



RADIOVISION: CONSUMPTION AND EVALUATIONS OF A SAMPLE OF UNIVERSITY COMMUNICATION STUDENTS

MANUEL SÁNCHEZ CID¹, ELENA CUEVAS-MOLANO¹, ALICIA LÓPEZ CARRAL², FERNANDO MARROQUÍN-CIENDÚA ³ ¹ Rey Juan Carlos University, Spain ² European University of Madrid, Spain ³ University of Bogotá Jorge Tadeo Lozano, Colombia

KEYWORDS

Radiovision Visual radio Digital radio Radio Radio and university students Radio consumption Radio communication

ABSTRACT

This research examines various issues concerning radio with video as a form of content production. After a clarifying reflection on the state of the question, focusing on the definition of the model and specifying the methodological procedures, the opinion of a target sample of university students aged between 18 and 24 was collected with regard to the communicative characteristics of this type of radio. The resulting data show a strong preference for its qualities and capabilities, while at the same time contrasting with its consumption rate.

Received: 29/ 11 / 2024 Accepted: 09/ 12 / 2024

1. Introduction

Throughout its history, radio has consistently leveraged technological advancements as a means of adapting to the evolving landscape of communication. The advent of digitalisation can be regarded as one of the most transformative developments in recent decades, significantly impacting the processes of production, broadcasting, and reception of radio content. The integration of the radio medium with digital technology, with the Internet acting as a primary conduit for digital functionality and its associated services (Franch & Robles, 2020), has positioned radio within a multitude of non-dedicated reception systems, including computers, televisions, and notably, smartphones. This has resulted in a significant expansion, with increased presence on a range of platforms and integration into the daily lives of users (Cedeño et al., 2017). Consequently, the digitisation process has enabled significant developments in terms of formats and creative possibilities, incorporating diverse elements, both auditory and visual (Pedrero-Esteban & Herrera-Damas, 2017; Piqué i Abadal, 2018), along with other advances.

This reconsideration of the expressive potential of a medium in which sound remains the primary mode of communication (Kischinhevsky, 2016) and to which visuals are introduced as an additional element (Berry, 2013) appears to be This approach is based on a strategy of reaching out to that part of society that is more attuned to visual habits and new ways in which information is consumed (Cardona Bedoya & Vaca González, 2019), rather than being driven by a need to survive or improve the quality of its productions. From this perspective, and in light of the fact that radio has become a multimedia hybrid as a result of digitalisation, it is reasonable to conclude that technological innovation should be regarded as an opportunity rather than as an element that is disruptive in nature (Prata, 2016). In particular, when the incorporation of these new forms of expression does not result in limitations but in an enabling resource (Cunha, 2016), as well as a free alternative for consumers.

Nevertheless, despite the expansion of possibilities for the production, broadcasting and reception of radio content, including video signals, the data on consumption in Spain is derived from the report of the Marco General de los Medios 2024 (AIMC. Asociación para la Investigación de Medios de Comunicación, 2024, p. 31)/General Framework for the Media in Spain 2024 (AIMC, Media Research Association, 2024, p. 31). The data indicate that the radio audience by type of wave exhibits the highest level of penetration for FM-only radio, with a clear predominance (44.9%) over the different radio systems of Internet reception (11.3%) and DTT (1.4%). Nevertheless, the versatility of a dual sound and visual language capable of connecting with other media and audiences means that the sector views this combination as an inclusive, but not exclusive, agent of change. However, technological progress is not without controversy, giving rise to doubts in this case about the need for such a pairing, about whether radio with video is still radio, and about its own definition (Ballesteros, 2014; Pedrero-Esteban, 2018).

1.1. Establishing the Video Radio Concept

Different authors have proposed various conceptualisations of radio with video. The most common include "radiovision" (Palazio, 1999; Cavia, 2016), "visual radio" (Pedrero-Esteban, 2022), "radio with image" (Zambelli, 2023), the term "radio cam," or "radio that can be seen," which is used by Radio Nacional de España, and "televised radio" (García Lastra, in Ballesteros, 2014). This last term appears to be more widely rejected due to its direct association with television. However, in the early days of radio with a video signal, it was precisely the means provided by television that were used to produce its audiovisual signal.

However, given that sound-only radio is a medium capable of generating mental images, which are created by the listener, the concept of 'visual' may not be a necessary attribute, as it is inherent to its cognitive essence. In this regard, it is acknowledged that, from the perspective of sensory modalities, all media can be classified as 'mixed media' (Mitchell, 2005). Therefore, radio can be regarded not as an exclusively auditory medium, but as a 'mixed' medium due to its capacity to generate mental images. Ala-Fossi et al. (2008) define visual radio as a medium in which broadcasters speak in front of professional cameras and music is played, as well as artists' videos being watched. They posit that visual radio is more than a webcam showing the radio studio's signal.

In this study, the term 'radiovision' will be employed, as the authors believe that this concept unites a radio production model that combines audio and video, taking into account their distinct possibilities. These include displaying events occurring in the studio; visualising a mask or fixed image; incorporating a video signal from outside the studio; or utilising closed videos that are not related to the activity taking place in the studio. In other words, the model of radio is evolving from a product based solely on sound to one that incorporates visual elements as a means of enhancing the content, diverging from the conventional format. However, the term 'radiovision' may give rise to questions regarding the identity of radio and television (Cavia Fraile, 2016). It is unclear whether radio with video can still be defined as radio, whether it constitutes a form of television, or whether it is a hybrid that extends beyond the boundaries of traditional radio but does not fully align with the conventions of television.

In any case, and regardless of the nomenclature employed, it is incontestable that the video radio signal provides an alternative experience that transcends the concept of conventional radio.

2. Objectives

This research is derived from the current media ecosystem of digital radio via the Internet and explores the concept of radio with a video signal as a model of content production. Given the paucity of research examining the use, acceptance and valuation of radio with a video signal by radio consumers, and the absence of a study that specifically addresses these aspects in depth, it is of interest to obtain answers that allow us to prospectively position the state of the question, as well as to resolve questions of a communicative nature regarding this type of radio. In light of the aforementioned concerns, the objective is to obtain quantifiable data on the perception held by a target sample of university students regarding knowledge, consumption and differential communicative aspects between traditional radio (sound only) and radiovision (sound and video signal).

3. Methodology and Research Design

In light of the established objective, the definition of the variables and the procedures to be employed (Ibáñez & Egoscozábal, 2008), this work is presented as a descriptive study (Hernández-Sampieri & Mendoza, 2020) wherein disparate variables are examined, described and compared in an identical or analogous context. In this instance, a comparison is drawn between the data extracted from the questionnaire and the data derived from the media reports. In accordance with the previously established selection criteria (Arias Gonzáles & Covinos Gallardo, 2021), the data collection was conducted through surveys, which are regarded as a rapid and efficient enquiry process (Casas Anguita et al., 2003), with the type of sampling being convenience sampling (Torres et al., 2019). Consequently, this study may be regarded as exploratory in nature, as it seeks to elucidate and comprehend a subject or issue when there is a paucity of available information (Vizcaíno Zúñiga et al., 2023).

The quantitative technique has been employed as it is characterised by rigour, objectivity and a focus on the analysis of numerical data in accordance with established statistical procedures (Igartua Perosanz, 2006). This will facilitate the extraction of direct percentages, which will provide sufficiently clarifying and relevant information for the purposes of this research. The data was obtained from a specially created questionnaire, which was subjected to a process of contrast and verification at different stages of the research project and whose results were collated in a primary source.

The study is comprised of two distinct phases. The initial phase is a preliminary analysis of the extant literature on the subject matter. This is followed by a second phase, which is conducted in the field and employs quantitative survey methodology. In both phases, three consolidation processes were conducted. In the preliminary phase of the study, a comprehensive bibliographical analysis was conducted on the digital evolution of radio, with a particular emphasis on radiovision. Additionally, an in-depth examination was undertaken of various case studies of radio channels and stations that exemplify this type of production. Additionally, two personal interviews were conducted with the managers of a national Spanish radio station that broadcasts its content in two formats: The data was divided into two categories: sound only and sound plus video. The findings of these interviews served to reinforce the findings of the exploratory phase.

In terms of the questionnaire, the initial stage entailed the design and prior validation of the questions to be posed, with the input of five experts: two with an exclusively academic background and three with a dual affiliation to university teaching and the audiovisual sector. The second process of this phase was also divided into two sub-parts. The first focused on the intelligibility and understanding of the questions posed in the pilot model. This was carried out by means of an in-depth interview with a

convenience sample of 15 university students. This was conducted using a semi-structured instrument that had been created for this purpose. The final stage of the second phase entailed the construction of the definitive questionnaire model, the administration of the surveys to the target sample, and the collation and quantification of the resulting data.

The final closed-ended questionnaire comprised two categories and twenty-four variables. The initial category, which is more comprehensive in scope, comprises eight variables that address various aspects of radio consumption. The second category, comprising 16 specific variables, is concerned with the consumption of the radiovision model and the various characteristics associated with its communicative capacity. The variables were constructed using dichotomous and polytomous multiple-choice scales. The two categories of enquiry, along with the specific variables included in the survey, are presented in Table 1.

Categories	NO.	Variables
<u>v</u>		Age
- - - - - - - - - - - 	2	Preferred hours of consumption
	3	Place of consumption
	4	Consumption in parallel with another activity
	5	Type of broadcaster/content
-	6	Means of receipt
	7	Consumption pattern
	8	Listening/downloading platforms
-	9	Knowledge of radio with video signal
	10	Preferred type of radio consumed
	11	Time of consumption
Specific variables: Specific consumption of traditional radio vs. radiovision and communicative characteristics	12	Easier to change stations depending on the
	13	type of station. Type of radio most effective in message construction
	14	Video signal that adds the most information to the radio sound message.
	15	Contribution of the video signal from the studio with broadcasters
	16	Contribution of the video signal from the studio without broadcasters
	17	External video signal input to the studio
	18	Video signal input with still image
-	19	Higher level of understanding of the message
	20	Increased entertainment level of the message
	21	Increased level of stimulation of the imagination
	22	Increased message credibility
	23	Increased recall of the message
	24	Increased loyalty

Table 1. Study categories and variables

Source: own elaboration, 2025.

3.1. Participants

The object of study brings together various factors, some linked to consumer behaviour and the perception of the communicative aspects of the radiovision model, while others relate to the potential for quantifiable descriptive data extraction from a sample group that may maintain a relationship with the aforementioned medium. Accordingly, the selection of a sample comprising university students with a background in Communication Sciences was deemed appropriate, despite the indication from the General Framework for the Media in Spain (AIMC, 2024, p. 14) that this age group represents the

demographic with the lowest level of radio consumption (less than 6%). These particularities presented a dual opportunity for exploratory verification. Furthermore, in addition to the aforementioned motivations, the fact that the university student body offered a logistically propitious structure for the execution of the field study was also a contributing factor. This was due to the fact that students enrolled in the first to fourth years of the university degrees concerned were taken into account.

The age of the participants was determined to be within the range of 18 to 24 years old. The participants were students enrolled in one of the following degree programmes: Communication Sciences, Journalism, Advertising and Public Relations, and Music. The following universities took part in the study: Rey Juan Carlos University (Spain), Complutense University of Madrid (Spain), European University of Madrid (Spain), and the University of Bogotá Jorge Tadeo Lozano (Colombia). Furthermore, given their specific affiliation with the radio domain, it was deemed appropriate to include the student contributors from the Radio of the Rey Juan Carlos University (RADIO URJC) in the sample.

The sampling method was selected based on convenience, with the sample comprising the data provided by the researchers who participated in the study. The total number of students enrolled in the selected subjects was 320, and 227 surveys were completed, representing 71% of the total. This response rate is deemed valid given that the questionnaire was administered online via an active recruitment model utilising personal linking (Sánchez & Segovia, 2008). Therefore, the sample of 227 students, drawn from a total of 320 individuals, is representative with a confidence level of 99% and a margin of error of 5% (Sucasaire, 2022; Hernández-Sampieri and Mendoza, 2018).

3.2. Sample Distribution

The sample was structured according to an interest-based selection of subjects linked to the Faculties of Communication Sciences, Information Sciences, Arts and Design, as well as a large group of students who collaborate with RADIO URJC. The participating subjects were as follows: Camera and Sound of Audiovisual Technologies; Radio Creation and Production; Editing and Post-Production; Consumer Psychology; Strategic Advertising Planning; Music Notation; and the aforementioned group of RADIO URJC collaborators, who were mainly students of Journalism and Audiovisual Communication. The size, classification and numerical distribution of the sample were configured on the basis of its relation to the object of study. It should be noted that the resulting data, which are purely objective and valid for exploratory purposes, are not representative of the entire university. The sample is comprised of individuals who are presumed to possess knowledge of radio (García-García et al., 2013). Consequently, the sample is not representative of the general population and does not permit the drawing of inferences with respect to gender, as this variable was not considered in the consultation.

3.3. Instruments

The construction, analysis and design of the categories and variables, as well as their evaluation, were formalised with the collaboration of a group of university lecturers and professionals from the audiovisual sector. The relevance, comprehension and understanding of the questions, as well as the different scales of measurement proposed, were validated through a pilot test involving fifteen university students with experience in the audiovisual sector. The final version of the instrument was designed as a structured survey, to be completed by students online outside of class hours over a period of six months between 2023 and 2024. The data obtained was processed using SPSS version 29 software. The surveys were conducted using Google Forms.

4. Findings

Having established the research objective, concepts and methodology, we now present the results of the field study, together with an analysis thereof. In accordance with the preceding approaches, the results are classified into two distinct categories: the first focusing on general aspects of radio consumption and the second of a more qualitative nature, which delves into specific aspects related to the communicative characteristics of radiovision in comparison to traditional radio. The resulting breakdown of the data extracted from the 227 questionnaires is presented in the form of direct percentages applied to each variable.

4.1. First category: General Aspects of Consumption

The eight variables within this category present data pertaining to consumption and the sample's relationship with the radio medium. This allows for the establishment of coherence with the AIMC 2024, AIMC Q Panel Radio 2024, and Barlovento Communication media studies. While the findings do not permit the extrapolation of data to a general university population, they nonetheless represent an objective and quantifiable aggregation of preferences, facilitating comparison and contrast with the aforementioned reports. The results are presented in Table 2, which is followed by a breakdown and analysis of each of the variables.

Table 2. Results for the first category related to the aspects general consumption of the radio medium

NO.	Variable	Concept	% out of 227	
1		Between 18 and 20	68,8	
	Age	Between 21 and 24	31,2	
	Preferred hours of consumption	From 00:00 to 08:00 h.	12,4	
2		From 08:00 to 15:00 h.	37'8	
		From 15:00 to 00:00 h.	49,8	
3	Place of consumption -	At home	46,2	
3		Away from home	53,8	
	Consumption in parallel with other activity	Working/Studying	33,5	
4		Leisure time	66,5	
5	Type of radio	Generalist	34,8	
5		Thematic	65,2	
	Means of receipt	Analogue FM	40,5	
		DTT/DAB	0,9	
6		Internet smartphone/tablet	48,5	
		Internet computer	10,1	
	Internet mode of consumption	Direct	48,9	
7		Download	51,1	
	۔ Platforms for listening/downloading radio content - -	YouTube	43,6	
8		iVoox	7,0	
		Own of the broadcaster	22,9	
		Other	26,5	

Source: own elaboration, 2025.

Variable 1: All participants confirmed that they fell within the established age range of 18-24 years, and this variable was validated in the 227 completed questionnaires.

Variable 2: This variable captures the nuance of 'preference' of consumption time versus actual consumption time, as the distribution of academic shifts in the sample could potentially bias the result. The present study indicates that the preferred time for consumption is between 15:00 and 23:00. This result is not aligned with the data presented in the General Framework for the Media in Spain Report 2024 (AIMC, 2024, pp. 26, 28, 30 and 31), which indicates that the 06:00 to 12:00 time slot is the most prevalent. It should be noted that the aforementioned report does not specify the relationship between time slot, age and type of programme (generalist/thematic). However, the data presented here are complementary to the AIMC Report.

Variable 3: Regarding the place of consumption, the data indicate that 53.8% of respondents prefer to listen outside the home. The results of this variable are partially consistent with the data presented in the AIMC 2024 Report (p. 28), which indicates that the home option is the predominant direct option in nearly all time slots. In contrast, the AIMC Q Panel Radio 2024 Report (p. 1) identifies the car (59%) as the location where Internet users are most likely to listen to the radio, with the same figure observed among individuals under the age of 24 (p. 3).

Variable 4: The sample indicated a preference for listening to the radio during leisure time, with 66.5% of respondents selecting this option. In examining the relevant literature, it was not possible to identify a comparable specific concept in any of the radio audience reports analysed.

Variable 5: Thematic radio is the preferred option, with a figure of 65.2%. This result aligns with the findings of the AIMC 2024 Report (pp. 12, 30 and 31) and the EGM 2nd wave 2024 Barlovento Communication Report (pp. 9 and 11). In the aforementioned report, Radio Temática (Thematical) is identified as the preferred station, both in terms of the age group and the percentage obtained in this case.

Variable 6: The option of listening to the radio via the Internet on a smartphone or tablet was selected by 48.5% of the sample, while 40.5% indicated a preference for listening via analogue FM. These findings are not aligned with those of the AIMC 2024 Report (p. 31) and the AIMC Q Panel Radio 2024 Report (p. 4), which indicate that FM reception is the predominant method of radio consumption. Conversely, the sample's inclination towards utilising mobile devices for Internet radio consumption is directly aligned with the findings of the AIMC Q Panel Radio 2024 Report, with smartphones emerging as the predominant device among live/streaming radio users, at 78.6% (p. 5).

In the context of Internet consumption, the percentage of respondents who indicated that they download content (51.1%) is greater than those who stated that they listen live (48.9%). This percentage balance is consistent with the trend observed in the AIMC Q Panel Radio 2024 Report (p. 4), in which 35.3% of users indicated a preference for live/streaming content, compared to 35.0% who expressed a preference for delayed/podcast content.

Variable 8: YouTube is the most preferred platform for listening to and downloading radio content, with 43.6% of respondents indicating this preference, compared to 23% for broadcasters' own platforms. This figure is consistent with the AIMC 2024 Report (p. 68), which identifies YouTube as the primary platform for accessing internet sites. It is noteworthy that of the nineteen sites listed in the EGM Report, only four are directly related to radio stations. Conversely, the AIMC Q Panel Radio 2024 Report (p. 6) indicates that broadcasters' own platforms are the most preferred, surpassing aggregators.

The data derived from the first eight variables are sufficiently consistent with the referenced consumer reports to lend credibility and validity to the results obtained, even if they provide novel aspects not contemplated in the aforementioned documents.

4.2. Second Category: Specific Variables (Consumption of Traditional Radio vs. Radiovision and Communicative Characteristics)

The sixteen variables in this category provide comparative consumption data between the sound-only radio and radiovision models, as well as investigating the sample's assessment of the communicative characteristics of the radio with video model. This approach of an exploratory study on the communicative characteristics of radio and television, aimed at a sample focused on the 18-24 age group and involving university studies, has not been found in specific research other than this one, nor in reports on media consumption focused on the radiovision model.

In the absence of a similar study, it is assumed that the questions posed here will yield information of interest to academic and professional environments. The approach and development of this study are therefore considered justified. As with the preceding category, although the responses obtained do not permit the extrapolation of data to a general university population, they do represent an objective sum of subjective evaluations that is representative for the purpose proposed here. The results are presented in Table 3, with a subsequent analysis of each variable, as was done in the previous case.

NO.	Variable	Concept	% out of 227
9	Do you know the radio with video signal?	Yes	100
9	Do you know the radio with video signal? -	No	0
	What type of radio do you prefer to listen to?	Radio with sound only	53,3
10		Radio with sound and video	15
		Both	31,7
11	Time of consumption –	1 to 2 h. with sound only	57,7
11		3 to 4 h. with sound only	7,5

Table 3. Results of the second category related to the specific consumption of traditional vs. radiovision radioand communicative features

NO.	Variable	Concept	
		1 to 2 h sound and video	27,3
		3 to 4 h sound and video	7,5
10	Easier to change stations depending on the	Radio with sound only	76,2
12	type of station.	Radio with sound and video	23,8
		Sound only	20,7
	– Type of radio most effective in message construction –	Video signal from the studio with	F7 2
		broadcasters	57,3
13		Video signal from the studio without	0.0
		broadcasters	0,9
		Video signal external to the studio	18,1
		Still image	3
	- Video signal that adds the most information	Video signal from the studio with broadcasters	60,4
		Video signal from the studio without	1,3
		broadcasters	
14		Video signal external to the studio	28,7
	to the radio sound message.	Still image	1,3
	-	The video signal does not provide	_)=
		additional information to the audio message.	8,3
		It provides relevant information and	
		reinforces the sound message.	83,3
15	Contribution to the sound message of the	It does not provide relevant information	16,7
15	video signal from the studio	and does not reinforce the sound	
		message.	
		It provides relevant information and	
	Contribution to the sound message of the video signal of the studio without broadcasters	reinforces the sound message.	12
16		It does not provide relevant information	
10		and does not reinforce the sound	88
	010000000	message.	00
	Contribution to the sound message of the video signal with production outside the studio.	It provides relevant information and	
		reinforces the sound message.	12
17		It does not provide relevant information	
		and does not reinforce the sound	88
		message.	00
		It provides relevant information and	
	Contribution to the sound message of the	reinforces the sound message.	13,7
18		It does not provide relevant information	
		and does not reinforce the sound	86,3
		message.	,-
10		Radio with sound only	38
19	Higher level of understanding of the message -	Radio with sound and video	62
	Increased entertainment level of the message -	Radio with sound only	22,5
20		Radio with sound and video	77,5
	Increased level of stimulation of the	Radio with sound only	48,4
21		Radio with sound and video	51,6
	Increased message credibility –	Radio with sound only	28,2
22		Radio with sound and video	71,8
		Radio with sound only	26,9
23	Increased recall of the message –	Radio with sound and video	73,1
		Radio with sound only	39,6
24	Increased loyalty	Radio with sound and video	<u>59,0</u> 60,4

Source: Own elaboration, 2025.

Variable 9: this question makes it possible to establish the percentages applicable to the other questions asked. By confirming the knowledge of the radio model with video signal of the whole sample, the percentage obtained in each variable is established in relation to the 227 completed questionnaires.

Variable 10: the radio model with sound only is the one most used by the sample, with 53.3%. To this percentage we should add the proportional part of the response of both, which would give an overall result of 69% compared to 31% for radio with sound and video. This figure is in line with the General Framework study in terms of preference for conventional radio (AIMC, 2014, p. 31), but does not allow a correlation with any of the media studies consulted, as radiovision is not included in the analysis of radio consumption.

Variable 11: in terms of consumption time, the option *between one and two hours* of radio only with sound model prevails with 57.7%. The range established in the questionnaire is validated by the 94-minute daily listening time confirmed by the EGM 2024 2nd wave Report (AIMC, 2024, p. 10).

Variables 12 to 24 introduce original and novel questions concerning knowledge of the medium, which are not found in any of the studies consulted on radio consumption.

Variable 12: for 76.2% of the sample, radio with sound only makes it easier to change stations compared to the radio-vision model. Without being considered a priori as a decisive factor in the choice of a type of radio, it could have an influence as a possible obstacle in the choice of the various stations with a video signal.

Variable 13: with regard to the most effective type of radio in the construction of the message, the most valued option is the radio with *video signal from the studio with broadcasters*, with 57.3%, practically tripling the option of *sound only*.

Variable 14: in terms of the video signal that provides the most additional information to the radio message, as in the previous case, the *video signal from the studio with broadcasters* is consolidated as the most highly valued option, with 60.4%.

The following four dichotomous variables focus on the provision of information and reinforcement of the audio message generated by the four video radio modes.

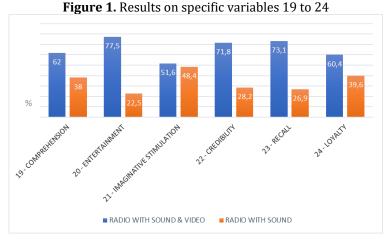
Variable 15: 83.3% of the sample consider that the video signal from the studio with broadcasters provides relevant information and reinforces the audio message. This production model is the most widespread in Spanish radio.

Variable 16: 88% of the sample consider that the *video signal from the studio without broadcasters* neither provides relevant information nor reinforces the audio message. This is usually a model of radiovision associated with night shifts.

Variable 17: 88% of the sample consider that the *external video signal from the studio* neither provides relevant information nor reinforces the audio message. This question was initially associated with the production model studied, where the external image is complementary.

Variable 18: 86.3% of the sample consider that the contribution of the *video signal with a still image* neither provides relevant information nor reinforces the audio message. This model of radiovision tends to recur when there is no authorisation for the use of images due to a question of rights or lack of consent from the broadcasters.

The next six variables, also of dichotomous type, focus on differential questions relating to the level of: comprehension, entertainment, imagination, credibility and recall. For all six variables, the sample gives a higher value to radio with sound and video than to radio with sound only, the only comparable result being that for imaginative stimulation.



Source: own elaboration, 2025.

5. Discussion and Conclusions

It is notable that, despite the potential for radiovision to enhance both a radio company's presence within the sector and its financial performance, this production model is notably absent from the primary Spanish media studies consulted. This may be indicative of a dearth of interest on the part of both broadcasters and consumers. In this regard, a feedback process is evident at all levels. If innovation is not implemented or is implemented and not disseminated, the user will not consume it, which in turn leads to a lack of interest on the part of the channels. In Spain, there are numerous instances in which various technological innovations with proven value have not yielded the anticipated social impact, either due to a lack of institutional interest or a lack of commitment on the part of the broadcasters themselves. Given the current implementation process, it is possible that radiovision in Spain may result in another development with limited impact, similar to that of 5.1 surround sound and DAB, which have been incorporated into the Spanish radio sphere with minimal significance.

An additional area of consideration is whether radiovision is driven by a genuine interest in enhancing communication or whether it adheres to circumstantial trends. Without being the object of the study and by way of a speculative contribution, the authors note notable disconnections between the visual and the sound in the radiovision of the most representative national channels by audience level according to the 2nd Wave of the General Media Study (SER, COPE, Onda Cero and RNE) (AIMC, 2024, p.4). This gives the impression that the video signal provides complementary information that is not integrated into the message with the same narrative weight as the sound. Conversely, the contribution of a radio programme produced with a video signal for a dual simultaneous broadcast – with and without an image – should take into account the narrative compatibility and optimal comprehension of the narrative for those who listen exclusively (Zambelli, 2023). In other words, allusions to visual elements should not impede comprehension for those who only consume the audio part.

These circumstances, coupled with the lack of studies that provide visibility to the knowledge and opinion of consumers about radiovision, have generated a need to seek answers to fundamental questions. These include the following question: Is the population is aware of the existence of radio broadcasting, the level of consumption of radio broadcasting, the media through which radio broadcasting is consumed, the user's opinion about the qualities and communicative capacities of radio broadcasting, and whether the video signal influences the understanding and improvement of messages? In view of the foregoing, the results obtained in this study are interpreted as constituting a novel contribution to the existing literature, despite the acknowledged limitations. They offer objective data of interest, particularly given that the age group surveyed, 18-24 years old, is the least likely to consume radio (AIMC, 2024, p. 14).

It is important to note that the results derived from variable 9 are limited by the convenience sample drawn from Communication studies. Therefore, the 100x100 knowledge of radiovision by the sample may differ in university environments outside this field. The present study acknowledges the potential bias generated by this sampling method.

The research presents its conclusions from a descriptive perspective, according to the two categories of variables that have been established. A breakdown and evaluation of the results obtained was conducted for the specific development of the different variables. The following content will present the most significant added conclusions:

- Conclusions drawn from the first category of the study: general aspects of radio consumption.

This category has made it possible to establish basic coherence between the radio consumption data of the sample and the media studies consulted, thus confirming the credibility and validity of the results obtained.

• The sample prioritised thematic radio and radio consumption outside the home and in leisure time. Although this question does not specify conventional radio or radiovision, the latter would conflict with parallel activities that require full attention, such as driving, studying, playing sport or working, so its use would be less justified than radio only in these contexts.

- In terms of means of reception, Internet radio via smartphone is the most valued option. This is evidence of the consolidation of the smartphone as the dominant device for accessing information (Pedrero-Esteban et al., 2019). But would the smartphone be used to listen to radio, with or without an image, if this technology did not encompass and provide access to a whole universe of services and communications, both live and downloaded? For the authors, this preference is based more on a question of operational versatility than on a question of signal type and/or quality, with the means taking precedence over the end.
- Although the sample did not show a clear preference for live or download as a mode of consumption, it did point to YouTube as the preferred platform for listening to and downloading radio content. Considering the previous preference for smartphones as a reception tool and the fact that on YouTube audiovisual radio content prevails over purely audio content, it could be inferred that the consumption referred to on the aforementioned platform is mainly for radiovision.
- Conclusions derived from the second category of the study: specific variables (radiovision consumption and communication characteristics).
 - The entire sample states that they are familiar with radio with video signal, which would be in line with the broadcasters' strategy for this age group. However, in variables 10 and 11, the sample establishes radio with only sound as its consumption preference, which is in direct contradiction with the answers obtained in variable 13 and variables 19 to 24, in which the communicative qualities of radio with video signal are particularly appreciated. The reasons for this contradiction could be various: either because of variable 12, which indicates that it is easier to change stations on radio with sound only; or because the preferred contents are not broadcast or are broadcast with a video signal; or because radiovision requires attention that this type of user is not willing to give; or simply because the contents with a video signal are not sufficiently attractive for the sample. This aspect is not incompatible, since the qualities and capacities of a form of production are not necessarily linked to the quality and attractiveness of its contents. And although, for Pedrero-Esteban et al. (2019), radio suffers from disaffection among young people due to its slow adaptation to interaction and visualisation, the truth is that, in the present study, the disaffection is precisely towards radiovision, with the consumption of traditional radio with sound only taking precedence.
 - Equally significant is the result of variable 14, in which radio with a video signal from the studio with broadcasters the form of radiovision which, according to the sample, provides the most added information to the sound message. However, the incorporation and processing of videos in the purely television mode is becoming more and more common in the radiovision model.
 - For variables 15 to 18, the video signal from the studio with broadcasters is the only option with a positive value for the sample, as it is considered to provide relevant information and reinforce the audio message. This production model is the most common in Spanish radiovision. Perhaps this is the reason for its greater acceptance.
 - And finally, regarding the contribution of a greater level of understanding, entertainment, imaginative stimulation, credibility, recall and loyalty, -variables 19 to 24-, the sample has mainly opted for radio with sound and video signal as opposed to radio with sound only. This brings us back to the aforementioned controversy, since, if radio with sound and video signal is considered to have greater capacity in all the aspects mentioned above, why is the radio model, most consumed by the sample, radio with sound only? Although some possible causes have been mentioned above, it could be added that the implementation of radiovision is limited and does not have a sufficiently wide range of content compared to the sound-only model.

Undoubtedly, depending on the skill with which it is used, radiovision can be as constructive as it is irrelevant to the message. For the authors, despite this technological evolution, radio in Spain remains faithful to its sound essence, with the visual implementation becoming a mere showcase for what happens in the studio.

This work has only attempted to provide objective data, but the results and their possible contribution show that there is still a long way to go.

References

- Arias Gonzáles, J. L. y Covinos Gallardo, M. (2021). *Diseño y metodología de la investigación*. Enfoques Consulting EIRL, 1, 66-78. https://gc.scalahed.com/recursos/files/r161r/w26022w/Arias_S2.pdf
- Asociación para la Investigación de Medios de Comunicación (AIMC). (2024). *Entrega de resultados EGM* 2024 – 2ª Ola. https://reporting.aimc.es/index.html#/main/radio https://reporting.aimc.es/ index.html#/main/cockpit
- Asociación para la Investigación de Medios de Comunicación (AIMC). (2024). *Nueva edición del AIMC Q Panel Radio 2024 –* https://www.aimc.es/a1mc- c0nt3nt/uploads/2024/06/2024_06_04_ NP_AIMC_Q_Panel_Radio_2024.pdf
- Asociación para la Investigación de Medios de Comunicación (AIMC). (2024). *Marco. General de los Medios 2024 (datos de 2023).* https://www.aimc.es/a1mc-c0nt3nt/uploads/2024/01/Marco_General_Medios_2024.pdf
- Ala-Fossi, M., Lax, S., O'Neill, B., Jauert, P., y Shaw, H. (2008). The future of Radio is Still Digital But which one? Expert Perspectives and Future Scenarios for Radio Media in 2015. *Journal of Radio* &, Audio Media, 15(1), 14-25. https://doi.org/10.1080/19376520801971337
- Ballesteros, T. (Presentador). (2 de julio de 2014). ¿Televisar la radio? *Entrevista. José María García Lastra. Televisar la radio.* [*Podcast*]. iVoox. http://www.ivoox.com/entrevista-jose-maria-garcia-lastra-televisar-radio-audios-mp3_rf_3276659_1.html
- Barlovento Comunicación. (2024). *Resultados Audiencia de Radio EGM 2ª Ola 2024*. https://barloventocomunicacion.es/wp-content/uploads/2024/07/Informe-Audiencias-Radio-2-Ola-2024.pdf
- Berry, R. (2013). Radio con imágenes: visualización de radio en la radio nacional de la BBC. *El Diario de la Radio, 11*(2), 169-184. http://sure.sunderland.ac.uk/id/eprint/5210/
- Cardona Bedoya, J. M., & Vaca González, Y. C. (2019). Tendencias de la radio online como apoyo a la construcción de estrategias propias para el medio. Anagramas Rumbos y Sentidos de la Comunicación, 17(34), 177-201. https://doi.org/10.22395/angr.v17n34a9
- Casas Anguita, J., Repullo Labrador, J. R., y Donado Campos, J. (2003). La encuesta como técnica de investigación. Elaboración de cuestionarios y tratamiento estadístico de los datos (I). *Atención Primaria*, *31*(8), 527-538. https://www.elsevier.es/es-revista-atencion-primaria-27-articulo-la-encuesta-como-tecnica-investigacion-elaboracion-cuestionarios-13047738
- Cavia Fraile, S. (2016). Nuevo modelo de radio a través de la cuarta pantalla: radiovisión, la radio que se ve. *Fonseca, Journal of Communication*, *13*(13), 65-84. https://doi.org/10.14201/fjc2016136584
- Cedeño L., R. M., Alcívar Vaca, C. H.; y Ponce Vásquez, D. A. (2017). Observaciones acerca de los dispositivos móviles. *Dominio de las Ciencias*, *3*(4), 83-103. https://doi.org/10.23857/dom.cien.pocaip.2017.3.4.oct.89-103
- Cunha, M. (2016, 5-9 de septiembre). *O rádio na nova ecologia da mídia. Intercom Sociedade Brasileira de Estudos Interdisciplinares da Comunicação -* XXXIX Congresso Brasileiro de Ciências da Comunicação. São Paulo, Brazil. https://portalintercom.org.br/anais/nacional2016/resumos/R11-2816-1.pdf
- Danhke, G. L. (1989). Investigación y comunicación. En Fernández-Collado, Carlos y Danhke, Gordon L. (Eds.), *La comunicación humana: ciencia social* (pp. 385-454). McGraw-Hill.
- Franch, E. B. & Robles, M. L. (2020). La adaptación digital de la radio y sus nuevos espacios publicitarios: el caso de audiobranded. *Comunicació: revista de recerca i d'anàlisi, 37(2),* 113-134. https://publicacions.iec.cat/repository/pdf/00000294/00000031.pdf
- García-García, J. A, Rending-Bernal, A. y López-Alvarenga, J. (2013). Cálculo del tamaño de la muestra en investigación en educación médica. *Investigación en Educación Médica*, 2(8), 217-224. https://doi.org/10.1016/S2007-5057(13)72715-7
- Hernández-Sampieri, R. y Mendoza, C. (2018). Metodología de la Investigación. Mc Graw Hill.
- Hernández-Sampieri, R. y Mendoza, C. (2020). Metodología de la investigación: las rutas cuantitativa, cualitativa y mixta. Universidad de Celaya. https://doi.org/10.22201/fesc.20072236e.2019.10.18.6 Igartua Perosanz, J. J. (2006). Métodos cuantitativos de investigación en comunicación. Bosch.
- Ibáñez, C. L. y Egoscozábal, A. M. (2008). Metodologías de la investigación en las ciencias sociales: Fases, fuentes y selección de técnicas. *Revista escuela de administración de negocios*, (64), 5-18. https://doi.org/10.21158/01208160.n64.2008.450

- Kischinhevsky, M. (2016). *Rádio e mídias sociais: mediações e interações radiofônicas em plataformas digitais de comunicação*. Mauad Editora Ltda.
- Mitchell, W. J. T. (2005). There Are No Visual Media. *Journal of Visual Culture*, 4(2), 257-266, https://journals.sagepub.com/doi/10.1177/1470412905054673
- Palazio, G. J. (1999). La radiovisión, el nuevo medio multiservicio. Zer: Revista de estudios de comunicación, (4)6, 179-197. https://ojs.ehu.eus/index.php/Zer/article/view/17393
- Pedrero-Esteban, L. M. (2022, 27 de septiembre). *Cinco claves sobre radio visual* [Webinar]. UNESCO. https://www.youtube.com/watch?v=-EXvtVEpeEY
- Pedrero-Esteban, L. M., Barrios Rubio, A., y Medina Ávila, V. (2019). Adolescentes, smartphones y consumo de audio digital en la era de Spotify. *Comunicar, 60*, (XXVII), 103-112. https://www.revistacomunicar.com/index.php?contenido=detalles&numero=60&articulo=60-2019-10
- Pedrero-Esteban, L. M. (2018, 2 de agosto). *A vueltas con la radio que se ve* [Webinar]. Medium. https://luismipedrero.medium.com/a-vueltas-con-la-radio-que-se-ve-aba87a366df6
- Pedrero-Esteban, L. M. y Herrera-Damas, S. (2017). La notificación 'push' como estrategia informativa de la radio en el entorno digital. *El Profesional de la Información. 26*(6), 1100-1107. https://doi.org/10.3145/epi.2017.nov.09
- Piqué i Abadal, J. M. (2018). *Especejant la ràdio: La transformació del mitjà radiofònic en l'entorn digital.* Observatori de la Producció Audiovisual. http://hdl.handle.net/10230/36033
- Prata, N. (2016, 1-28 de agosto). *Nuevos modelos de negocio de la radio*. XXII Congreso Internacional de la Sociedad Española de Periodística, Madrid.