it is indicated that the main activity performed by individuals with visual disabilities in their free time is to watch television or other screens, as shown in figure 1.

Figure 1. Types of activities performed by people with visual disabilities in their free time



**Source:** Data from the Poll on disability, personal autonomy, from the INE (2020).

In fact, this activity has twice the number of users than the second most-common activity: *Physical exercise, go for a walk, sports*, which underlines the existing interest for audiovisual content, this reinforcing the idea of the present project.

## 2. Objectives and method

As already outlined in the sections above, the main objective of the project is to discover and analyze the needs of the visually impaired with respect to the use and enjoyment of audiovisual media, especially the cinema, to formulate, based on them, an audiovisual literacy proposal that could allow them to understand the codes belonging to the language, to improve their experience. Starting with this premise, a series of secondary objectives emerge:

- 1) To perform research on the concept of audiovisual literacy for people with visual impairments. This provides a solid theoretical framework for the posterior design of a training proposal, as it is based on the principles, regulations, and most effective practices in this area.
- 2) To analyze the current situation of individuals with visual impairments with respect to the use and access to audiovisual media, which will allow us to:
  - Identify the barriers they must face.
  - Understand the technology applied and assess if improvements can be made.
- 3) Propose a research methodology that provides homogeneity to the study and that allows for a multi-level analysis.
- 4) Create a first draft on an accessible and effective training proposal in accordance with the interests of the collective.

Based on these objectives, a series of research questions emerge, which have served as the common thread that guided this proposal, such as: what type of initiatives have been conducted on the blind or with those with a certain degree of visual impairment? Is there a real need to work on the creation of active media training plans? And derived from this, how could it affect the improvement of their day-to-day life? And even, what is the perception of the individuals in this collective with respect to their consumption of media?

### 2.1. Methodology

The social sciences, through observation, allow us to observe the patterns of interaction between societies, establish direct actions on them, and also, to learn from the results of its application. With this aim, the present work is approached with a mixed, cross-sectional methodology, based on quantitative procedures –measurement of variables and collection of exploratory data through a survey- and descriptive procedures, which allow discovering the experience and needs of those who are polled.

The study started with a previous exploratory review of the literature (Vilches, 2020) after which a more in-depth study was conducted through the use of tools used in inductive approaches, such as semi-structured interviews, which are efficient qualitative tools (Blasco Hernández y Otero García, 2008). More specifically, interviews were given to the head of the press office and multimedia content of the ONCE Foundation, and the Board of the Odeon Cinemas Group/CINESA, between December 2022, and February 2023, to obtain more specific knowledge on the situation, experience, and consumption of this collective with respect to communication media, and more specifically, the cinema.

The objective of using both techniques was the verification and comparison of the information obtained in three different moments in time through different methods, which is also known as methodological triangulation in the collection of data (Betrián Villas et al., 2013). This triangulation allows obtaining results that are more rigorous, especially when working with small samples, as it analyses the object of study from different perspectives (Requena and Ayuso, 2018), thereby allowing for an analysis in multiple contexts.

With respect to the use of polls, for a quantitative and/or qualitative analysis, a previous test must be conducted with a control group (Grasso, 2016). In this case, after a first interview with our contact at the ONCE foundation, a recommendation was given to propose its dissemination within the group of affiliates, as it was sufficiently representative, being composed by a total of 70,490 individuals, with almost 50,000 within the age range of those who could be consulted –older than 18 years old-. Under these guidelines, a model was prepared with the *Microsoft Forms* tool, and was tested with 8 individuals with diverse visual impairments, to validate its reliability, accessibility, and mean completion time (18 minutes). After receiving the opinions from the pilot study, a final version of the poll was created, comprised of 20 questions, divided into three blocks:

- Block 1. Personal profile and sociodemographic data.
- Block 2. Training received and previous knowledge on audiovisual media.
- Block 3. Assessment of training proposals and degree of satisfaction with the viewing experience.

It must be important to indicate that the pretest of the poll was providential, because, despite it being an adapted form that allowed the activation of the immersive reader, when the time came to answer the questions, it was observed that full accessibility was not attained. Thus, the way in which questions were asked was changed, and indications were provided on the value of the Likert-type questions, which allowed entering the data in an open format, given that those with severe visual impairments and complete blindness found great difficulties in precisely marking the data within the row, square, or column. Thus, the poll itself was our first reality check with respect to accessibility of digital content and/or multimedia, and it implied the first barrier for the development of the study.

In spite of this, a total of 92 responses were obtained, which is a high number of participants, considering the inherent difficulties of the group to be surveyed. The analysis of the data was mainly descriptive, based on frequencies, means, and percentages (López Romo, 1998), as the poll was designed with both closed-ended questions with exclusive nominal scales, dichotomous open-ended questions, open questions with a perceptive characteristic, and assessment questions, that is, a combination was made between identification, information, and opinion questions, in order to obtain reliable data that would allow us to make generalizations in the conclusions.

As the last methodological matter, we must indicate that considering the sample obtained, *Student's t* test was used as the statistical model to analyze the data. This technique, broadly used in the field of scientific research, allows for the comparison of groups or variables of interest, and the determination of significant differences between them, or if the correspondence of the data is random. In our case, it was verified that the theoretical assumptions necessary were met for it to be valid: the normality of the distribution of the variables, and homogeneity of the variances. Thus, although the sample was significantly small, it was statistically valid.

### 3. Results

The results are presented in two different levels. On the one hand, the quantitative data obtained from the poll are provided and explained. This analysis allows us to better understand our target population and helps us move towards the second level of the results: the formulation of a proposal of audiovisual literacy.

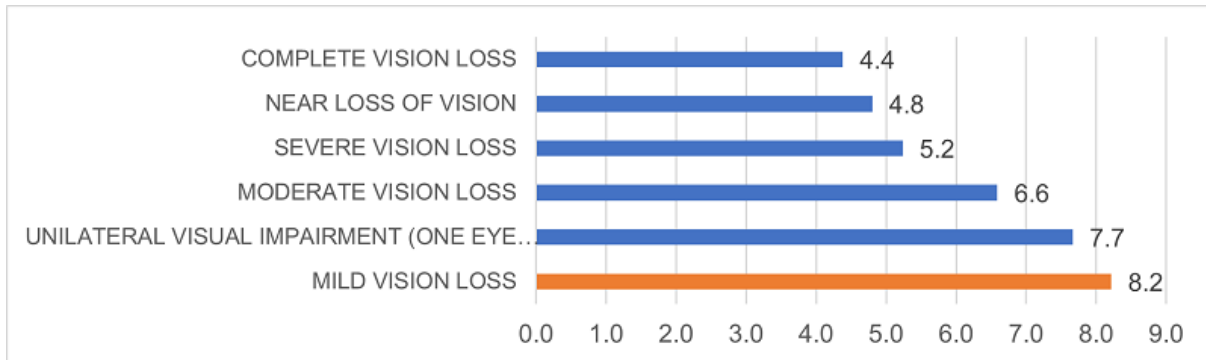
Table 1 shows the data from Block 1: Sample profile, composed by 47 women (52%), 39 men (42%), and 6 individuals who did not want to state their gender (6.5%). As for the stratification according to age, the majority presence of two groups was observed: those framed within the ages of 21-25, and those aged from 46-50. The third data set was the variable about their type of visual impairment. This variable is the most important conditioning factor when deciding on any training action, and it allows establishing the significant correspondence -*Student's t* test- with other questions from the questionnaire, so that an inferred meaning is obtained. A significant presence of individuals who were included in the "complete loss of vision" -24%, and "almost complete loss of vision"-21.7% was observed.

Table 1. Complete data and as a percentage of the profile of the collective of individuals with visual disabilities who were polled

<b>Block 1. Personal profile and sociodemographic variables</b>		
Variable	Total	Percentage
<b>Gender (total N =92)</b>		
FEMALE	47	52%
MALE	39	42%
THEY HAVE NOT GIVEN DATA	6	6,50%
<b>Age</b>		
15-20	4	4,30%
21-25	25	27%
26-30	8	8,60%
31-35	13	14,10%
36-40	8	8,60%
41-45	13	14,10%
46-50	21	22%
51-55	7	7,60%
56-60	5	5,40%
61-65	9	9,70%
66 or more	6	6,50%
<b>Type of visual impairment</b>		
ALMOST TOTAL LOSS OF VISION	20	21,70%
SEVERE VISION LOSS	18	19,60%
MILD VISION LOSS	14	15,20%
MODERATE VISION LOSS	15	17,30%
UNILATERAL (ONE EYE ONLY)	2	2,20%
TOTAL VISION LOSS	22	24%

Block 2 asked questions related with the specific training in audiovisual media, the assessment of the level of knowledge on this respect, and the degree of satisfaction with this training. The questions aimed at obtaining a more precise focus on the collective, and in fact, figure 2 shows the significant relationship between the variables “Type of visual impairment” and “Assessment of the level of knowledge about audiovisual media”, as this assessment increases as the degree of disability decreases.

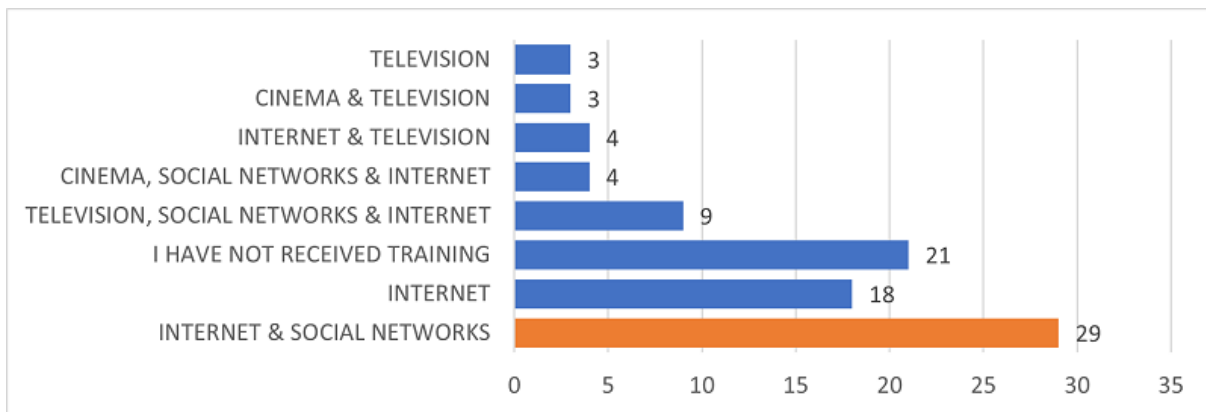
Figure 2. Mean values of the assessment on the perception on the level of knowledge about audiovisual media according to the type of impairment



Although the ranges shifted between 4.4 and 8.2, the mean of all the answers was 5.83, which can be considered sufficient, although with a high margin for improvement.

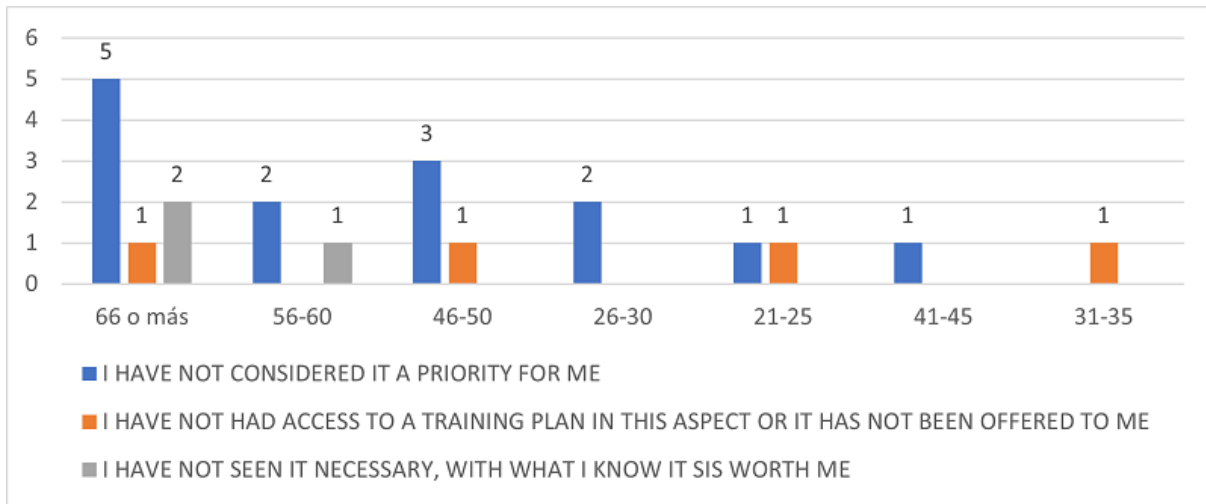
Figure 3 shows us what type of training on audiovisual media was previously received, highlighting the plans oriented towards social networks and internet. As it is a multiple choice question, simple and combined answers were obtained, although the most striking data was that 21 individuals indicated not having received training on media.

Figure 3. Training programs on audiovisual media received



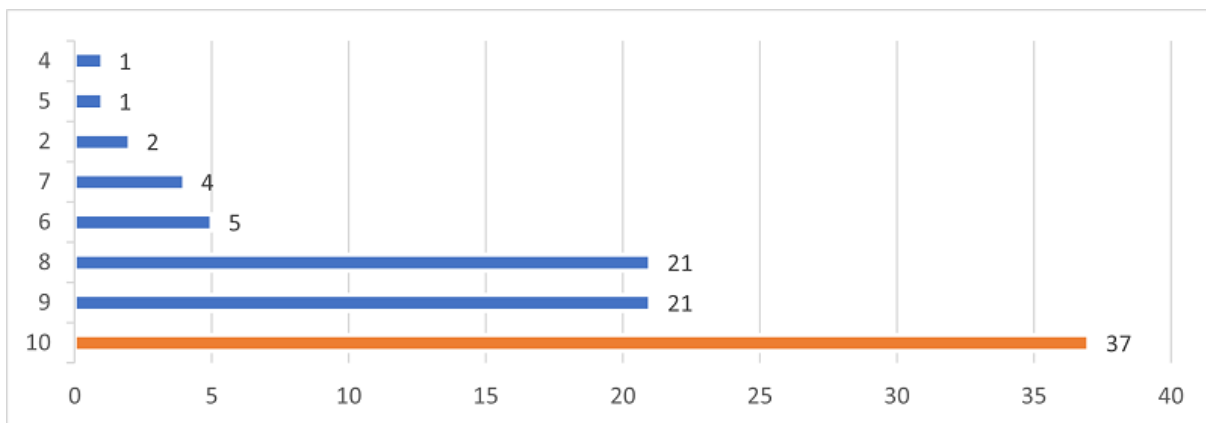
The itinerary generated in the survey when reaching this point allowed us to know the reasons why negative responses could be obtained about the training. Figure 4 shows that it was mostly due to a matter of priorities, and that these were found in the older age ranges.

Figure 4. Reasons why training was not received



As for the assessment on the need to receive adequate training, very eloquent answers were produced, as shown in figure 5, with a clear acceptance in this sense, as shown by a mean of 9.2 out of 10.

Figure 5. Assessment on the need for adequate training in audiovisual media, on a scale from 1 to 10



Block 3 contained another of the important aspects to know: the frequency of movie theater attendance and watching movies at home, as these data do not presently exist or are unknown. Figures 6 and 7 indicate that there is a growing relationship between the degrees of satisfaction with the cinematographic experience as a function of the frequency with which one visits the cinema or views movies at home.

Figure 6. Degree of satisfaction with movie attendance according to frequency, on a 1 to 10 scale

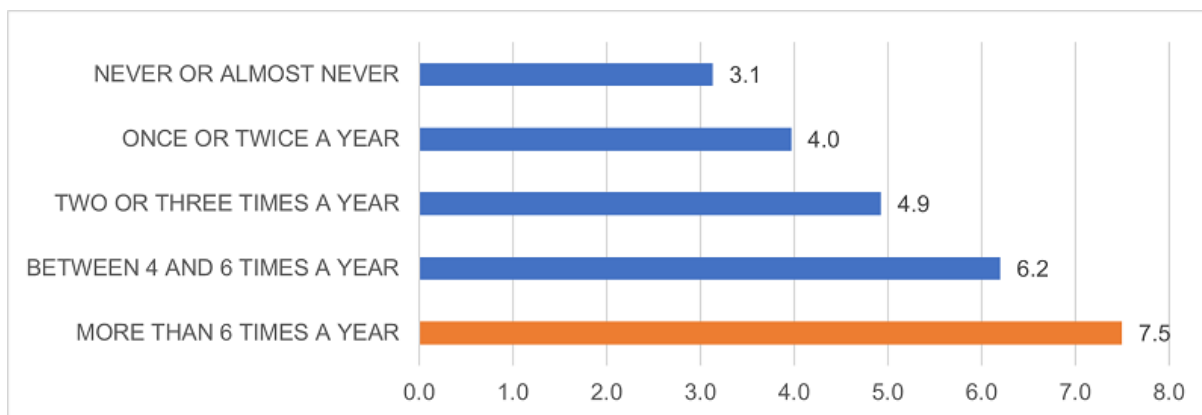
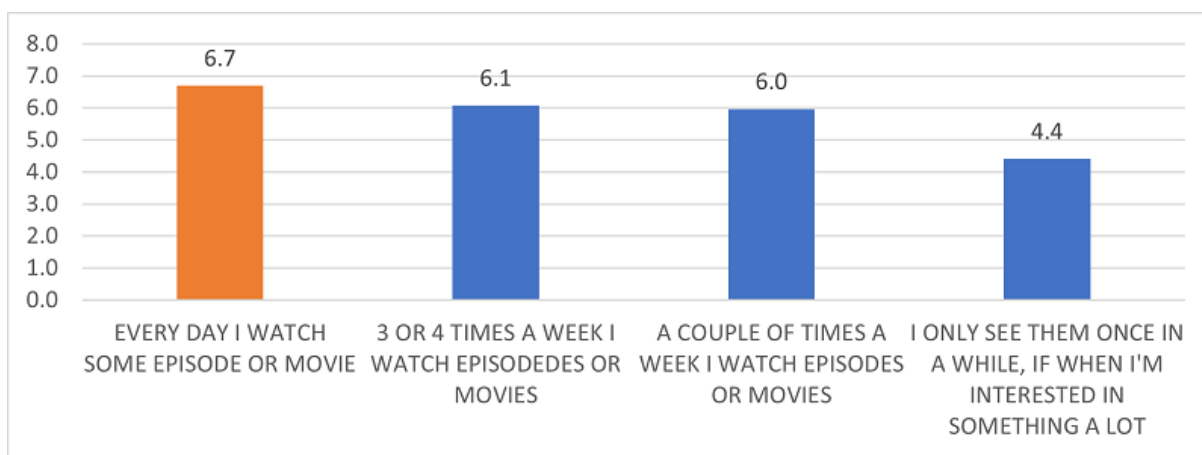


Figure 7. Degree of satisfaction with watching movies at home, according to frequency, on a 1 to 10 scale



However, it is important to highlight that while the mean for the satisfaction with movie theater attendance was 4.60 out of 10, at home this value was 5.62, which indicates that in this secondary space, there are less barriers against watching movies, so that its assessment was somewhat higher. This data presents us with a difficulty that must be considered when formulating a training proposal, as leaving this comfort zone may imply an initial resistance.

In addition to this data, we must add the information obtained through the semi-structured interviews given to the experts from the ONCE Foundation and the CINESA group -table 2-, as their opinions have not only served us to better understand the current situation of individuals with visual disabilities and their problems related with access to



audiovisual media, but they have also provided us with the context necessary for the training proposal.

Table 2. Selection of fragments from the interviews given to experts (ONCE Foundation and CINESA)

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The ONCE Foundation continuously carries out training and capacity-building programs due to the high demand from this community, as they need to adapt to an increasingly technology-driven world. In this regard, initiatives focused on media and audiovisual literacy are among our top training priorities, as evidenced by the Digital Talent (XTD) program.

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The INSERTA program, which emerged in response to the need for implementing policies of full inclusion for people with disabilities in society, has been solidifying a strategy of initiatives, sponsorship, and promotion towards their job placement. However, all these efforts always rely on acquiring appropriate training that meets society's demands. Similarly, we work to provide training that improves the quality of life for these individuals, which is why proposals related to leisure and recreational activities are essential.

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Cinema and television are highly demanded mediums among this community, mediums that, despite being attractive and of interest, are not very accessible, so despite their potentiality not only as a form of entertainment or information but also as a vehicle for learning, it is limited. In this regard, we demand more research and innovation.

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Audio description in cinema has been a significant improvement in this area, but it is a relatively young service. In Spain, serious efforts have been made in this field since the beginning of the 21st century. However, it is not a service that is equally liked by all individuals with visual disabilities. Despite the existence of development and application standards, in practice, it can be overwhelming as it incorporates a considerable amount of auditory information about the technique or audiovisual narrative. This interference can affect the comprehension of the meaning and enjoyment of the work itself.

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A training program focused on audiovisual content for this group should be designed from the perspective of those who cannot see. It should take into account their concerns and limitations, as this is the only way to address and facilitate their overcoming of challenges. Additionally, the program should consider the incorporation and utilization of other senses besides hearing. Practical actions that facilitate the interpretation of audiovisual content should also be considered, as it would streamline the amount of auditory information that needs to be processed.

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At CINESA, we understand that going to the movies is not just about watching a film; it's an experience in the broadest sense of the word. That's why in recent years, we have been implementing *Whatscine* technology, which enables us to transform the theater into an accessible environment for people with disabilities, without impacting the rest of the audience. This is what inclusion and accessibility are all about.

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We consider that there is an audience that doesn't go to the cinema, even though they wish to, because they lack a service that meets their needs. This audience consists of people with visual disabilities, and currently, with the technological advancements in the field of movie exhibition, it is a group that can be catered to in order to enhance their enjoyment. This is especially important since it is an audience that genuinely desires to go to the movies. In a way, they are a "cinema-loving" audience.

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The experience in a movie theater is not comparable to the experience at home; every true movie lover knows that. In this regard, movie theaters have pending work with individuals who are visually impaired, but we are working on it. We have Dolby 7.1 surround sound rooms, ScreenX projection for 240° viewing, and DBOX seats with immersive motion that can be adjusted by the user. These technologies can be crucial tools for this type of audience, but we need to make them known and explain their usefulness.

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**Source:** Based on the semi-structured interviews given to experts.

## 4. Discussion

Understanding and knowing the world around us allows us to interact in an autonomous, critical, and independent manner, as full citizens (Gozálvez-Pérez and Contreras-Pulido, 2014), for this, the creation of adaptation and comprehensive accessibility plans that consider all the realities must be a goal, for which there are many tools and technologies that, as we have observed, are undergoing constant evolution.

In this sense, audiovisual media, and more specifically, the cinema, is a fundamental piece that could contribute to this reconstruction (Russo, 2018), being key for reaching collectives such as individuals who have some type of disability, whom, as we have observed, demand more specific training plans that can provide them with improvements in two specific areas:

- a) Degree of understanding of the works, as the audio description is focused on the sense of hearing, sometimes overloading the quantity of information received, duplicating it, or presenting it in an insufficient manner, which is a limiting factor.
- b) The viewing experience, that is, the degree of enjoyment that could be experienced, which is associated with the creation of more immersive and empathetic emotions, basic pillars of audiovisual narrative (Pérez, 2019) and which arrive as a consequence of the achievement of the previous point.

As a response to both matters, a first draft was designed, thereby achieving one of the main objectives of the work. This draft includes the contents to be taught as different modules, which contain the description of the objectives, results from the learning, and training actions, as shown in table 3. Also, a timetable of the sessions was suggested, in order to have a calendar that facilitates the monitoring of students and their better participation.

This program, conceived from the study of the data and the interviews given to experts from the ONCE foundation, must first pass the first filter in the shape of the project managers, to guarantee that its content, its distribution, and the methodological tools proposed, are in agreement with the principle of universal accessibility. Thus, it is understood that it would be convenient to count with the co-participation of the collective of visually-impaired individuals for its review, as they are the ones who specifically know the barriers that hinder their learning, and that which interferes with their digital and media skills.

Table 3. First draft of the training program

MODULE	OBJECTIVE	LEARNING OUTCOMES	ACTIVITIES	ESTIMATED TIME
<b>Introduction</b>	Motivate students to participate. Raise awareness about the need to understand the elements of audiovisual language and narrative to enhance the comprehension of works and improve their cinematic experience	Listen and learn	1. Personal introduction of each participant: favorite films, topics of interest, actors/directors they would like to know more about	45 minutes
<b>Module 1. What is Audiovisual Narrative?</b>	What is Audiovisual Narrative? Understand the concept and different types of narratives based on the discourses they aim to create	Identify different types of narratives in the examples discussed in the classroom Actively participate in creative discussions that may arise in each case	1. Watch excerpts from various works: spots, music videos, news, films	60 minutes
	Understand the evolution of narrative over time	Develop interpretative and communicative skills Actively participate in creative discussions that may arise in each case	1. Create narrative or film analysis sheets Provide interpretative comments on the works or excerpts viewed	90 minutes
<b>Resumen Module 1</b>	REINFORCEMENT - FORUM - PRACTICAL WORK			60 minutes
<b>Module 2. Audiovisual Language: Elements</b>	Understand the basic elements of audiovisual language in the visual realm (Part I): Basic terminology and Shot scale	Identify different types of shots	1. Create examples of different shot types using a mobile phone 2. Watch excerpts	60 minutes
	Understand the basic elements of audiovisual language in the visual realm (Part II): Camera angles and movements	Identify different camera angles and movements	1. Create examples of different angles using a mobile phone	60 minutes
	Understand the basic elements of audiovisual language in the visual realm (Part III): Visual composition	Identify compositional schemes	1. Watch excerpts	90 minutes
	Understand the basic elements of audiovisual language in the visual realm (Part IV): Lighting	Identify color patterns in lighting and their associated synesthesia	1. Illuminate a scene	60 minutes
	Understand the basic elements of audiovisual language in the sound realm (Part I): Speech and music Understand the basic elements of audiovisual language in the sound realm (Part II): Effects/Noises and silences	Differentiate between audio description and internal sounds in works	1. Watch excerpts	60 minutes
<b>Summary Module 2</b>	ANALYTICAL VIEWINGS FOR REINFORCEMENT - FORUM - PRACTICAL WORK			60 minutes
<b>Module 3. Narrative Time</b>	Understand the characteristics of narrative time	Identify different ways of depicting the passage of time in audiovisual works	1. Watch excerpts	60 minutes
<b>Module 4. Narrative Space</b>	Understand the types of narrative spaces: Natural/Artificial, Explicit/Implicit	Differentiate between spaces of different nature	1. Watch excerpts	90 minutes
<b>Summary Modules 3 y 4</b>	ANALYTICAL VIEWINGS FOR REINFORCEMENT - FORUM - PRACTICAL WORK			60 minutes
<b>Module 5. Characters and their conflicts</b>	Understand the typologies of characters and their narrative functions	Categorize characters	1. Create a character profile	90 minutes
	Understand the types of conflicts	Establish relationships between conflicts and objectives	1. Watch excerpts	60 minutes
<b>Summary Module 5</b>	ANALYTICAL VIEWINGS FOR REINFORCEMENT - FORUM - PRESENTATION OF PRACTICAL WORK			90 minutes
<b>Module 6. Farewell. Satisfaction survey</b>	Critically evaluate the course's learning outcomes.	Listen and learn	Complete the satisfaction survey Distribution of supplementary materials	45 minutes
<b>TUTORING</b>				5 hours
<b>TOTAL DURATION 25 HOURS</b>				

Source: created by authors from the methodological model of training proposals by López Mayor y Cascales Martínez (2019).

We also confirm that the application of the methodology proposed has allowed us to compare data about the behaviors and experiences –observation- with structural information –quantitative analysis-, being adequate for our purposes, and providing us with a global view to the study (Andréu Abela, 2011) which can help us formulate new research studies in the future.

Lastly, we must leave on the record that the work with media literacy proposals contributes towards the social inclusion of individuals with visual disabilities, improving their interaction with the world that surrounds them, and therefore creating citizens who are informed and participative. This proposal is defined as indispensable, as audiovisual learning facilitates their approach to media in a critical manner. As a result, the possible improvement, as small as it may be, destined towards increasing the experience of reception of a person with any type of visual impairment, is a goal that not only improves their own routine, but also the routine of those who surround them. Thus, as stated by the CINESA group, we must continue to investigate on this respect, as technology advances very fast, especially for those who cannot follow it or who must make great efforts to adapt to it. Ultimately, this is not about media consumption, but it is about making it into a creative tool of personal growth and social progress, because it is no longer enough to have the tools in our hands, we must also know what to do with them.

## Author's contribution

**Marta González Caballero:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Writing-original draft and Writing-review- and editing. **Victoria Mora de la Torre:** Data analysis, Investigation, Methodology, Writing-original draft, and Writing-review- and editing. All authors have read and agree to the published version of the manuscript. Conflicts of interest: The authors declare that they have no conflict of interest.

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