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Communication professorship: access, consumption and media culture. A comparative study of Spain and Mexico

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Abstract

Justification. The professors of Communication transfer many of the previously consumed items to the classroom, as a basis for case-studies. **Methodology.** This paper analyzes, by means of survey techniques, the media consumption of Spanish (Valladolid University) and Mexican professors (La Salle University, Mexico City), assessing their informational habits, their priority, and their perception of quality assigned to the different media, as well as their extent of interactivity with them. **Results and conclusions.** Findings reveal that the professors’ access to press, radio and television, besides being daily, demonstrates the prevalent use of traditional supports and formats; in addition, the latest types of information devices – smartphone, tablet and laptop – show an intermediate penetration among these professionals; finally, we find the fact that the professors interact with journalistic companies primarily through comments on the most relevant news, made in social networks.

Keywords

Competencies; media consumption; media culture; Communication studies; teaching methodologies.

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Translation by **Iván Risueño Neila**

1. Introduction

The approval of Plan Bologna and, along with it, the coming of the European Higher Education Area (EHEA), have implied a restructuring of the higher education across Europe in order not only to homologate the degrees, but also to provide quality, by means of improving applied methodologies to the entire process of learning.

In 2012, as an initiative launched by the professors from Valladolid University Eva Campos Domínguez and Marta Redondo García, Teaching Innovation Seminars (SIDIC, acronym in Spanish) were set up with the purpose of establishing a forum for the reflection and debate on the teaching methods and materials which enable the digital development within Journalism studies. One year later, the proposal became the Teaching Innovation Project backed up by the aforementioned university, which labels it as “Outstanding”, ever since (2013-2014; 2014-2015 y 2015-2016).

This team, in which the authors take part, reckons a key issue: without a thorough awareness of all the actors involved in the educational process (mainly, professors and student body), it will be quite difficult to improve the situation in terms of what the EHEA recommend: the acquisition of specific labor market-directed competencies, which result in narrowing the gap between education and professional world (Humanes y Roses, 2014). In order to propose new teaching methodologies, specifically orientated to the field of Communication, and aligned with the competencies defined by institutions like EHEA or AMIC [1], the ISIC team undertook the examination of media consumption habits both among the students and among the Journalism professors, in Valladolid University (Spain). These data were then compared to the ones from Communication Sciences, in La Salle University, Mexico City (Mexico).

The paper here presented displays a comparison between the results of the analysis of the professors from both countries, regarding their media culture -including preferences, habits and demands for informational contents-, according to the fact verified into the classroom (Fuente y Mera, 2013): the case-studies on media items represent a constant within the teaching of Communication, as a way to bring the forthcoming graduates closer to their craft (Murciano, 2005).

2. The Higher System of Teaching and Learning based on competencies

In 1998 Europe began to shape an ambitious plan, known as Plan Bologna, so as to generate a Higher Education European Area (EHEA), through a homogeneous and competitive academic offer,

promoting the mobility of its members, and adapting to the current social demands (Ministerio de Educación, Cultura y Deporte, 2003).

The educational system planned for Europe, which became obligatory in 2010-2011 academic year, entailed the reform of the university educational system in most of the 47 signatory countries. In Spain, Plan Bologna came along with the Royal Decree 1393/2007, dated 29th of October, which clearly calls for the inclusion of new teaching methodologies and the measurement of learning, not solely through contents but also through competencies.

Competencies that Leonard Mertens defines as “the stock of knowledge and abilities necessary to achieve certain results demanded by specific circumstances” (1997: 30). It was first in the seventies of twentieth century when this conception would be transferred to the workplace environment, thanks to Harvard University psychologist David McClelland, who identified the variables affecting the job performance.

However, this is not a solely European concept, but also South America contributes to the debate on which role may University play for society and the youngsters’ education (Duarte Gómez, 2012). Moreover, the awareness of the crisis that University is undergoing, related to its institution, authority and prevalence (Santos, 2007), leads us to the conviction of necessarily adopting a teaching grounded on competencies (Barnett, 2001), which provides the students with criticism and thinking capacities.

“So, University has never gone out of fashion. Neither has it stopped standing at the very core of the struggles of its time. Neither, lastly, has it evaded the responsibilities entrusted by society, nor has it escaped the pressure coming from other city spaces: the regular people, the market-place, policy and cultural power.” (Brunner, 2005).

More specifically, regarding the field of Communication, the Spanish National Agency for Quality Assessment and Accreditation (ANECA, acronym in Spanish), in *Libro Blanco. Títulos de Grado en Comunicación*, describes the characteristics of this discipline, acknowledging four types of competencies for it: disciplinary (knowledge), professional (know how), academic competencies, and other specific competencies (ANECA, 2005).

Anyhow, these competencies deal with skills whose extent of development and orientation will depend on the professor, who will have to work effortfully for awakening the students’ abstraction capacity, which, as Sartori (1998) says, might be found not only asleep, but also overlapped, due to the current predominance of the images and visual culture. It narrows the critical mind and leads to an over-controlled society. Here is why professors are the required professionals to offset and remove this obstacle, providing the future graduates with the reasoning and intellectual effort by which they become critical on their use of technology.

In the same vein, this team acknowledges that the most part of competencies configuring the field of Communication are acquired by means of the observation and study of concrete cases (Fuente y Mera, 2013). Real examples that each professor brings out from what he/she reads, listens to, or views, within his/her personal media consumption.

3. Journalism Degree, an option in vogue

In Spain, Journalism degree was not included within the University educational offer until the early seventies, when Ministry of Education and Science passed the regulatory decree, authorizing the impartation of “teachings such as Journalism, Cinematography, Television, Radio broadcast and Advertising” (BOE, 1971: 14944). Despite that, during Franco’s time there were Schools of Journalism, Radio & Television, and Advertising, the most remote precedents of the current faculties of Information Sciences and Communication Sciences.

In 1941, on 17th November, Popular Education Vice-secretary founded, through a Ministerial Order, the Madrid Official School of Journalism, dependent on the General Administration of Press, which would be followed, later on, by similar centers in Navarra, Barcelona or Valencia. These schools were replaced by the current Faculties of: Information Sciences, in Madrid Complutense University, in Barcelona Autònoma University, and Navarra University, just in 1971, when they were constituted under the aforementioned decree.

Since then, and along these nearly 40 years, the faculties assimilating Journalism in their academic offer have multiplied. On table below, by Doctor Pilar Sánchez García (2013), we view the gathered data from universities in which Journalism studies are available at the present time; it also shows details of their foundation date, location and ownership. We have completed it, after a list updating, by adding European University of Atlantico and Lleida University.

Table 1. Universities imparting Journalism

Foundation date	University	Location/Province	Ownership
1971	Complutense	Madrid	Public
1971	of Navarra	Pamplona	Private- Church ownership
1972	Autònoma	Barcelona	Public
1981	of the Basque Country	Bilbao	Public
1988	Pontificia	Salamanca	Private- Church ownership
1988	of La Laguna	Tenerife	Public
1989	of Sevilla	Sevilla	Public
1991	of Santiago de Compostela	Santiago	Public
1992	of Málaga	Málaga	Public
1992	Pompeu Fabra	Barcelona	Public
1993	San Pablo CEU	Madrid	Private- Church ownership
1994	Ramón Llull	Barcelona	Private
1995	Antonio de Nebrija	Madrid	Private
1995	European University of Madrid	Madrid	Private
1996	Carlos III	Madrid	Public
1997	Internacional Cataluña	Barcelona	Private- Church ownership
1997	Católica San Antonio	Murcia	Private- Church ownership
2000	Rey Juan Carlos	Madrid	Public

2000	Camilo José Cela	Madrid	Private
2000	of Valencia	Valencia	Public
2000	CEU Cardenal Herrera	Valencia	Private- Church ownership
2002	Francisco de Vitoria	Madrid	Private- Church ownership
2002	Miguel de Cervantes	Valladolid	Private
2002	of Vic	Barcelona	Private
2002	of Murcia	Murcia	Public
2003	of Valladolid	Valladolid	Public
2003	Abat Oliva CEU	Barcelona	Private- Church ownership
2003	of Lleida	Lérida	Public
2004	Rovira i Virgili	Tarragona	Public
2005	San Jorge	Zaragoza	Private- Church ownership
2005	Miguel Hernández	Elche-Alicante	Public
2005	Islas Baleares (CESAG)	Baleares	Public-private- Church ownership
2008	of Zaragoza	Zaragoza	Public
2009	Distance Education (UDIMA)	Madrid	Private
2009	Jaime I	Castellón	Public
2010	of Castilla la Mancha	Cuenca	Public
2014	European University of Atlantico	Santander	Private

Source: Sánchez García (2013)

Therefore, and throughout the academic year 2015-2016, it is possible to study Journalism, as Degree, in 37 centers [2] across the country, and pick up studies among other 65 Degrees related to Communication, under the following names: Audiovisual Communication, Digital Communication, Advertising Communication, Business Communication, and Communication.

The Madrid Press Association confirms for the whole academic year 2012-2013 that: 21,204 students signed up for Journalism, a 4.6% higher than one year before, while the number of graduates in this discipline increased by 9.4%, raising the total numbers of graduates in Journalism or Information Sciences to 77,832, since their setting-up, in the seventies (Asociación de la Prensa de Madrid, 2013).

In respect with the Mexican context, three former educational institutions paved the way for the impartation of Journalism: Journalism School Carlos Septién García (1949), National Autonomous University of Mexico (1951) and Veracruzana University (1954) which offer was primarily focused on turning this craft really professional, especially within press. Orientation that would change along with the foundation of the first degree in Information Sciences and Techniques by Iberoamericana University in 1960. These studies became a milestone, a new tendency indeed, followed later by the rest of universities [3]. It meant a more humanistic look beside the most technical teaching, by enabling to evaluate the cultural, educational and social values, brought through the mass media. In Carlos Luna's words -Hernández Ramírez (2004: 112)- this new degree "founds in the country a new way of understanding and educationally tackling the communicative demands and possibilities in society (1991: 11-12)".

Nevertheless, sticking to the verified data by Hernández Ramírez (2004), in the 90s of twentieth century there was an exorbitant rise of schools offering communication studies in Mexico, reaching 300%. The existing 88 centers at that time grew to 216 in less than ten years, most of them holding a private ownership –around 80%-.

This situation implied certain uneasiness since, as Luna Cortés alerted (1995), the number of Communication graduates in the five years following 1995 were expected to count as many as in the previous thirty years. One of the main reasons for the massive choosing of these studies was the rate of graduates joining the workforce, which had grown to 73% under the craft training model, in the first years after Journalism degree had become official (Baldivia, 1981). This supposed a potential employability far higher than what other degrees could provide, something that eventually failed in the beginning of the twenty-first century.

The new century gives way to a new stage: an increasingly higher difficulty in raising satisfactory employment rates, besides high levels of job instability. Both problems lead to a climate of distrust in the efficiency in education and the imparted training (Weller, 2006).

Despite the above-mentioned, in Mexico, Information Sciences and Journalism remain among the 15 most demanded (Rizo García, 2012). In fact, according to data from Public Education Office (SEP, acronym in Spanish), in the academic year 2012-2013, the whole amount of students enrolled in syllabuses related to Communication reached 67,128, as 12,126 of them finished their studies, during that period (CONEICC, 2014). In addition, the number of educational institutions registered [4] with a Journalism degree amounts to 80 in 2015, while in Communication Sciences it soars to 273 centers nationwide.

Finally, although it is true that both the media structure and the journalistic culture vary from one location to another, it is also undoubted that the Journalism professorship confront the same challenges: technological convergence, the multifunctional aspects of the journalist's craft, and a business model under construction and continuous development. These challenges and goals are solely attainable through a broad and "comprehensive perspective" (Deuze, 2006) combining practical with contextual training. Marcial Murciano, honoured President in the Communication/Information Deans' Conference, summarizes it: "A solid theoretical, scientific and practical training will not be enough, since it will be necessary to constantly broaden it, through a continuous analysis of practical cases" (2005: 89), properly selected. Real cases that will depend on the habits and routines regarding professors' media consumption.

4. Studies on media consumption

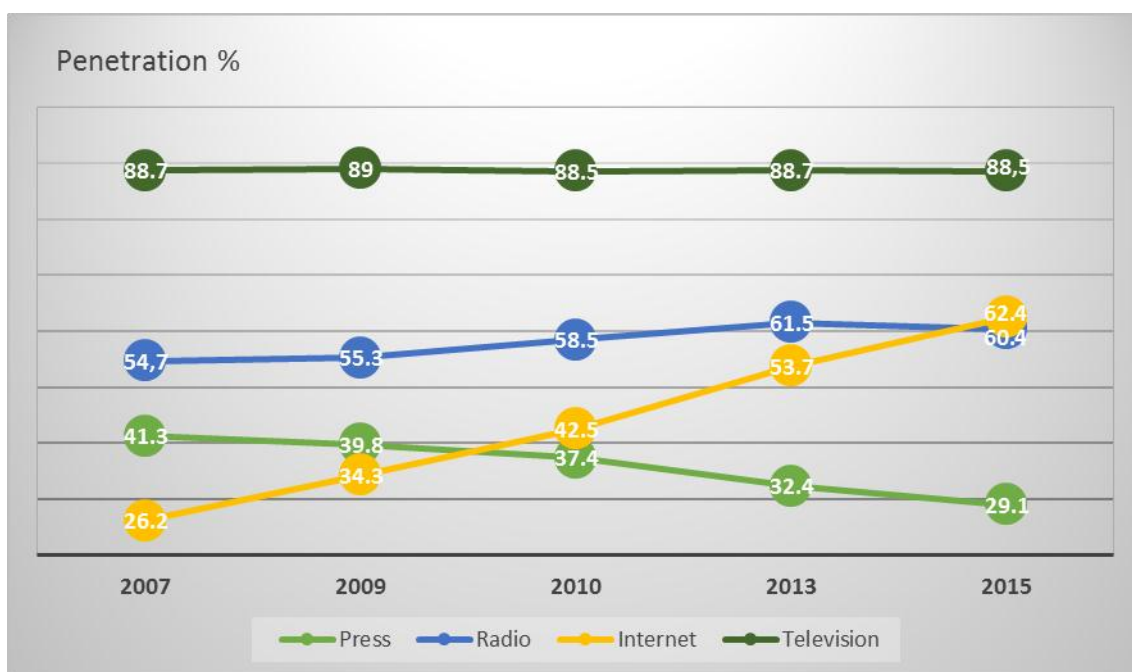
Studies aimed at the user's media experience, covering from the consumption routines to the interpretation of the perceived messages, were at their beginning placed within Culture Studies. Precisely thanks to these, the issue of media reception and consumption acquires a high profile, and as Matterlart and Neveu reckon, it becomes "a field of investigation itself, which surpasses them" (2004: 83).

The so-called Birmingham School hosts, in the early 80s, with David Morley ahead, the scientific concern about a view on communication barely explored until that moment: the media reception, counting for the first time on the *focus group* technique, as well as on the observation of up to twenty-nine groups, representative of diverse social sectors (Morley, 1996).

Since then, the widespread investigations on media consumption habits in society keep growing. In Spain, we have the Media General Study (EGM, acronym in Spanish), the reknown institution for the measurement of press, radio, television and Internet audiences. Annually, the EGM publishes three reports, known as waves, based on interviews to a representative sample of Spain residents over 13 years old.

Sticking to these results, in Spain television is the one medium showing the highest rate of penetration -88.5%-, followed by the Internet, radio and press. Ranking which until past year (2014) gave radio a second position, now replaced by the Internet, as graph I shows, gathering up the evolution in social penetration by the main mass media.

Graph I. Spanish Evolution: press, radio, television and the Internet



Source: AIMC (2015a)

The same bullish tendency of the Internet had already been informed in Mediascope Europe study, made in 2012 for all Europe. Its findings, besides confirming television as the most consumed medium, with a 95% penetration rate, acknowledge the Internet as the second position (65%) since 2010, occupying the place taken by press the previous years. In addition, the successive editions of study *Navigators in the Net* warn of the users' growing interest in looking up contents in the networks, disseminated by the journalists and the companies they work for (AIMC, 2015b).

However, given the specificity of the diverse collectives and groups shaping society, numerous investigations choose the analysis of media consumption habits, and their influence, within a specific

social group, with common characteristics (Campos y Garza, 2015; Paz y Brussino, 2015; López y Gómez, 2014; Retis, 2011). Other times instead, the object of study is not a collective but a medium - at this point, we cite *World Internet Project*, which seeks to mark out the predominant practices all over the world, or Digital Leisure and Entertainment Observatory (OCENDI, acronym in Spanish) orientated to television and radio consumption-. It might also include the focus on certain content - political information (Muñiz y Maldonado, 2011), infotainment (Berrocal, Campos y Redondo, 2014)-; or a specific format (Segado, Díaz y Soria, 2015; Noguera Vivo, 2010).

The aforementioned factors help infer that the access and consulting of communication media are still identifiable as an everyday activity, entirely traceable within our routine, while often playing a “backdrop” role, simultaneous with other actions (Paz y Brussino, 2015). The study by Nielsen (2015) detects a 55% of Spanish who turn on the television as a way to escape boredom at home; when it deals with idle times on public transport, both Spanish (Nielsen, 2015) and Mexican youngsters (Campos y Garza, 2015) prefer to escape by surfing the Net, thus reinforcing the idea that they live on-line constantly. This recent study also finds television consumption simultaneous with another activity, mainly eating, followed by navigating the social networks.

Since the very first day of the Web of Webs, the characteristics of the media ecosystem have been transformed to a great extent, inevitably conditioning both the communicative processes and the forms of socialization. Concepts such as: convergence, immediacy, mobility, or interaction, define well the new media reality, clearly becoming a requirement to attract the users, whose free time options have multiplied.

Roca Sales (2011) identifies two primal changes of consumption habits, since the setting-up of Information and Communications Technologies (ICT), -which embraces not only the Internet, but also the new mobile devices: mostly tablets, *smartphones* and video game consoles-. The first transformation relates to a new option given to the consumers: organizing their own programming schemes, which has allowed the spread of the phrase “consumption under demand”, rapidly multiplied since 2011 (Ericsson, 2015); the second change refers to the users’ ability to consult, hierarchize, modify and redistribute contents. All these novelties, providing the user (*prosumer*) a take of control never had before, threaten the traditional model of business, production and distribution (Berrocal *et al.*, 2014).

Initiatives considered as the trigger for the new generations –the future adult audiences- to set aside the traditional information channels, mostly in favor of virtual social networks, which perform today’s filtering function, attributed to the *mass media* in the past (Segado *et al.*, 2015). Disaffection, also evident from the radio data (López y Gómez, 2014), which show how the majority of Spanish youngsters from 18 to 25 consume it to enjoy music contents, -avoiding the rest of uses, informational included-; and moreover, for this consumption the predominant access is *on-line* -via *streaming* or *podcastings* downloads-.

This situation, and the obvious potential growth of audiences for the virtual space, make media companies find themselves forced to permit “their contents to be transferred, edited, or even mixed (*mash-up*) and this way, easily located” (Noguera Vivo, 2010: 179), in order to gain visibility and not to be left aside. Segado *et al.* (2015) examine the issue of information published by the media likely to reach a major virality in social networks, and detect a predominance of section National (37.9%), followed by Society and Culture (27.1%) and International (13.3%). Nonetheless, we can also

observe, within these culture industries, a low propensity to listen and attend to the audience, since 69.3% of the Spanish media headlines do not appear on their Facebook profile for individuals' use: neither as a reply to any previous question nor as the means to start any contact or relationship at all.

5. Methodology

With an attempt to address the media culture of Communication professors –who are charged, among other tasks, with the selection of cases later examined in classroom- an exploratory study is put to deal with the university environment, taken from two Spanish-speaking centers: Valladolid University (Spain) and La Salle University, in Mexico city (Mexico). Despite coming from very different contexts, these institutions share high levels of national supply and demand of Communication studies, as expounded in the foregoing sections.

Valladolid University includes the Journalism degree in the course 2003/2004 [5], whose pre-enrollment procedure counted the amount of 1,283 applications [6], that finally brought the number of 116 enrolled students. From then on, the present Journalism Degree –a clear consequence of the changes under Plan Bologna- has been imparted in Faculty of Philosophy and Letters of the city. Throughout the academic year in which the above-mentioned exploratory study took part, Journalism counted on 27 professors of their own.

Just two years before, in 2001, August, La Salle University, located in Mexico city, turns Communication Sciences Degree official, through afternoon classes for 48 enrolled. The positive evolution of Architecture, Design and Communication Mexican School (EMADyC), where this degree is imparted, obtains the CONEICC accreditation; this helps it turn into Faculty in 2012, under the acronym FAMADyC. In 2015 there were registered about 400 enrolled students, and a 50 professors' staff, for this degree in the faculty.

Through the survey, one of the most employed investigation techniques (Vinuesa Tejero, 2005) helping capture the opinion of a specific social group, our task dealt with: how, and through which media, the professors get the information. The results obtained give way to a second goal: to establish a comparison between the countries (Spain-Mexico), which leads straight to this article.

The questionnaire, distributed on-line during the course 2014/2015, contains 30 questions, including both one-choice and multiple-choice (using Likert scales for each respondent opinion on the different media), as well as open questions, led to determine the professors' preferences regarding newspapers, channels, radio-stations or webs, and concrete programs on audiovisual media. The survey is preceded with an introduction, which tells the objective of this research, and guarantees anonymity. For distributing the questionnaire, *Google Docs* was chosen, given that, unlike other platforms, it guarantees each participant's confidentiality.

The questionnaire appears divided in 4 sections, denoting the main mass media: press, radio, television and the Internet; then ends up gathering personal data from the respondents: gender and age range. Each section is based on the same attempt: exploring which way the respondents approach each specific medium, for which they are asked about their specific consumption habits, namely: at which moment they access, how often, and by means of which support and format. In addition, it is sought to capture, as much as possible, the consumed contents, by outlining an issue-based

categorization; furthermore, the quality assigned to the different media, and the chosen paths to interact with each of them.

6. Description and analysis of results

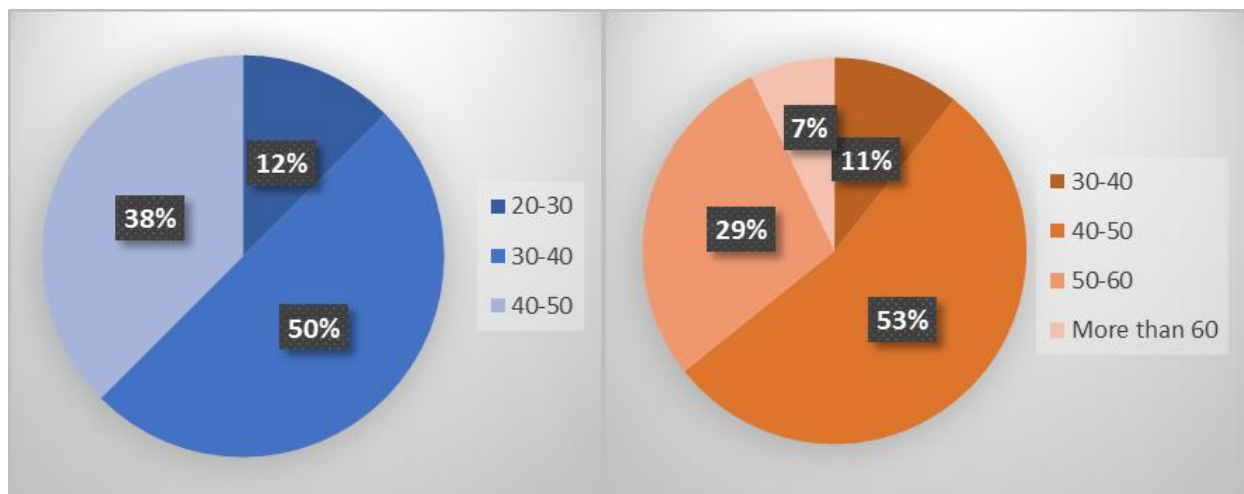
The survey was responded by more than half the number of professors (n=44) who worked in the mentioned institutions during the course 2014/2015 -59.2% of the employed in Valladolid University and 56% of the ones in La Salle University-.

Given the size of the universe -77 subjects-, with a reliability level of 99% and a 10% of margin of error, 43 individuals were necessary to respond, so that we could count on a significant sample and representative results.

Due to the impossible access to the sociodemographic characteristics of the whole universe, we mention the features in terms of age and gender below, concerning this sample.

First, the majority age range of respondents is placed, for Valladolid, in 30 to 40 years, while in La Salle the predominant range is from 40 to 50 years (graph II).

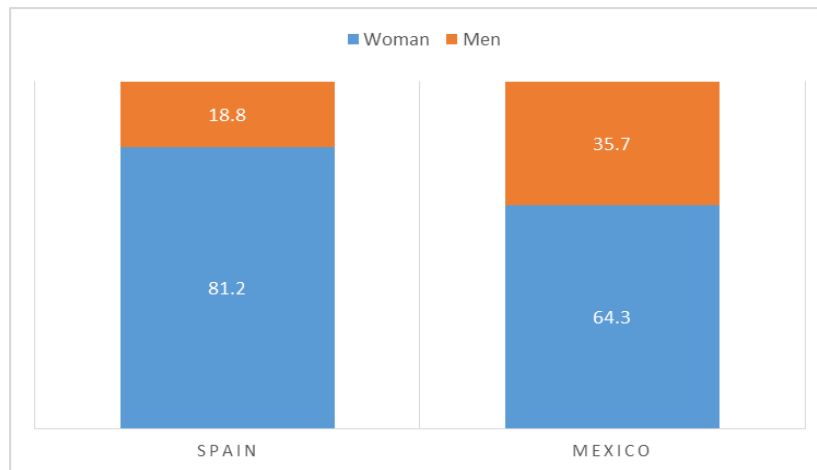
Graph II. Age data from the samples of Valladolid University (left) and La Salle University (right)



Source: Authors' own elaboration

Regarding the gender of participants, a remarkable preponderance of women can be seen in both cases, reaching up to 81.2% in Valladolid, and 64.3% in La Salle (graph III). This imbalance found in gender corroborates the tendency that the successive Annual Reports on Journalistic Profession published by the Madrid Press Association have been confirming year after year (Ortiz, Rodríguez y Pérez, 2011): we are observing a clear feminization in Journalism studies (Rivero, Meso y Peña, 2015), which has also become a reality in their teaching.

Graph III. Gender within the sample of the ones polled



Source: Authors' own elaboration

6.1. The professor's information-searching process

Daily, the professors approach press, television, radio and social networks to get informed, while their approaching magazines shows a much lower frequency, usually several times a month -43.8% in Spain, and 42.8%, in Mexican case-.

With respect to the aforementioned daily uses, the most consumed medium is the press, including here both printed and digital headlines. The second position, and again coincident in both universities, is taken by social networks, which means that the professors make use of their circle of trust in order to get the information, be it through either face-to-face or on-line conversations; be these either synchronous (phone conversation) or asynchronous (messages by mobile phone).

In La Salle, the daily consumption of television and radio presents similar levels, which leads both media to the third place regarding their following, while in Valladolid University radio slightly surpasses television, as shown in Table 2.

Table 2. Daily access to information

	Press	Television	Radio	Social Networks	Magazines
Spain	81.3%	50%	56%	62.5%	0%
Mexico	71.4%	60.7%	60.7%	50%	17.8%

Source: Authors' own elaboration

When the professors are asked about their specific actions related to informational habits, Valladolid context reflects a rather scarce use of both WhatsApp and blogs -namely *never or rarely*, used by a 62.5%, a 43.8%, respectively, which diverges from the regular viewing of *hashtags* and friends' profiles (56.3%). On the contrary, Mexican professors reveal how they do make a continuous use of mobiles' application WhatsApp, to keep up with the news (42.8%), and they very often consult their friends' profiles and *hashtags* (57.1%); while the reading of blogs shows very irregular results –with practically the same percentage for all offered options [7]-.

Something absolutely coincident within the groups explored is the interest in viewing the contents published by the different media in the Net, since 93.8%, in Valladolid University, and 67.8%, in Mexican case, affirm they *always* or *usually* do it. There are clear data on the followings of information uploaded by the journalists or the medium itself, in social networks, according to the low percentage of those who declare they *never or rarely* do it -12.5%, in Valladolid, and 14.3%, in La Salle [8]-.

6.2. Access supports

Once demonstrated that in order to get informed, the professorship count on different media regularly consulted, then the study deals with proving which are their preferences at the support and format chosen.

With regard to television, both universities prefer -with a 93.8% and a 100%- the classical support, which permits to conclude that professors usually approach television items on the T.V itself. The same happens with radio, showing overwhelming numbers: 75% in Spain, and 71.4% in Mexico, choose its traditional support, although slight uses of more recent formats appear, as such is the case of mobile telephones or computers.

With respect to press, an inverse tendency seems demonstrated, in relation to the given data of television: the Internet as a platform prevails (87.6% and 57.1%), with an outstanding computer screen, when compared to tablet and mobile phone (see table 3). In La Salle University, the traditional support for reading press still plays its role (42.9%), while in Valladolid this is minor (12.5%).

Table 3. Supports on which press is consumed

Press (Spain)	Percentage	Press (Mexico)	Percentage
Mobile (Internet)	12.5%	Mobile (Internet)	7.1%
Laptop, or Desktop computer(Internet)	56.3%	Laptop, or Desktop computer(Internet)	28.6%
Classical support	12.5%	Classical support	42.9%
Tablet (Internet)	18.8%	Tablet (Internet)	21.4%

Source: Authors' own elaboration

The information through social networks –so to speak, from friends and acquaintances' environment- is usually obtained through the Internet (93.8% and 78.6%) prioritizing its consumption by mobile

phone, followed by computer. We find the relevant fact that a low percentage of respondents (6.3% and 21.4%) admits becoming informed through meeting their friends face to face.

Finally, magazines appear, besides television and radio, maintaining a prevalent use of the classical format (62.5% and 57.1%), namely, the print.

6.3. Priority and perception of information quality

When it comes to determine which medium each professor primarily chooses (press, radio and television) to find information on current affairs, we observe results are highly related to consumption frequency, above explored, in 6.1. Thus, press prevails *always* or *usually* as the one medium to keep up with the news, for 100% of the respondents in Valladolid, and 92.9% in La Salle. Concerning the rest of media, and as table 4 shows, television reaches a following rate of 68.8% and 82.1%, respectively, very close to the radio data, with rates of 62.6% and 82.2%.

Table 4. Priority assigned to the main media

	SPAIN			MEXICO		
	Press	Television	Radio	Press	Television	Radio
Always - usually	100%	68.8%	62.6%	92.9%	82.1%	82.2%
Sometimes	0%	12.5%	31.3%	0%	10.7%	10.7%
Rarely-never	0%	18.8%	6.3%	7.1%	7.1%	7.2%

Source: Authors' own elaboration

Considering that mainstream studies on media consumption usually place television as the medium with a major social penetration (AIMC, 2015a; Mediascope Europe, 2012), we keep hold of the valuation the Journalism professors make about its contents. In Valladolid University the way they perceive television programming is *regular* (68.8%), while only 18.8% perceive it as *good*, with no case responding *very good*. In La Salle, for its part, the opinion registered about this kind of items points at their mediocrity, and only 25% respond *good* or *very good*.

Table 5. Quality attributed to television

Television (Spain)	Percentage	Television (Mexico)	Percentage
Very good	0%	Very good	3.6%
Good	18.8%	Good	21.4%
Ordinary	68.8%	Ordinary	32.1%
Bad	6.3%	Bad	25%
Very bad	6.3%	Very bad	17.9%

Source: Authors' own elaboration

In Mexico, radio, newspapers and magazines spread quality contents according to more than half the sample—concretely, 71.5% referring to radio, 74.2%, press, and a 67.9%, magazines-. Instead, in

Spain, the majority perception of *good* or *very good* is only for radio consumption, in 62.5% of the cases, while for half the Journalism professors the newspapers bring *ordinary* contents (see table 6).

Table 6. General Valuation of communication media

	SPAIN			MEXICO		
	Press	Radio	Magazines	Press	Radio	Magazines
Very good - Good	43.5%	62.5%	50.1%	64.2%	71.5%	67.9%
Ordinary	50%	37.5%	43.8%	32.1%	17.9%	32.1%
Bad - Very bad	6.3%	0%	6.3%	3.6%	10.7%	0%

Source: Authors' own elaboration

6.4. Medium's provenance and contents

Assuming that the survey data allow us to assert that professorship frequently approach the mainstream media, thereupon we go deeper within every typology at the specific geographical provenance of all media explored, and so we discover the issues of a major interest.

International media in Mexico show a larger penetration than they do in Spain. International press is looked up daily or several times a week, for 82.1% of the cases in La Salle, while Valladolid places this use below half, 37.6%. These are recurring numbers for international television, often consumed by 67.9% of La Salle's professors and 18.8% in Valladolid. To summarize, the rate of popularity and following of international media in Mexico doubles the one in Spain.

Quite the opposite, the professors from Valladolid University tend to consult national media, within either press (93.8%) or television (81.3%); also, regional media, which brings a 75% for press and drops to 31.3% in television; and local media: 68.8% of the sample consult print media, and 18.8% television. This prevalence of professor's interest in print media, here remarked since the very first pages, gets especially reinforced in Spanish context; such is the case that no respondent marked option *never* when asked about how often he/she reaches three out of the four press typologies (national, regional and local), something that Mexican case also shows, with a rather similar number: 10%. Negative answer that we certainly find, more often for television, with some aspects over 20%. See table 7.

Table 7. Usual Consumption according to media's provenance

	International Media		National Media		Regional Media		Local Media	
	Press (*)	T.V (*)	Press (*)	T.V (*)	Press (*)	T.V (*)	Press (*)	T.V (*)
Spain	37.6% (6.3%)	18.8% (18.8%)	93.8% (0%)	81.3% (6.3%)	75% (0%)	31.3% (12.5%)	68.8% (0%)	18.8% (18.8%)
Mexico	82.1%	67.9%	89.3%	71.5%	60.7%	25 %	64.3%	32.1%

	(3.6%)	(7.1%)	(0%)	(3.6%)	(7.1%)	(21.4%)	(3.6%)	(25%)
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(*) Percentage referred to answer “never”

Source: Authors’ own elaboration

With relation to the most attracting contents, we find similar data for both universities. The section National Politics becomes the most sought in press, radio, television and the Internet, while Internacional Politics and Culture shows a second and a third position –although there are differences depending on the specific center and medium-.

6.5. Time and space of consumption

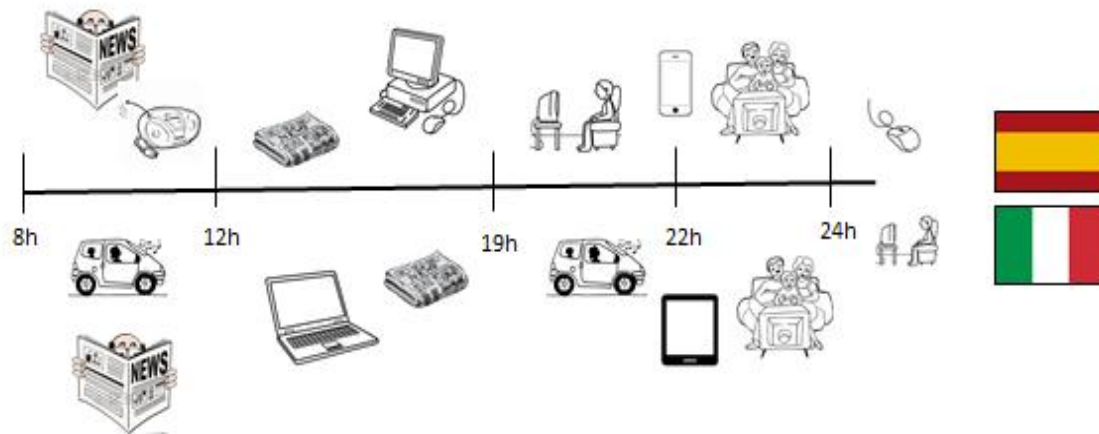
Despite various researches proving media consumption tied to our daily life (Nielsen, 2015; Paz y Brussino, 2015), the survey helps see how professor is prone to approach one or another medium depending upon which moment of the day, with relevant similarities between the two countries. In this regard, first time in the morning, which takes from 8 to 12, gather the largest rates for press reading (87.5% and 75%) and for radio listening (93.7% and 92.9%), which in Mexico includes equally: conventional radio and car radio.

Regarding television, 68.8% and a 46.4%, respectively, state they do not turn it on within that morning-time range (8 to 12); such is the case that in both countries the television consumption gains intensity from 10 p.m to 12 p.m (86.6% and 75%), commonly through the traditional device.

From the afternoon on, the next rise for radio use occurs from 7 to 10 p.m (68.7% and 60.7%) meeting the after-working time, for being mainly consumed into the respective vehicle.

Also worth mentioning, the Internet brings an information-searching consult which remains steady all day long. In this case, the key is the change at the type of support and format, as day goes by. This way, while the morning time shows a predominance of desktop and laptop computers, during the evening devices such as mobiles and tablets gain presence.

Image 1. Graph presentation of the most consumed media and supports throughout the day



Source: Authors' own elaboration

From midnight on the media consumption drops noticeably at both centers; neither press nor radio reach a 25% of the sample. Only the Internet and television barely maintain presence, below 50%.

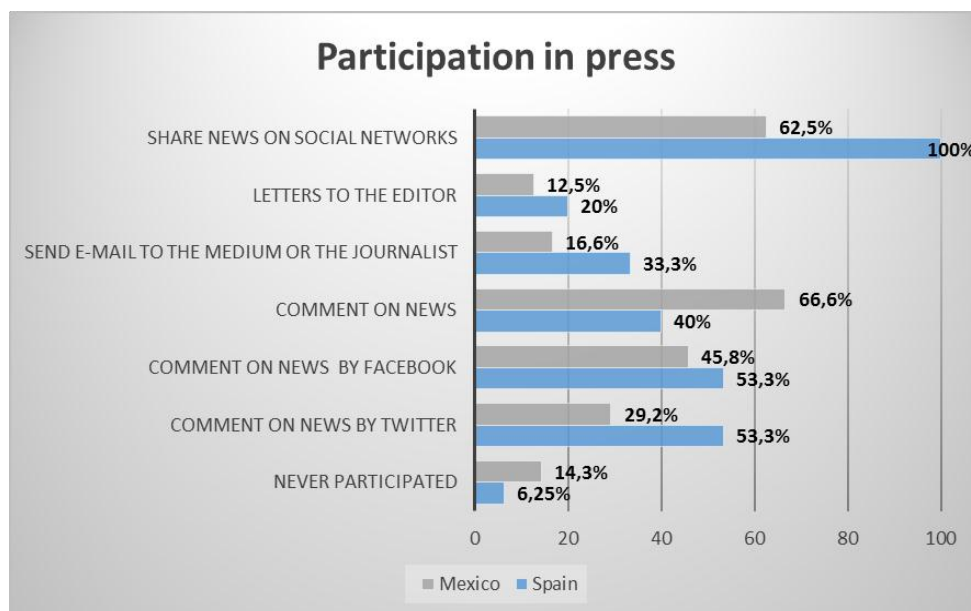
Given the fact that the data from the professors' Internet surfing points at different devices, it is also proved that their choice is conditioned by the specific situation where each professor might be. When access to the Net is at home, the predominant support is the laptop computer (50% and 42.9%); when it is at the main workplace, namely the university itself, Spanish case trades the laptop for the desktop computer, with that same percentage (50%) while in Mexico the highest rate (35.7%) maintains the laptop usage; and when it deals with sharing such virtual experience with relatives or friends, mobile phones win in both countries. The primary situations in which tablets are consumed, not exceeding 25%, demonstrate that these formats appear linked to a solitary use, mostly in Mexico, and to home consumption, in Spain.

6.6. Interacting with the medium

The coming of the Internet has not only transformed the media ecosystem, but also has changed our ways of socialization, even affecting our relationship with the communication media. Several reasons encourage the users to participate: the increase of the mechanisms by which we contact a medium and/or its professionals; the comfort and simplicity their processes bring, and in large part because they are free. Next, we mark out the options most embraced by Journalism professors in order to interact, as well as the media most open to comments.

In relation to the latter, the Internet and press show the highest participation rates among the respondents, reaching an average of 95% and 90%, respectively. On the contrary, around 45% of the sample admit they haven't partaken in television, while radio different data between the two countries can't help generalize, since participation in Mexico (82.8%) lies far higher than the one admitted by the Spanish professionals, placed in 50%.

Graph IV. Participation in press



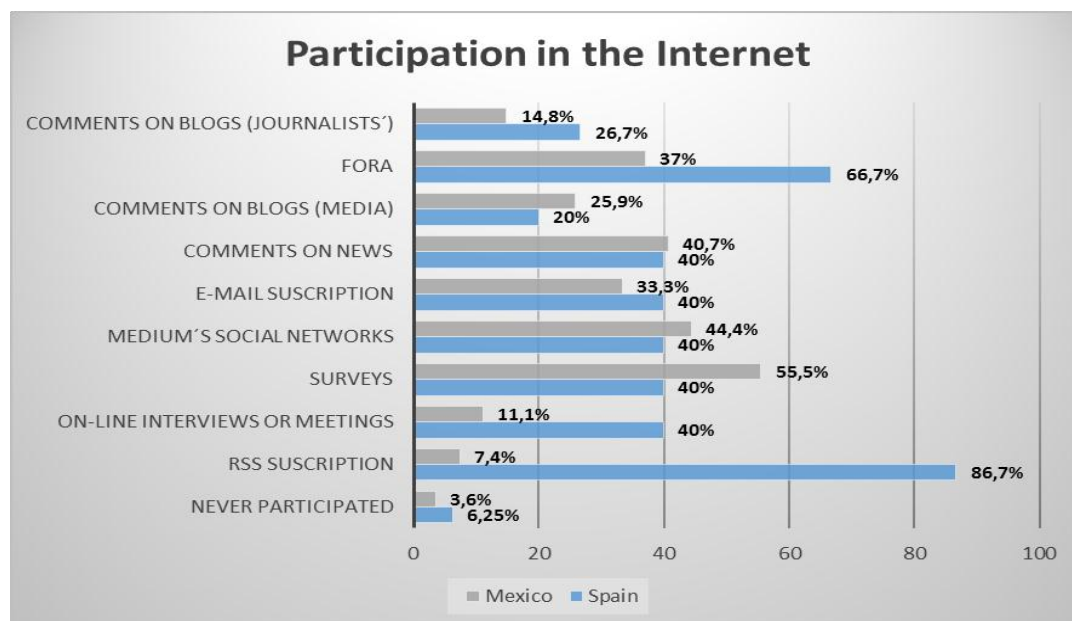
Source: Authors' own elaboration

In general terms, the survey reveals that the participatory means making use of the Net –which include all the dynamic usages within the social networks- are the most used in contrast to the analogical and tangible practices, such as phone calls or letters to the editor, whose representation among respondents is anecdotal.

More precisely, and checking graph IV, related to press, the interaction between reader and newspaper is usually a result of both commenting and sharing the content of some news on Facebook and Twitter. A good example is Spanish case, where all those respondents who answered that they had sometimes partaken in a print medium, also claimed to have shared some news in social networks. On the other hand, referring to the lowest level following practices, we meet the letters to the editor, and the sending of email to either the medium or the journalist.

Internet, the most likely medium for websurfers to interact with informational contents, makes the Mexican professors participate mostly through on-line surveys (55.5%) and through the media corporate profiles on social networks (44.4%). On the contrary, Valladolid presents RSS suscription as the most spread system (86.7%), followed by the fora (66.7%). In addition, there is the relevant fact that: the comments on news, the email suscription, the surveys, the on-line meetings, and the following of media corporate profiles on social networks, all of them gather, among Spanish professors, the same reception level, which rises up to 40%.

Graph V. Participation in the Internet



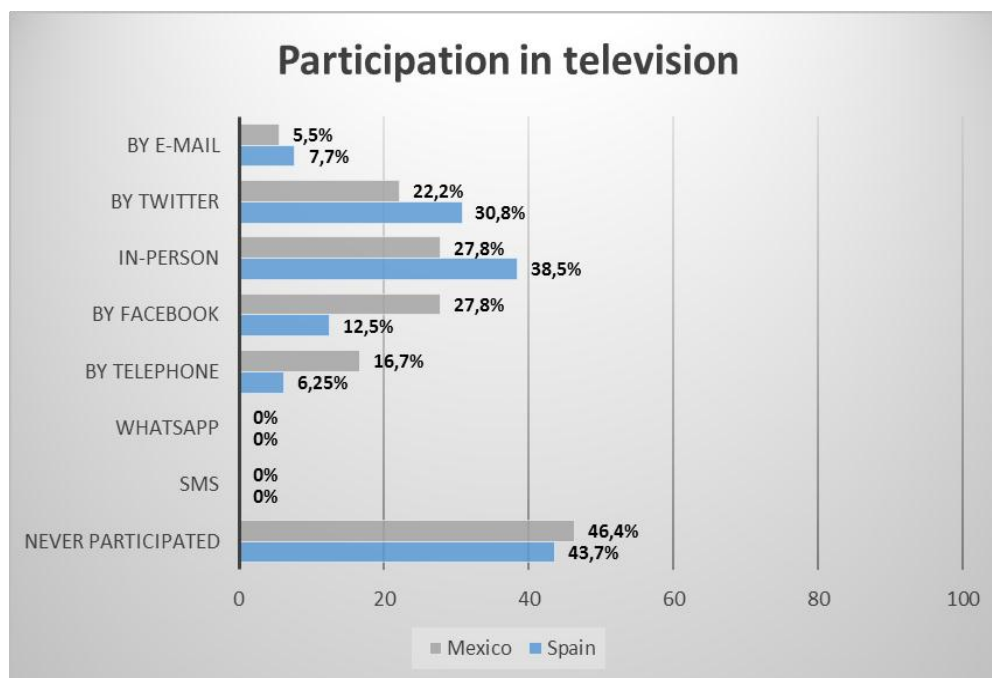
Source: Authors' own elaboration

Regarding the media with the lowest number of interactions –television and radio- we find in-person participation as relevant as the on-line means, as well as the fact that the specific services provided at the mobile phone (Whatsapp and SMS) show a very weak presence.

Within those respondents who stated having participated in television on some occasion, and given the similar rates from both of the centers (see graph VI), we remark that about 23% do it through social networks (Facebook and Twitter) and around 33% in-person. Finally, it is outstanding how communicating by SMS or Whatsapps aren't options for the professors to partake in television.

Radio turns out to show the biggest differences between the two universities, regarding the means of participation chosen by professors. Notwithstanding its third position for interaction in both countries -only above television-, a fact calls our attention: the most precluded means for the rest of media (in-person communication, phonecalls, and e-mail) are the ones mostly used in Valladolid, when analyzing radio. This is something we note that, as a whole, does not involve more than half the sample (graph VII).

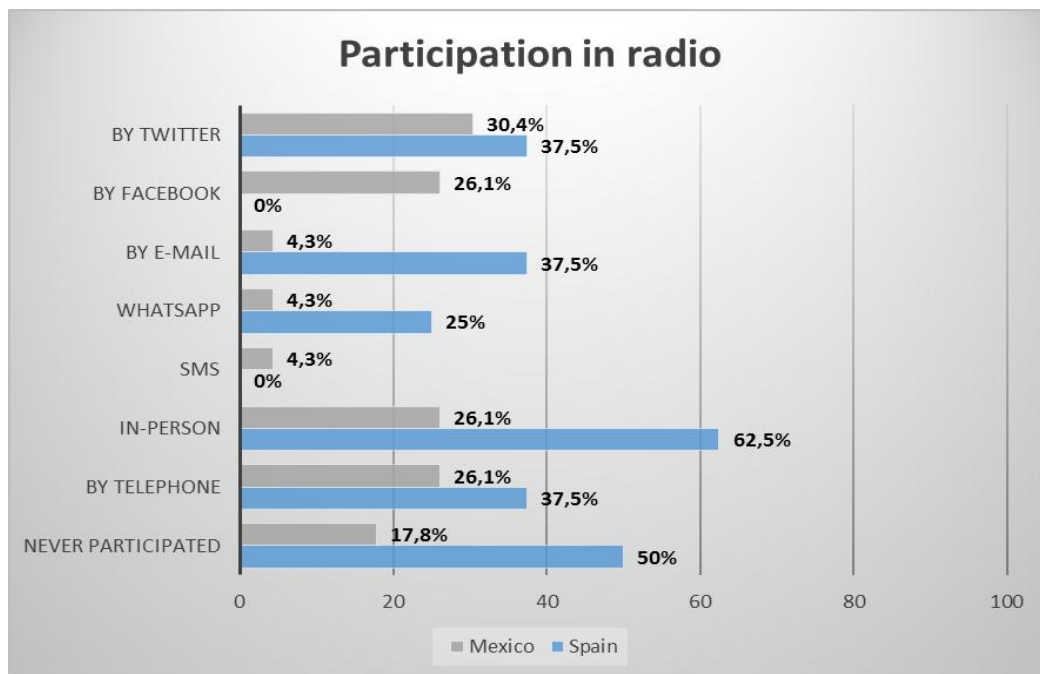
Graph VI. Participation in television



Source: Authors' own elaboration

In La Salle, although the in-person participation and telephone call present a rather low impact when compared to Valladolid data, these practices yield similar numbers to the option “by Facebook” (26.1%). For the Mexican, as graph VII demonstrates, there isn't any participatory mechanism bringing a difference between radio and the rest of media.

Graph VII. Participation in radio



Source: Authors' own elaboration

7. Conclusions

The case-study in the classroom constitutes a fundamental pillar for university teaching, a profession which over the years has aspired to both improve its pedagogic quality and integrate as many craft-directed competencies as possible. In Journalism, the presentation and analysis of items from the different communication media help and strengthen critical capacity and get future graduates closer to their craft performance.

Under this premise the exploratory study is set up, focused on the professorship in Valladolid, Spain, and La Salle, Mexico city, Mexico. Its main objective aims at knowing how Communication professors become informed -which media they consume, how often, and through which supports and formats-, and as a second objective, performing a comparison of the two Spanish-speaking countries selected, Spain and Mexico, where the supply and demand of Communication studies have grown significantly, over the last years.

The results of the survey, responded by an average of 57.6% of the active professors of Journalism degree, in Valladolid, and Information Sciences in La Salle, describe strong similarities between these countries, and help confirm that these professionals share common interests, necessities and habits at media consumption.

Regarding the kind of media, both print and on-line format make of press the one most consulted, and daily approached, for getting the information, preferably within the issues of both national and international politics. However, on-line radio and television projected on a screen different to

traditional: computer, tablet or mobile phone- accounts for a quite low penetration rate –not higher than 25%-, while the information through social networks – namely, the circles of friends and acquaintances- is primarily reached in the Internet, prioritizing first, mobile phone, and then computer, as the means for its consumption.

When it comes to valuate the contents displayed by the different media, press and radio count on the appreciation from the professorship, not as does television, usually marked as *ordinary*. Something that should take us to think carefully, given that precisely television reaches, according to the principal audience-computing agencies (AIMC, Mediascope Europe), the highest rates of social following.

Finally, two relevant facts turn out to be: the professors in Valladolid interact with the media, mainly press, through Web 2.0 mechanisms and tools, –such as the insertion of comments or the viralization of contents through social networks- ; the professors in La Salle primarily use Web 1.0, by means of activities as giving certain initiatives continuity, such as on-line surveys, or the consult of journalists´ and media´s corporate profiles.

7.1. Discussion and future lines of research

As this paper reveals, the preferences on media-consumption shown by the Communication professorship are quite similar between Spain and Mexico, which would permit, on future occasions, to boost the same measures of promotion and support for the new teaching methodologies –main goal for our researchers´ team- , and their application to the transmission of knowledge within Communication-orientated disciplines.

Furthermore, it is highly recommended, and this is the way we are working at the present, to carry out a research on students, the other side involved in any teaching process, as object of study. It will help testing whether or not their media-approaching and, by extension, media culture, are in line with the answers given by professors; or otherwise, whether there are relevant differences.

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8. Notes

[1] Acronym in spanish, referring to “Asociación Mexicana de Investigadores de la Comunicación”: Mexico Communication Researchers Association.

[2]Results from ANECA-database, accessible at: <http://srv.aneca.es/ListadoTitulos/busqueda-titulaciones> (Latest query: 21.09.2015). The calculation doesn´t include: Madrid Technology and Business University, for not showing public information nor contact details available; Pontificia Comillas University, because despite its appearance on ANECA list, as a promoter of Journalism

Degree, we found that they deny having offered these studies, according to a telephone conversation. In addition, Ramon Llull University is worth mentioning, in its two available degrees: Journalism, and Journalism and Corporate Communications.

[3] Hernández Ramírez (2004) reminds us that Pio XII Philosophy Institute in Guadalajara, today Valle de Atemajac University (UNIVA, acronym in Spanish), founded a technical journalism school, the first one in West Mexico, in 1962, later named as Communication Sciences and Techniques School. Evolution also undergone in Journalism degrees in UNAM and Veracruzana University.

[4] Available database at: <http://www.sirvoes.sep.gob.mx>

[5] At that time the only Journalism degree offered by a public university in Castilla y León.

[6] In 868 of the applications (68%) the option for studying Journalism was among the three first out of the twelve available alternatives.

[7] Each respondent had the opportunity to choose between: *always, usually, sometimes, rarely or never*.

[8] From now on, and in order to avoid being too reiterative, whenever percentages happen to appear together again, this will convey: the first number refers to Valladolid, and the second one, to La Salle University.

9. Bibliography

AIMC (2015a). *Audiencia general de medios. Abril 2014 a marzo 2015*. Available at: <http://www.aimc.es/-Datos-EGM-Resumen-General-.html> (15.09.2015)

AIMC (2015b). *17º Navegantes en la Red*. Available at: <http://www.aimc.es/-Navegantes-en-la-Red-.html> (15.09.2015)

ANECA (2005). *Libro Blanco. Títulos de Grado en Comunicación*. Autor. Available at: www.aneca.es/media/150336/libroblanco_comunicacion_def.pdf (01.09.2015)

Asociación de la Prensa de Madrid (2013). *Informe anual de la profesión periodística*. Autor: Madrid. Available at: www.apmadrid.es/images/stories/informe_profesion_2013.pdf (22.08.2015)

Baldivia, J. (Coord.) (1981). *La formación de los periodistas en América Latina (México, Chile y Costa Rica)*. México: editorial Nueva Imagen.

Barnett, R. (2001). *Los límites de la competencia. El conocimiento, la educación superior y la sociedad*. Barcelona: Gedisa.

Berrocal, S., Campos, E. y Redondo, M. (2014). “Prosumidores mediáticos en la comunicación política: el «politainment» en YouTube”. *Comunicar: Revista Científica de Comunicación y Educación*, vol. XXII, núm. 43, pp. 65-72.

BOE. Boletín Oficial del Estado (1971). *Decreto 2070/1971, de 13 de agosto, por el que se regulan los estudios de Periodismo y demás medios de comunicación social en la Universidad*. núm. 220, de 14 de septiembre de 1971, pp. 14944-14945.

Brunner, J. J. (2005). “Universidades: su origen”. En: *Información, análisis y discusión sobre educación y política educativas* [blog]. Available at:
<https://jjbrunnermt.wordpress.com/2005/08/11/universidades-su-origen/> (15.07.2015)

Campos, L. L. y Garza J. A. (2015). “El estudiante de Ciencias de la Comunicación de la UANL: Consumo, perfil y aspiraciones”. En: F. Peinado (Coord.). *Formación, perfil profesional y consumo de medios de alumnos en Comunicación* (pp.93-104). Cuadernos Artesanos de Comunicación, 77. La Laguna (Tenerife): Latina.

CONEICC (2014). *Diagnóstico de la formación y el campo laboral de los comunicadores en México*. Author: México D.F.

Deuze, M. (2006). “Global journalism education. A conceptual approach”. En: *Journalism Studies*, vol. 7, núm. 1, pp. 19-34.

Duarte Gómez, J. A. (2012). “Las tensiones entre el enfoque por competencias y el campo académico de la comunicación”. En: *Poliantea*, vol. 8, nº 15, pp. 29-42. Available at:
<http://journal.poligran.edu.co/index.php/poliantea/article/view/69/61> (18.07.2015)

Ericsson, (2015). *ConsumerLab TV & Media Report 2015*. Available at:
<http://www.ericsson.com/news/1949448> (22.09.2015)

Fuente, C. y Mera, M. (2013). “Implantación del Método del Caso en la enseñanza del Periodismo en las universidades españolas: un análisis a partir de las guías docentes”. En: *Estudios sobre el Mensaje Periodístico*, vol. 19, núm. especial marzo, pp. 177-186.

Hernández Ramírez, M. E. (2004). “La formación universitaria de periodistas en México”. En: *Comunicación y Sociedad*, núm. 1, nueva época, enero-junio, 2004, pp. 100-138.

Humanes, M. L. y Roses, S. (2014). “Valoración de los estudiantes sobre la enseñanza del Periodismo en España”. *Comunicar*, núm. 42, v. XXI, pp. 181-188.

López, N. y Gómez, L. (2014). “La democratización del proceso comunicativo en radio: los jóvenes prosumidores”. En: *Vivat Academia*, año XVII, núm. 126, pp. 31-53.

Luna Cortés, C. E. (1995). “Enseñanza de la comunicación: tensiones y desencuentros”. En: Galindo, J. y Luna, C. (Coords.) *Campo académico de la comunicación: hacia una reconstrucción reflexiva* (pp. 133-156). México D.F: Iteso y Consejo Nacional para la Cultura y las Artes.

Matterlart, A. y Neveu, É. (2004). *Introducción a los estudios culturales*. Barcelona: Paidós.

Mertens, L. (1997). “Sistemas de competencia laboral: surgimiento y modelos”. En: Cinterfor, *Formación basada en competencia laboral: situación actual y perspectivas* (pp. 27-39). Montevideo: Cinterfor.

Ministerio de Educación, Cultura y Deporte (2003). *Documento Marco de Integración del Sistema Universitario Español en el EEES*. Autor. Available at: www.eees.es/pdf/Documento-Marco_10_Febrero.pdf (07.06.2015)

Morley, D. (1996). *Televisión, Audiencias y Estudios Culturales*. Buenos Aires: Amorrortu editores.

Muñiz, C. y Maldonado, L. (2011). “Entre la movilización y el malestar mediático. Impacto de las prácticas comunicativas en las actitudes políticas de los jóvenes”. *Perspectivas de la comunicación*, vol. 4, núm. 2, pp. 32-54.

Murciano, M. (2005). “La enseñanza del periodismo, nuevos desafíos internos y externos”. *Cuadernos de Periodistas*, núm. 5, pp. 89-100.

Nielsen (2015). *El mundo digital y el impacto de las nuevas formas de consumo audiovisual*. Available at: <http://www.nielsen.com/content/corporate/es/es/press-room/2015/siete-de-cada-diez-espanoles-quieren-total-libertad--para-consum.html> (22.09.2015)

Noguera Vivo, J. M. (2010). "Redes sociales como paradigma periodístico. Medios españoles en Facebook". En: *Revista Latina de Comunicación Social*, núm. 65, pp. 176-186. Available at: http://www.revistalatinacs.org/10/art/891_UCAM/13_JM_Noguera.html (22.09.2015) DOI: 10.4185/RLCS-65-2010-891-176-186.

Ortiz, M. Á., Rodríguez, D., y Pérez, M. J. (2011). “Perfil de entrada de los futuros alumnos de comunicación en las universidades de Madrid, en 2010/2012: la reafirmación de los rasgos”. *Revista de Comunicación de la SEECI*, año XV, núm. 26, pp. 1-21. DOI: <http://dx.doi.org/10.15198/seeci.2011.26.1-21>

Paz, A. P. y Brussino, S. (2015). “Consumo juvenil de información política. Análisis estructural y reticular de las preferencias mediáticas de universitarios cordobeses (Argentina, 2012)”. En *REDES: revista hispana para el análisis de redes sociales*, vol., 26, núm. 2, pp. 171-205.

Retis, J. (2011). *Estudio exploratorio sobre el consumo cultural de los inmigrantes latinoamericanos en España: el contexto transnacional de las prácticas culturales*. Fundación Alternativas. Available at: <http://www.researchgate.net/publication/272419023> (15.09.2015)

Rivero, D., Meso, K., y Peña, S. (2015): “La feminización de los estudios de Periodismo: análisis del caso español”. En: *Revista Latina de Comunicación Social*, núm. 70, pp. 566-583. DOI: 10.4185/RLCS-2015-1060

Rizo García, M. (2012). *Imaginarios sobre la comunicación. Algunas certezas y muchas incertidumbres en torno a los estudios de comunicación, hoy*. Bellaterra: Institut de la Comunicació, Universitat Autònoma de Barcelona.

Roca Sales, M. (2011). "Fragmentación de audiencias y reacciones de las networks en Estados Unidos. El caso de ABC, CBS, Fox y NBC". *Telos: Cuadernos de comunicación e innovación*. Available at: https://telos.fundaciontelefonica.com/seccion=1268&idioma=es_ES&id=2011050916350001&activo=6.do (22.09.2015)

Sánchez García, P. (2013). "Desafíos en la formación de los periodistas españoles: convergencia europea, capacitación tecnológica y formación permanente". *Comunicación y Medios*, núm. 28, pp. 40-60. Available at: <http://www.comunicacionymedios.uchile.cl/index.php/RCM/article/view/29685> (07.06.2015)

Santos, B. de S. (2007). *La Universidad en el siglo XXI. Para una reforma democrática y emancipatoria de la universidad*. La Paz, Bolivia: CIDES-UMSA.

Sartori, G. (1998). *Homo videns: la sociedad teledirigida*. Madrid: Taurus.

Segado, F., Díaz, J. y Soria, M. (2015). "La viralidad de las noticias en Facebook. Factores determinantes". *Telos: Cuadernos de comunicación e innovación*, núm. 100, pp. 153-161.

Vinuesa Tejero, M. L. (2005). "La encuesta. Observación extensiva de la realidad social". En: R. Berganza y J. Á. Ruiz (Coords.). *Investigar en Comunicación. Guía práctica de métodos y técnicas de investigación social en Comunicación* (pp.177-206). Madrid: McGraw Hill.

Weller, J. (2006). "Problemas de la inserción laboral de la población juvenil en América Latina". *Papeles de Población*, vol. 12, núm. 49, pp. 9-36.

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