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Spanish University Radio Stations’ Own Content Programming: Ondacampus, UPV Radio, Uniradio Jaén, Radio Universidad and RUAH

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Abstracts

Introduction. The objective of this study is to analyse the programming grids of the university radio stations in the field of Spanish public education, which are already part of the internet environment, in order to try to demonstrate that their contents are especially for educational and cultural purposes, in accordance with the objectives pursued by such institutions. **Methodology.** The research conducted a content analysis of radio station programming with an extensive record of variables that formed the basis of further analysis. **Results.** This work allows us to point out the minor differences in regard to new contents, from public service and with new formats that these stations have currently and the limited use made of the resources granted to them by ICTs during the designing and creation of new formats. **Conclusions.** It also allows us to conclude that these stations should increase the supply of educational and training content in order to position and distinguish themselves more from private radios with general interest or thematic programming.

Keywords

Radio; Public University; Third Sector; Programming, Public Service.

Contents

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Translation by **Diane Garvey Zaccaro**

1. Introduction

As a unifying force of media, the Internet has become the great new medium of the twenty-first century, capable of offering contents on a mass level, but at the same time personalized information adapted to each user according to their individual habits, tastes and preferences. Moreover, we have moved from the local to the global, but also from mass to segment, and as one would expect, the digital transformation and the Internet itself have led to a questioning of the old paradigm of sectors such as telecommunications and mass media (Hendy, 2000). Faced with this new situation, traditional media have had to re-invent themselves and try to become part of a situation that keeps on evolving by leaps and bounds. In the case of radio, this adaptation is going ahead with a certain amount of confusion and an unclear future.

“[...] the Spanish radio industry still needs to renovate its analogical model in the full digital age: the same as in other countries, radio has moved from the exclusiveness of the Hertzian medium to a much broader context where it converges with other media, formulas and multi-media services fostered by computer technologies, such that we are witnessing a mistrustful co-existence of the traditional concept of radio and the still uncharted territory that some authors call ‘postradio’”. (Pedrero Esteban, Sánchez Serrano, & Pérez Maillo, 2015: 422) (our translation).

Since the appearance of the Internet, radio has had to adapt to the online context, not only from a technical point of view, but also through a restructuring of programming, adapting its grids and contents to the current demands of new audiences and Internet users (Bowman & Willis, 2003). Within this stage of great changes, universities as institutions and the radio stations that have emerged within them are playing an important role since “they educate citizens so that they can develop their knowledge and skills in society” (Pastor, 2012: 19).

Over the last few years, several authors have carried out studies on Spanish university radio stations that have materialized in the age of the Internet, and they have reviewed their fundamental aspects, finding that they have not been subjected to great changes or transitions from the analogue state (Espino Narváez, 2014; Fidalgo, 2009; Marta & Segura, 2012; Perona Páez, 2012).

Therefore, we consider that the research presented here is socially justified in that it proposes a continuity in the reviews of online radio content programming within the context of public universities, where this kind of programming must address the goals of training, educating, and disseminating culture, as well as making interactivity one of the principal engines for the creation and configuration of contents in their programming. Our goal was to analyze to what extent university radio stations address these public service objectives, and to do so we studied the programming of five public university radio stations in Spain that broadcast online, have a podcast library and fulfil all the requirements of our methodology.

In times of great technological change, it becomes necessary to reflect on the new contexts that are emerging not only on a technical level, but on a social one as well. Traditional paradigms no longer serve to understand the communicative processes in the mass media, according to Orihuela (2002); the existence of the Internet means that they have to reinvent themselves. The new media context that adapts to or emerges directly from the web can be defined through seven new paradigms proposed by Orihuela (2002): interactivity, personalization, multimedia, hypertextuality, updating,

abundance and mediation. Thus, radio has also found itself involved in this change or transition to new paradigms. Gallego (2010) describes the main aspects that today's radio companies should stress: digitalization, convergence, and interactivity.

Radio today is not only listened to; it can be seen, written to, participated in, chatted about. The aim, proposed by Cebrián (2008), is to broaden the contents, with texts, images, video and, in short, all types of extra multimedia content that complements the main services based on the broadcasting of audio contents.

“The 2.0 environment widens the concept of radio consumption, which is no longer exclusively linear. But the object of consumption also varies, and, in addition to being audio it can be complemented with texts and images. Giving value to the objectives is one of the priorities of radio stations, which consider that they are thus also reinforcing the digital brand.” (Martí i Martí, Monclús, Gutiérrez, & Ribes, 2015: 18).

In this aspect, the models of Internet radio programming and therefore the majority of university radio stations now entail both live broadcasting and the opportunity to store contents to make them available to audiences.

“The young university audience shows a tendency that has consolidated into individual, multi-screen, multi-task consumption with a constant drive for interaction with their preferred audiovisual contents through mobile applications and social networks. This new channel of communication opens new, practically unlimited, possibilities for communication groups that were unthinkable only five years ago.” (Ortega, González Ispuerto, & Pérez Peláez, 2015: 627-651) (our translation).

To understand the concept of online radio one has to comprehend the possibilities the Internet offers this medium and thus also the university radio stations that had their origins there. The web has opened up new opportunities for audio exposure on the radio, and, according to Pagador (2012), three of these are durability (audio archives), fleetingness (audio broadcasts only available at certain times, such as news), and live broadcasting (downloading of podcasts and streaming). The Internet has also permitted the use of new languages because of its multimedia nature, links and hyperlinks, and the possibility of accessing contents in a non-sequential way (Farkas, 2006).

Online radio is not limited to streaming; the podcast is another very important element when consuming radio contents on the Internet. Users can have access to and download audio contents and listen to them wherever, whenever and however they want. This allows personalized media consumption (Crofts, Dilley, Fox, Retsema, & Williams, 2005).

The Internet offers university radio stations the possibility of creating communities, forums, surveys, blogs, and of interacting with the audience when creating and programming contents, or giving their audience the freedom to change the contents according to their individual tastes, and to publish them and retransmit them (Gallego, 2010). We have come to the point where the audience no longer only listens, but has moved from passivity to activity, evaluating the products, participating in their construction and disseminating them (Canavilhas, 2011: 22).

“This is precisely where university radio can differentiate itself, in the content. That is why it must devote time to what the general-interest radio stations normally do not: to culture, science, social exclusion, underprivileged groups, etc. That is, university radio should devote itself to broadcasting specialized or alternative contents to be able to reach the public or audience that the rest of the media are not able to.” (Espino Narváez, 2014: 29).

For all of these reasons we consider that the academic interest of this research study lies in the critical approach to what we present as a trend towards a homogenization of contents in the radio stations analyzed, in contrast to the voices advocating that university radio stations should take good advantage of the resources available to them (Perona Páez, 2012; Romo, 1989). The text contributes a negative view of the results obtained and progresses towards a constructive criticism that will help these radio stations to differentiate themselves from commercial and general interest radio as far as contents and objectives are concerned.

Currently, there are different models of programming: general-interest radio, music radio, and cultural radio. One of the definitions of general-interest radio is that made by Faus (1995: 182), who understands it as “radio of information, of intellectual communication, of ideas, that is, total radio”. On the other hand, Moreno (2005) defines music radio as that which constantly airs musical contents, taking advantage of the aesthetic-emotional dimension of music. It is heard more than it is listened to and accompanies more than it informs. This is the largest radio specialization. Finally, we have the characteristics of cultural radio, of which university radio forms a part. It pertains to the group of thematic radio stations, whose objectives are educational, cultural and informative. The structure and programming of their contents depend less on news and current events and focus more on educational aspects. The cultural message is meant to enrich minds and seeks to “cause the audience to make an effort and at the same time clarifies what it broadcasts in order to awaken the public to new interests” (Moreno, 2005: 13).

1.1. The university radio phenomenon

University radio stations are a radio phenomenon that comes within the frame of what we know as free or non-profit audiovisual mass media. These stations are linked to academic institutions, usually universities, and thus their objectives are mainly cultural, educational, informative and entertaining, addressed chiefly to a young university student public. The goal of the university is to educate citizens, and university radios can be considered one more tool involved in this educational purpose.

These stations are proliferating owing to the advances in technologies and the Internet, giving rise to greater participation and debate among the audience, according to Espino Narváez and Martín Pena (2012). This digital boost in an online context must be understood within the context in which non-profit radio exists: low budgets, non-commercial programming and mainly cultural objectives. This is why, although there are university radio stations that broadcast over the air, most of them have found their best ally in the Internet, owing to its global nature and the fact that the allocation of radio frequencies is not necessary. This reduction in costs and requirements for broadcasting quality programming is much more favorable on the Internet, which in addition offers the possibility for increased interaction with audiences, for generating debates, and for permitting the station and the audience to work together to build contents. Its multi-media aspect allows greater variety of contents

and greater dissemination of them through social media and the possibilities of hypertext. Since no legislation exists in Spain specifically to regulate these radio stations, and even less so on line, there has been an increase in the number of new university radio stations that broadcast on line.

In Spain, university radio emerged in the 1940s with Radio Barcelona and Cadena SER, which broadcast university contents even then. The first Spanish radio station entirely devoted to the university was that of the University of La Laguna, which began broadcasting in 1987. According to Marta and Segura (2012), Radio Universidad de Salamanca appeared in 1996, and in subsequent years radio stations of the following universities came on the scene: Complutense University de Madrid, Autonomous University of Madrid, and the Universities of Navarra, León and A Coruña.

The university radio stations pertaining to the Association of University Radio Stations (ARU, acronym in Spanish) [1] are addressed in this research and currently number 22. Their main objectives, as stated on the Association's website (ARU, 2014), are to group radio professionals from Spanish universities, plan and disseminate university, cultural, scientific and technological topics to society in the form of radio contents, and, in short, any other activity relating to public service that has been entrusted to universities.

The ends pursued by ARU coincide with the spirit of the university as an institution; however, what we intended to do in this research, by analyzing programming grids, was to study whether these objectives are actually met or whether university radio stations function simply as one more university service. "Nonetheless, the sector still shows important signs of instability [...] The reasons behind these circumstances have a lot to do with the fragile structure on which, with a few exceptions, this type of mass media depends: diffuse organization, temporary volunteer workers, scarce or null budget after the initial investment, etc." (Perona Páez, 2012: 38).

University radio stations are non-profit, and this means that they are entities that should not receive economic benefits for their activity. However, to better understand what being a non-profit radio station in Spain involves, it would not be amiss to review the pertinent Spanish legislation regarding the mass media, and more specifically, radio.

Regulation of Spanish radio in the democratic era has been defined by five laws: The Statute of 1980, The Planning Act of 1987, The Act for Municipal Radio Stations of 1991, The Emergency Measures Act of 2005, The Act to Reform Spanish Public Radio and Television of 2006 and the General Act of Audiovisual Communication of 2010 (LGCA, its acronym in Spanish). Also included are the technical plans for the years 1978 and 1979, as described by Arboledas (2012).

The General Act of Audiovisual Communication (BOE, 2010) defines the radio as an audiovisual communication service with editorial responsibility and with the objective of providing programs and contents aimed at informing, entertaining or educating the public at large, and of broadcasting commercial communications. The legislation focuses mainly on stations and public and private service providers. However, the LGCA also regulated and takes into account free, alternative or community radio stations that are non-profit and that had existed in a legal limbo for years (Hernández Prieto, 2016). Arboledas (2012) points out that the first time these types of radio stations were recognized in the legislation was with the Planning Act of 1987, which stipulates that to receive a non-profit radio license the owner had to have Spanish nationality and be a resident of the country.

The LGCA of 2010 was an attempt to fill the gap in specific legislation for the free radio sector, despite the subsequent lack of specificity at the level of tendering in Spain's Autonomous Communities. This Act stipulates that community non-profit private communication services will be able to provide non-commercial audiovisual communication services to attend to the specific social, cultural and communication needs of communities and social groups, as well as to foster citizen participation. These contents must be broadcast openly and without commercial advertising. The providing of these services requires a license that establishes the conditions that guarantee that these services are not commercial.

These non-lucrative radio stations are a “blind spot in the entire Spanish radioelectric system” (Badillo & Pérez Alaejos, 2012: 90). Most of Spain's autonomous communities have not known how to guarantee their legal existence, and oblige them to participate in competitions for licenses together with commercial stations; alternatively, they have tried to eliminate them from regulation.

In regard to exclusively online radio, the LGCA makes practically no reference to the Internet context. It is therefore understood that regulation in this aspect will be determined by respecting and paying for the licenses and canons relating to copyright and royalties of protected audiovisual contents, especially in the case of music. This legal “vacuum” of online radio has been one of the main drivers behind the creation of new free or university radio stations, to come back to the subject of our research.

The main objective in this study is thus to determine what Spanish public university radio is like on the Internet, analyzing the type of contents offered and the extent to which their programming is homogeneous. In addition, given that web 2.0 interactivity is key to the dissemination of contents, we addressed the type of relation these stations have with their audience through social networks.

Although there are both public and private universities in Spain that have radio stations, we decided to analyze only those linked to public universities, since they are likely to be the ones that foster free and public citizen education to a greater extent. Besides offering academic and educational contents, these radio stations should support the dissemination of cultural and social contents, providing an alternative to radio formulas and general interest radio programming. Thus we posit the first hypothesis of our study:

H1. The contents of Spanish university radio stations linked to public universities are above all educational and cultural, in line with the objectives pursued by universities: to educate citizens.

If this kind of programming is to have a sizeable impact, it must be stable. The design of weekly programming with a succession of constant programs and a minimum of variation helps not only to garner audience loyalty, but also to create a positive image that can attract a wider audience.

It must also be taken into account that broadcasting university radio on the Internet offers very favorable possibilities for the stations' activities. These stations and their web services should offer accessible and up-to-date contents to their audiences. Just as private radio stations (both general interest and thematic) usually present quite similar programming, since their objectives are similar,

Spanish university radio stations may also be likely to reflect this tendency to design programming with common features. Thus, we pose the second hypothesis of our study:

H2. Spanish university radio stations linked to public universities chosen for the sample, and which therefore fulfill all the requirements established in the study, are homogeneous in nature and show similar programming.

Our idea was to find out what type of programming the selected stations use, whether it falls in line with the principles and values related to university institutions, and whether the stations take advantage of the possibilities offered by the Internet as a channel for differentiating their contents from what is offered by commercial radio.

2. Method

The research consists of a comparative study based on the quantitative analysis of the contents, programming and social network activity of the Spanish university radio stations chosen for the sample.

There are many definitions of “content analysis.” Walizer and Wienir (1978), among others, define it as any systematic procedure devised to examine the contents of stored information. Krippendorff (1980) defines it as a research technique capable of making valid and stable inferences from data about a context. The definition by Kerninger (1986) is perhaps one of the most standardized: content analysis is a method of study and analysis of communication in a systematic, objective and quantitative way, with the purpose of measuring certain variables. To design and direct the most appropriate work method when approaching the task of collecting, analyzing and exhibiting data, we reviewed several previous academic studies in this sense related to the topic of radio programming (Gutiérrez & Huertas, 2003; Martí i Martí, 1990; Moreno, 2005).

Given that there are many university radio stations, “the analysis of different radio stations that depend on institutions of higher education allows us to confirm the broad diversity of communication projects that can be found internationally. Each university radio station has its own objectives and a certain idiosyncrasy. In the case of Spanish radio stations these differences and typological variety are even greater.” (Fidalgo, 2009: 135).

We therefore began by establishing certain criteria for selecting the necessary sample population of radio stations for the research study. Thus the stations had to:

- Pertain to the Association of Spanish University Radio Stations
- Be linked only to public universities
- Have a web service and live online broadcasting
- Maintain their website and contents up to date
- Offer not only academic contents, but also different kinds of subject matter.
- Have stable weekly programming without large variations over the academic year
- Have profiles in Facebook and Twitter that are regularly updated.

To delimit the size of our sample we consulted the website of the Association of Spanish University Radio Stations to find out how many of the stations were members. Of the 26 stations found, only 17 had active websites and regular online broadcasting. Among these 17 radio stations, 13 correspond to public universities, and four to private ones. Finally, we selected for the study the only five stations that fulfilled all of the requirements and criteria described above: Ondacampus (University of Extremadura), UPV Radio (Polytechnic University of Valencia), Uniradio Jaén (University of Jaén), Radio Universidad (University of Salamanca) and RUAH (University of Alcalá de Henares). The rest of the stations were ruled out because they did not meet the criteria.

After determining the sample, we went on to investigate the programming of each of these stations [2]. Below, and in the understanding that genre, as defined by Wolf (1984), refers to that form of communication that the audience is able to identify without difficulty, and whose characteristics are linked to the type of contents offered, we proceeded to identify the topics offered by the university radios either by listening or by reviewing the podcast tags of each of the slots having their own autonomy within the programming. In all cases we excluded programming contents only meant to maintain continuity in the broadcasting, such as continuous music, breaks, and jingles. Thus, addressing only the autonomous slots, we defined nine types of subject matter or genres:

1. News: the group of slots that contribute news and information about current events and agendas.
2. Entertainment: this genre contains all shows that combine a variety of sections of contents, such as commentary on current events, talks show segments, interviews, music, cultural information, reports, or humor.
3. Music: slots devoted exclusively to music and current news about music
4. Film: this subject matter comprises autonomous contents related only to film or movies.
5. Literature: this genre would include programs about current literary events, and new titles coming out in books, poetry, theatre and authors.
6. Sports: contents that review current sports events at university, local or general interest level. It also comprises slots devoted to specific sports, such as cycling.
7. Educational: all the programs devoted to fostering education and learning in the audience, including science divulgation, news relating to education, employment or academic matters.
8. Social contents: programs that include social subject matter such as gender equality, disability, social exclusion, volunteer work, politics, economics, etc.
9. Other Cultures: this category comprises programs that focus on making different cultures more familiar; some are even offered in another language.

To locate the programming of the university radios within a time frame, we differentiated between weekdays and weekends, and the day was divided into three blocks of time: morning (8 AM to 2 PM), afternoon (2 PM to 9 PM), and night (9 PM to 3 AM). Uniradio Jaén is the only station that broadcasts a few programs after 4 AM, so we decided to include them as part of the morning slot. The sample contents were collected during the week May 26 - June 1, 2014.

We also decided to differentiate between four types of content duration (up to 10 minutes, up to half an hour, up to one hour, and longer than an hour) to be able to classify each spot within one of these categories and subsequently calculate the approximate number of hours the five radio stations devote to each genre. We then selected the data referring exclusively to weekday programming, since that is

when the stations offer most of their own productions (on weekends the programming of autonomous spots decreases in favor of musical radio formula programming).

To analyze social network activity we sought out the Facebook and Twitter profiles of each of the stations and measured the data regarding their followers, the station’s own postings or what they post by others, “likes”, “shares”, comments, tweets, retweets, mentions and hashtags over the last week of May 2014 (May 26 - June 1). In addition, and for purely descriptive purposes, we collected information about the stations’ activity in social networks. These data have been arranged in tables that reflect the number of postings, tweets and different types of interaction in addition to the number of times each station promoted audience participation. To obtain a more overall picture of the topic we used the “Top 40 Spain” station broadcasting on May 26 as a point of comparison.

The results are presented in two different sections: the first is focused on the subject matter or genre used in the radio broadcasting, and the second addresses the analysis of the radio stations’ weekday programming.

3. Results

As described in the Method section, all the information extracted and analyzed refers to programs that are a programming unit in themselves, not taking into account the contents that make up the “continuity” or station breaks, the purpose of which is to maintain constant broadcasting between specific programs, usually comprising music, brief items, or announcements. Below we present the data analysis relating to the thematic classification of university radio programming.

Table 1. Classification by subject matter of university radio programming

	News			Entertainment			Music			
Radio Station	No. prog	% p. c.	% p. e.	No. prog	% p. c.	% p. e.	No. prog	% p. c.	% p. e.	Total
Ondacampus				7	25.9%	33.3%	3	3.9%	14.3%	21
UPV Radio	1	33.3%	2.2%	12	44.4%	26.7%	27	35.5%	60.0%	45
Uniradio Jaén	1	33.3%	2.7%	3	11.1%	8.1%	14	18.4%	37.8%	37
Radio univ.	1	33.3%	1.9%	3	11.1%	5.6%	21	27.6%	38.9%	54
RUAH				2	7.4%	10.5%	11	14.5%	57.9%	19
Total	3	100.0%	1.4%	27	100.0%	13.0%	76	100.0%	36.5%	176
	Film			Literature			Sports			
Radio Station	No. prog	% p. c.	% p. e.	No. prog	% p. c.	% p. e.	No. prog	% p. c.	% p. e.	Total
Ondacampus	1	20.0%	4.8%				2	28.6%	9.5%	21
UPV Radio				1	8.3%	2.2%	2	28.6%	4.4%	45
Uniradio Jaén	2	40.0%	5.4%	3	25.0%	8.1%	1	14.3%	2.7%	37
Radio univ.	1	20.0%	1.9%	6	50.0%	11.1%	1	14.3%	1.9%	54
RUAH	1	20.0%	5.3%	2	16.7%	10.5%	1	14.3%	5.3%	19
Total	5	100.0%	2.4%	12	100.0%	5.8%	7	100.0%	3.4%	176
	Educational			Social			Other Cultures			
Radio Station	No. prog	% p. c.	% p. e.	No. prog	% p. c.	% p. e.	No. prog	% p. c.	% p. e.	Total

Ondacampus	3	16.7%	14.3%	4	30.8%	19.0%	1	6.7%	4.8%	21
UPV Radio	1	5.6%	2.2%	1	7.7%	2.2%				45
Uniradio Jaén	7	38.9%	18.9%	2	15.4%	5.4%	4	26.7%	10.8%	37
Radio univ.	6	33.3%	11.1%	6	46.2%	11.1%	9	60.0%	16.7%	54
RUAH	1	5.6%	5.3%				1	6.7%	5.3%	19
Total	18	100.0%	8.7%	13	100.0%	6.3%	15	100.0%	7.2%	176

Source: the authors.

Regarding the information in Table 1, and comparing the total number of programs represented, it can be observed that the genre that stands out most among all the stations is Music, followed by Entertainment and Educational, which between the three occupy 58.2% of total programs. In contrast, the types of content least represented in this set of stations are News (1.4%), and Film, with only 3.8% of the total programming. Not all the stations broadcast all the genres we chose to investigate. Ondacampus and RUAH do not offer news programs. UPV Radio has no programs devoted to film or other cultures, and RUAH has no programming of social contents.

If we take into account that the values relating to universities are the ones most linked to what we call News, Educational, Social and Other Cultures categories, we find that education is the only one to which all the radio stations devote programming. Only Unirradio Jaén and Radio Universidad offer programs in these four categories, whereas RUAH only participates in two of them.

3.1 Comparative analysis of university radio programming

Turning now to the analysis of the weekly programming of Spanish radio stations, the data presented below refer to the total number of autonomous programs within the stations' programming, taking into account when they are repeated as well. Although in all cases we also analyzed weekend programming, results are only shown for the weekday programming, since it is more complete and based on the production of each station's own contents. This analysis was done taking as a reference the data included in Table 2, which reflects the relation between the number of autonomous programs (plus their repeats) in the programming offered by each station on weekdays, and their type of content.

Table 2. Classification of total programming by subject matter (weekdays only).

	Music		Entertainment		Educational		
Radio Station	Number	%	Number	%	Number	%	Total
Ondacampus	3	3.2%	7	19.4%	3	12.0%	20
UPV Radio	35	37.2%	19	52.8%	2	8.0%	71
Uniradio Jaén	14	14.9%	3	8.3%	7	28.0%	40
Radio univ.	27	28.7%	5	13.9%	12	48.0%	95
RUAH	15	16.0%	2	5.6%	1	4.0%	28
Total	94	37.0%	36	14.2%	25	9.8%	254
	News		Other Cultures		Social		
Radio Station	Number	%	Number	%	Number	%	Total
Ondacampus			1	4.3%	3	17.6%	20
UPV Radio	10	40.0%			1	5.9%	71
Uniradio Jaén	5	20.0%	3	13.0%	2	11.8%	40

Radio univ.	10	40.0%	18	78.3%	11	64.7%	95
RUAH			1	4.3%			28
Total	25	9.8%	23	9.1%	17	6.7%	254
	Literature		Sports		Film		
Radio Station	Number	%	Number	%	Number	%	Total
Ondacampus			2	25.0%	1	5.0%	20
UPV Radio	2	13.3%	2	25.0%			71
Uniradio Jaén	3	20.0%	1	12.5%	2	5.0%	40
Radio univ.	8	53.3%	2	25.0%	2	2.1%	95
RUAH	2	13.3%	1	12.5%	1	3.6%	28
Total	15	5.9%	8	3.1%	6	2.4%	254

Source: The authors.

As can be observed, Music stands out above the rest of the categories, comprising more than a third of the programming in the total calculation of the five radio stations. Music is followed by Entertainment, but with less than half the programming devoted to Music, which was 37%, and in the last places we have Sports and Film, both with values under 4%. The mean presence of the rest of the content categories is approximately 8%. Briefly analyzing genre by genre all of the programming and repeats of all the stations, we find the following:

- Music: UPV Radio is the station with the most music slots (35), whereas Ondacampus has the fewest music programs, with only 3.
- Entertainment: UPV Radio is again ahead in the number of entertainment programs and their repeats (19), and RUAH comes in last in this category (2).
- Educational: Uniradio Jaén is the station broadcasting the most programs of this type (12), and RUAH the least with only one.
- News: tied in first place are UPV Radio and Radio Universidad de Salamanca (10), with Uniradio Jaén offering half that number.
- Other Cultures: Radio Universidad is the station that stands out in this category with 18 weekly slots devoted to other cultures.
- Social topics and Literature: Radio Universidad is the station that has the most programming in these topics, standing out far above the rest of the stations (11 slots)
- Sports and Film: In these categories all the stations offer between one and two programs, a low number in relation to the other categories.

Focusing our attention now on the programming of each radio station, it can be seen that of the five university radio stations, the ones with the most slots devoted to their own autonomous programs from Mondays to Fridays are Radio Universidad and UPV Radio. The former offers almost five times the programs of Ondacampus, which comes in last with only 20. But to better understand the programming of these five stations, we can observe the behavior of each of them in their general weekday programming, based on the data shown in Table 3.

Table 3. Classification of weekday programming by subject matter.

	Music		Entertainment		Educational		
Radio Station	Number	%	Number	%	Number	%	Total
Ondacampus	3	15.0%	7	35.0%	3	15.0%	20
UPV Radio	35	49.3%	19	26.8%	2	2.8%	71
Uniradio Jaén	14	35.0%	3	7.5%	7	17.5%	40
Radio univ.	27	28.4%	5	5.3%	12	12.6%	95
RUAH	15	53.6%	2	7.1%	1	3.6%	28
	News		Other Cultures		Social		
Radio Station	Number	%	Number	%	Number	%	Total
Ondacampus			1	5.0%	3	15.0%	20
UPV Radio	10	14.1%			1	1.4%	71
Uniradio Jaén	5	12.5%	3	7.5%	2	5.0%	40
Radio univ.	10	10.5%	18	18.9%	11	11.6%	95
RUAH			1	3.6%			28
	Literature		Sports		Film		
Radio Station	Number	%	Number	%	Number	%	Total
Ondacampus			2	10.0%	1	5.0%	20
UPV Radio	2	2.8%	2	2.8%			71
Uniradio Jaén	3	7.5%	1	2.5%	2	5.0%	40
Radio univ.	8	8.4%	2	2.1%	2	2.1%	95
RUAH	2	7.1%	1	3.6%	1	3.6%	28

Source: The authors.

- Ondacampus: This is the station that programs the largest percentage of contents in Entertainment in comparison to the others, and it takes up more than a third of its programming. Its Music, Educational and Social programs share the same percentage (15%), and together they take up almost half of the weekly programming. It should be noted that there are no spots for News or Literature on this station.
- UPV Radio: Music comprises 49.3% of the programs offered by this station; Education occupies a little more than a quarter of the programming, and 14.1% is devoted to News. These three categories together account for 90% of this station's programming. It does not have any programs on Other Cultures or Film. There is clearly a sizable lack of balance in relation to other subject matter.
- Uniradio Jaén: Music is also the genre most broadcast here, occupying more than a third of the programming. Educational programs and News come next, followed by lesser percentages in Other Cultures and Social topics, which together make up less than 15% of the total. Nonetheless, all of the categories are represented on this station.
- Radio Universidad: the radio station of the University of Salamanca devotes almost a third of its autonomous programming to Music. The second most broadcast genre is Other Cultures, approaching 20% of the programming, being much higher than in the other stations. Sports and Film are the least present categories, although Radio Universidad also programs all the category types.

- RUAH: This is the station with the highest percentage of Music among its programs, as it occupies more than half of its total programming. The rest of the categories are more or less balanced in percentages, but no individual one reaches 10% of the total. Also notable is that this radio station does not broadcast any news, as we saw earlier, nor does it address social topics.

The weekly programming of the radio stations can be divided into several blocks of time; in this case we agreed on three: morning, afternoon and night. Table 4 shows which of these time blocks offers more programs in general and how each station in particular distributes its programs.

Tabla 4. Classification of programming according to time block.

Radio Stations	Music			Entertainment			Educational		
	M	A	N	M	A	N	M	A	N
Ondacampus	12.5%		50.0%	25.0%	50.0%	25.0%	37.5%		
UPV Radio	50.0%	37.9%	62.5%	50.0%	24.1%	12.5%		6.9%	
Uniradio Jaén	22.2%	40.0%	57.1%	11.1%	6.7%		16.7%	20.0%	14.3%
Radio univ.	15.8%	25.6%	71.4%	5.3%	4.7%	7.1%	15.8%	14.0%	
RUAH	72.7%	54.5%	66.7%	18.2%	9.1%				16.7%
% total	30.1%	32.1%	63.6%	18.3%	14.2%	9.1%	12.9%	10.4%	3.6%
Radio Stations	News			Other Cultures			Social		
	M	A	N	M	A	N	M	A	N
Ondacampus						25.0%	12.5%	25.0%	
UPV Radio		17.2%	20.8%					3.4%	
Uniradio Jaén	27.8%					28.6%	11.1%		
Radio univ.	13.2%	11.6%		20.9%	20.9%		13.2%	11.6%	7.1%
RUAH				9.1%	9.1%				
% total	10.8%	9.4%	9.1%	10.8%	9.4%	5.5%	8.6%	7.5%	1.8%
Radio Stations	Literature			Sports			Film		
	M	A	N	M	A	N	M	A	N
Ondacampus				12.5%	12.5%			12.5%	
UPV Radio		3.4%	4.2%		6.9%				
Uniradio Jaén	5.6%	13.3%			6.7%			13.3%	
Radio univ.	7.9%	7.0%	14.3%	2.6%	2.3%		2.6%	2.3%	
RUAH		9.1%	16.7%		9.1%			9.1%	
% total	4.3%	6.6%	7.3%	2.2%	5.7%		1.1%	4.7%	

Source: The authors.

As far as the time blocks are concerned, the one accumulating the most programs in general is the morning, followed by the afternoon and in last place, nighttime. The thematic categories that appear most in the morning scheduling are Music (30.1%), Entertainment (18.3%) and Educational programs (12.9%), and these genres are also the most important ones in the afternoon. At night, however, news programs take over from educational ones (sharing the same percentage as Entertainment at 9.1%), but always behind Music, the leading genre occupying 63.6% of the programming. It is also of interest here to compare the behavior of each radio station in relation to these blocks of time:

- Ondacampus: the radio station of the University of Extremadura devotes mornings mainly to Educational programs, afternoons to Entertainment (being the station that broadcasts the highest percentage of this genre in the afternoon), and nights to Music.
- UPV Radio: this station programs only Music and Entertainment in the morning in equal parts and with percentages ahead of all the other stations. In the afternoons and at night, Music again occupies first place, surpassing 50% of the programming during these hours.
- Unirradio Jaén: this is the only radio station to devote mornings to News, and News is also the most prevalent genre in its morning programming. Music is prevalent in the afternoon and it is the station with the highest percentage of Music in this sense. Nights here are also devoted to Music.
- Radio Universidad: Other Cultures leads the morning block in this case (20.9%), thus distancing it from the general trend in the other stations. In the afternoon, Music is again the most prevalent category, although not much more so than Other Cultures (again at 20.9%). At night, music once again is the genre occupying the most time, with the highest percentage of all (71.4%).
- RUAH: Music reigns in the morning on this station in Alcalá, occupying almost three quarters of its morning programing. The afternoon and evening are also devoted to this category, with lower percentages, but in both cases higher than 50%.

Finally, in this comparative analysis of the programming of these five Spanish university radio stations, it is important to bear in mind how long each program lasts, that is, approximately how much real time is devoted to each genre. To start with, Table 5 shows data concerning program length in relation to the five stations.

Table 5. Percentages of program length by station.

Radio Stations	10'	30'	60'	90'	Total
Ondacampus		25.0%	50.0%	25.0%	20
UPV Radio		32.4%	60.6%	8.5%	71
Uniradio Jaén		2.5%	82.5%	15.0%	40
Radio univ.	2.1%	71.6%	25.3%	1.1%	95
RUAH		3.6%	78.6%	14.3%	28

Source: The authors.

As can be observed, the programs lasting up to 60 minutes are those that clearly stand ahead in the total computation, followed by programs lasting approximately 30 minutes. Radio Universidad is the only station to broadcast programs lasting under 10 minutes and it is also the one with the most 30-minute programs. Uniradio Jaén and RUAH are the stations with the most contents lasting up to an hour in their own programming. Ondacampus is the station with the greatest percentage of programs lasting an average of 90 minutes in its weekday programming. In regard to the relation between subject matter and program length in the five stations, Table 6 shows the following results:

Table 6. Classification of programs according to length and subject matter.

Radio Stations	Music				Entertainment				Educational			
	10'	30'	60'	90'	10'	30'	60'	90'	10'	30'	60'	90'
Ondacampus			3			3	2	2				3
UPV Radio		4	26	5		6	12	1				2
Uniradio Jaén			10	4			3			1	5	1
Radio univ.		6	20	1		2	3			12		
RUAH			15	3		1	2					1
Total		10	75	13		12	22	3		13	11	1
Radio Stations	News				Other Cultures				Social			
	10'	30'	60'	90'	10'	30'	60'	90'	10'	30'	60'	90'
Ondacampus								1			1	1
UPV Radio		10									1	
Uniradio Jaén			5				2	1			2	
Radio univ.		10				18				18	1	
RUAH							1					
Total		20	5			18	3	2		18	5	1
Radio Stations	Literature				Sports				Film			
	10'	30'	60'	90'	10'	30'	60'	90'	10'	30'	60'	90'
Ondacampus							1	1		1		
UPV Radio		2					2					
Uniradio Jaén			3				1				2	
Radio univ.	2	6				2				2		
RUAH			1	1			1				1	
Total	2	8	4	1		2	5	1		3	3	

Source: The authors.

In regard to each classification of program length and taking into account all programs broadcast by the five stations:

- Up to 10 minutes: only used for programs devoted to Literature.
- Up to 30 minutes: the topics usually addressed in this program length have to do with News, Other Cultures, Social topics, Educational topics and Literature.
- Up to one hour: this is the typical length of Music and Entertainment shows.
- Longer than one hour (which we have defined as approximately 90 minutes): together with the ten minute micro-shows, this time length is the least common one, and is used mainly with Music and Entertainment, although it can also be found in relation to Other Cultures.

An approximate calculation of the programming time that each station devotes to each topic category can be observed in Table 7.

Table 7. Classification of genres and the time they occupy in each radio station.

Approx. no. of hours	Mus	Ent	F/E	O. C.	Soc	News	Lit	Spo	Film	Total
Ondacampus	3	6.5	3	1.5	3	0	0	2.5	0.5	20
UPV Radio	35.5	16.5	2	0	1	5	1	2	0	63

Unirradio Jaén	16	3	7	3.5	2		3	1	2	38
Radio Universidad	24.5	4	6	9	6	5	3.3	1	1	60
RUAH	19.5	2.5	1	1	0	0	2.5	1	1	29
TOTAL horas	98.5	32.5	19.0	15.0	12.0	10.0	9.8	7.5	4.5	208.8

Source: The authors.

The stations with the highest number of hours devoted to programming proper (i.e., not taking into account continuous music, breaks, space fillers, etc.) were UPV Radio and Radio Universidad (63h and 60h, respectively), and the one with the least was Ondacampus (20h). Among all the programs of all the stations, the categories with the most hours were Music and Entertainment (98.5h and 32.5h, respectively), whereas the least number of hours was devoted to Film and Sports (4.5h and 7.5h, respectively). Analysis of the hours in relation to each station shows that:

- Ondacampus: at this station, most hours are devoted to Entertainment, and the fewest to Film.
- UPV Radio: Music is the genre most hours are devoted to in this station, whereas the least amount of time is devoted to Social topics and Literature.
- Unirradio Jaén: Here again Music is the category with most hours, with Sports having the least.
- Radio Universidad: here the most dominant category in terms of number of hours is also Music, with Sports and Film having the least.
- RUAH: this station devotes practically all programming to Music (19.5h), leaving very little time for the other thematic categories.

Additionally, we also made an approximation of each station’s activity on social networks and their interaction with their audience on Facebook and Twitter. Based on the data shown in Table 8 we analyzed the presence of each radio station on Facebook, as well as the type of use each of them made of this social network in order to interact with their audience during the week of May 26 - June 1, 2014.

Table 8. University radio stations and Facebook.

	Ondacampus	UPV radio	Unirradio Jaén	Radio Univ.	RUAH
Followers	1,235	303	3,708	733	442
Original postings	3	3	3	5	2
Participation proposal		1	3		
Likes of own postings	4	3	15	4	3
Shares of own postings	1	2	1		
Comments on own postings					
Postings of others		3	2	3	
Likes of others’ postings		44	5	8	
Shares of others’ postings		2		3	
Comments on others’ postings		7	2	1	

Source: The authors.

The station showing the most activity, inviting the most participation and receiving the most feedback is Unirradio Jaén. The amount of each station’s own postings is similar for all five, but even so, Radio Universidad stands out. The only two stations that invite active audience participation

are UPV Radio and Unirradio Jaén, whereas the rest limit themselves to informing about their broadcasts, contents or current events linked to their surroundings.

In regard to postings by others on the stations’ Facebook pages, only UPV Radio, Unirradio Jaén and Radio Universidad receive them, and in very low numbers (3, 2 and 3, respectively), although the feedback in the form of “Likes”, “Shares” and “Comments” that UPV Radio and Radio Universidad receive in this sense is quite a bit higher than in their own postings. None of the stations interact with their followers within their own postings or postings by others on the stations’ own pages.

The university radio stations analyzed also have their own profiles registered on Twitter. Table 9 shows the Twitter activity of the five stations over the week between May 26 and June 1, 2014.

Table 9. University radio stations on Twitter.

TWITTER	Ondacampus	UPV radio	Unirradio Jaén	Radio Univ.	RUAH
Followers	753	422	1,318	291	1,903
Total no. Tweets	1,251	2,943	2,559	1,637	3,592
Total no. weekly tweets	14	43	14	80	26
Retweets to others	8	10		11	3
Tweets seeking participation	5		14		
Responses	2				
Mentions	11	18		9	4
Retweets	7	17	15	5	3
Hashtags	NOT	YES	NOT	YES	YES

Source: The authors.

The station that tweeted most during the week analyzed was Radio Universidad (80 tweets). The rest of the stations made an average of 24 tweets that week, an average of eight tweets of which were retweeted to others. The station receiving the most retweets was UPV Radio (almost 40% of its tweets). The only station that did not retweet to anyone was Unirradio Jaén, which, moreover, was the station that most demanded participation in its tweets, concretely in all of them, the same as in its postings on Facebook. Ondacampus was the other station that also invited audience participation through its tweets.

In relation to direct interaction, Ondacampus was the only station to answer the tweets of other users, and all of them except Unirradio Jaén were mentioned in tweets by others. Finally, all of them except Ondacampus and Unirradio Jaén used hashtags to promote dissemination of their contents. The activity of these radio stations on social networks is very low in comparison to that of large radio stations such as Top 40 Spain, whose social network activity can be seen in comparison to that of the university radio stations in in Table 10, which provides data on a single day of activity.

Table 10. Facebook and Twitter data from the five university radio stations and Top 40 Spain (on May 26, 2014).

	Top 40	Ondacampus	UPV radio	Unirradio Jaén	Radio Univ	RUAH
Facebook followers	83,4361	1,235	303	3,708	733	442
Own postings	11	3	1	1	1	1
Participation proposals	2	0	1	1	0	0
Likes for/about	625	0	3	3	1	2

Shares for/about	50	0	1	1	0	0
Comments for/about	36	0	0	0	0	0
Followers	672,958	753	422	1,318	291	1,903
Total no. tweets	45,400	1,251	2,943	2,559	1,637	3,592
Tweets in 1 day	52	2	13	2	12	7
Participation	16	2	0	2	0	0
Retweets	315	0	3	2		0
Hashtags	YES	NOT	YES	NOT	YES	NOT

Source: The authors.

4. Discussion and conclusions

To summarize, the data show that the radio stations in the sample address contents that foster education, closely linked to university objectives, and pay less attention mainly to news and current events. Nonetheless, as we highlighted at the beginning, the genres that have the greatest weight in the stations analyzed are Music and Entertainment, which shows that the stations selected do not go so far as to risk offering a different kind of programming. “In my point o view, university radio stations are in the midst of an identity-seeking process within the broad spectrum of mass media. At the present time, the arrival of digital technologies and the development of information and communication technologies (ICT) means that the path taken by university radio, the same as in the case of the rest of the mass media, will become more and more global and employ more multimedia, although the radio will continue to be its principal medium of reference.” (Fidalgo, 2009: 135).

As far as our initial hypotheses are concerned, after the analyses it can be seen that although these university radio stations should have education as one of their prime objectives, the large number of hours and programs devoted to entertainment and music show that they are not ready to take the risk of proposing a “different” kind of radio. This does not mean that they do not devote time to cultural, educational and social programs, which in fact they do, and more so than in general interest radio stations, but not to the extent nor with the sufficient weight that one might expect from radio stations linked to institutions of higher education. In fact, the group of the stations’ own contents within the programming that contains educational programs comes in third place.

With these results we thus put into question the idea of (Romo, 1989) concerning the role of university radio stations in advancing the dissemination of culture, in seeking a dialogue with society, in denouncing social problems by constructing ideas of social knowledge and wisdom at the service of the community and in favor of social justice, not so much because of the profit-seeking typical of commercial radio programming as for a lack of creativity and a failure to take advantage of the new digital scenarios. The trend observed in this research is that university radio stations copy commercial formats and do not take risks by incorporating thematic categories that could differentiate them from the rest.

Our second hypothesis assumed that Spanish university radio stations linked to the public universities selected for our sample based on the criteria described in the methodology section would have homogeneous programming. This would mean that their programming is shaped around very similar original contents, in programming grids with common patterns.

“Most Spanish university radio stations broadcast their programming on the Internet, using streaming or podcasts. The most frequent type of programming has a mosaic structure, with short spots of the “window” type and fragmentary contents that usually make the rhythm of the broadcasting dynamic. These kinds of programs are usually thematic and have a set periodicity. Less common but present are programs of special coverage and practice of curricular contents for students.” (Marta & Segura, 2012: 122).

The stations analyzed show certain trends in terms of placing certain types of contents in specific time spots, such as music in the afternoon in most cases, and music at night on all the stations studied. These stations also tend to place news programs in morning or afternoon spots. Nonetheless, the sample size in future research should be greater in order to corroborate the trend toward homogeneity found here.

Along the same line as Perona Páez (2012: 47), we support the idea that university radio stations could take better advantage of the possibilities offered by the Internet and promote their web presence by making an authentic *a la carte* radio, interacting on Facebook and Twitter much more intensely, and participating in their programmed contents by intervening in blogs which some programs already have.

Moreover, the Internet has fostered the creation and development of this type of radio, as well as its range, which is now global. Interactivity is fundamental on the Internet, and the participation of these stations’ audiences, with a demographic profile of young people familiar with digital technologies, should be an essential pillar when constructing and sharing content. However, it seems that in general it is still difficult to enter into contact with this audience, and more contents are produced *for* them than *with* them; the stations offer content rather than involving audiences creatively and fostering dissemination. In short, the university radio stations studied fulfill a divulgative role, although that is not essentially their main objective. As they face the future, these stations should increase their offer of educational contents in order to position and differentiate themselves more clearly from commercial stations with general interest and thematic programming. They should also increase their activity on line to favor interaction and “teamwork” with an audience that is now demanding to form part of the creation of products consumed on the Internet, with much more personalized contents.

In relation to the ever greater segmentation and personalization of contents, it would be of interest to open future lines of research to verify whether university radio stations have adapted to or are on their way to adapting to these trends, in addition to increasing their offer of educational contents. Something that also should be investigated is how these changes in the generation of new, more individualized contents are taking place (if indeed they are taking place), and in what ways audiences are being integrated into this process in terms of how they study, their preferences and their habits of consumption. In short, we must continue once again to observe the development and adaptation of radio as it faces the new challenges that are emerging.

5. References

- Arboledas, L. (2012). Regulación y políticas públicas: dispersión legislativa y clientelismo político. In J. I. Gallego & T. García Leiva (Eds.), *Sintonizando el futuro: Radio y producción sonora en el siglo XXI* (pp. 105-141). Madrid: Instituto Rtve.
- ARU. (2014). Objetivos. Asociación de radios universitarias. Retrieved 16/06/2014, from <http://www.asociacionderadiosuniversitarias.es>
- Badillo, Á. & Pérez Alaejos, M. P. (2012). Estructuras del mercado radiofónico español. Transformaciones y tendencias del clivaje público/privado. In J. I. Gallego & T. García Leiva (Eds.), *Sintonizando el futuro: Radio y producción sonora en el siglo XXI* (pp. 61-103). Madrid: Instituto Rtve.
- Ley 7/2010, de 31 de marzo, General de la Comunicación Audiovisual (2010).
- Bowman, S. & Willis, C. (2003). *Nosotros, el medio. Cómo las audiencias están modelando el futuro de las noticias y la información*. Reston: The Media Center at The American Press Institute.
- Canavilhas, J. (2011). El nuevo ecosistema mediático. *Index Comunicación, 1*, 13-24.
- Cebrián, M. (2008). *La radio en Internet. De la ciberradio a las redes sociales y la radio móvil*. Buenos Aires: La Crujía.
- Crofts, S., Dilley, J., Fox, M., Retsema, A., & Williams, B. (2005). Podcasting: a new technology in search of viable business models. *Firs Monday peer-reviewed tech journal, 10*(9).
- Espino Narváez, C. (2014). Contenido, estructura y función social en la programación de las radios universitarias españolas. *Edmetic, Revista de Educación mediática y TICS, 3*(1), 26-42.
- Espino Narváez, C. & Martín Pena, D. (2012). Las TIC y las radios universitarias: hacia una nueva comunicación. In C. Espino Narváez & D. Martín Pena (Eds.), *Las radios universitarias, más allá de la radio. Las TIC como recursos de interacción radiofónica* (pp. 21-33). Barcelona: Editorial UOC.
- Farkas, B. G. (2006). *Secrets of poadcasting. Audio Blogging for the Masses*. Berkeley: Peachpit Press.
- Faus, A. (1995). La radio española en la encrucijada. *Situación: revista de coyuntura económica, 4*, 179-194.
- Fidalgo, D. (2009). Las radios universitarias en España. Transformación al mundo digital. *Telos, 80*, 124-137.
- Gallego, J. I. (2010). *Podcasting. Nuevos modelos de distribución para los contenidos sonoros*. Barcelona: UOC Press.
- Gutiérrez, M. & Huertas, A. (2003). La programación de las radios generalistas en España. *Zer, 8*, 117-135.
- Hendy, D. (2000). *Radio in the global age*. Cambridge: Polity Press.
- Hernández Prieto, M. (2016). Legislación y pluralidad de actores. LSCA y LGCA en perspectiva comparada. *Revista Internacional de Comunicación y Desarrollo, 1*(3), 55-70.

- Kerlinger, F. N. (1986). *Foundations of behavioural research*. New York: Holt, Rinehart and Winston.
- Krippendorff, K. (1980). *Content analysis. An Introduction to its Methodology*. Beverly Hills: Sage.
- Marta, C. & Segura, A. (2012). Emisoras universitarias españolas en la web 3.0: programación y contenidos. In C. Espino Narváez & D. Martín Pena (Eds.), *Las radios universitarias, más allá de la radio. Las TIC como recursos de interacción radiofónica* (pp. 103-124). Barcelona: Editorial UOC.
- Martí i Martí, J. M. (1990). *Modelos de programación radiofónica*. Barcelona: Feed-Back Ediciones.
- Martí I Martí, J. M., Monclús, B., Gutiérrez, M. & Ribes, X. (2015). La radio, modelo de negocio en transición: estrategias de oferta y de comercialización en el contexto digital *Quaderns del CAC*, XIII(41), 13-22.
- Moreno, E. (2005). Las “radios” y los modelos de programación radiofónica. *Comunicación y Sociedad*, XVIII(1), 61-111.
- Orihuela, J. L. (2002). Los nuevos paradigmas de la comunicación. Retrieved 09/06/2014, from <http://www.ecuaderno.com/paradigmas/>
- Ortega, F., González Ispuerto, B. & Pérez Peláez, M. E. (2015). Audiencias en revolución, usos y consumos de las aplicaciones de los medios de comunicación en tabletas y teléfonos inteligentes. *Revista Latina de Comunicación Social*, 70, 627-651. doi: 10.4185/RLCS-2015-1063
- Pagador, I. (2012). La ventana radiada: oyentes y Red en Conexión. In C. Espino Narváez & D. Martín Pena (Eds.), *Las radios universitarias, más allá de la radio. Las TIC como recurso de interacción radiofónica* (pp. 87-101). Barcelona: Editorial UOC.
- Pastor, L. (2012). Prólogo. In C. Espino Narváez & D. Martín Pena (Eds.), *Las radios universitarias más allá de la radio. Las TIC como recursos de interacción radiofónica* (pp. 87-101). Barcelona: Editorial UOC.
- Pedrero Esteban, L. M., Sánchez Serrano, C. & Pérez Mailló, A. (2015). Desafíos de la industria radiofónica española en el entorno digital: hacia la redefinición de su modelo de producción, comercialización y difusión *El nuevo diálogo social. Organizaciones, públicos y ciudadanos* (pp. 421-436). Valencia: Campgráfico.
- Perona Páez, J. J. (2012). Las emisoras universitarias en el contexto digital: programación, nuevos medios y hábitos de escucha UOC. In C. Espino & D. Martín (Eds.), *Las radios Universitarias, más allá de la radio. Las TICS como recursos de interacción radiofónica* (pp. 33-57). Barcelona: Editorial UOC.
- Romo, C. (1989). Las radiodifusoras no comerciales en México. Una diversidad de opciones en crecimiento. *Revista Renglones*, 15, 19-23.
- Walizer, M. H., & Wienir, P. L. (1978). *Research methods and analysis searching for relationships*. New York: Harper and row.
- Wolf, M. (1984). Géneros y televisión. *Análisi*, 189-198.

6. Notes

[1] The website of the *Asociación de radios universitarias* is:
www.asociacionderadiosuiversitarias.es

[2] To extract the data on the number of programs, broadcasting schedules and program length, we reviewed the programming grids and podcasts available on the following websites:
(http://www.ondacampus.es/radio_index.php?id_aplic=13;
http://www.upv.es/pls/oreg/rtv_web.RadioCarta?p_idioma=c;
<http://uniradio.ujaen.es/>;
<http://www.ruah.es>). For Radio Universidad, we used the programming grid provided directly by the station.

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<http://www.revistalatinacs.org/071/paper/1096/16en.html>

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