

# Map of communication research groups in Spain

Mapa de los grupos de investigación en comunicación en España

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*This work was born within the framework of the MAPCOM project "Map of Communication Research in Spanish Universities from 2007 to 2018" (PGC2018-093358-B-100, Ministry of Science and Innovation)*

## How to cite this article / Standard reference

Gómez-Escalonilla, G. & Caffarel Serra, C. (2022). Map of communication research groups in Spain. *Revista Latina de Comunicación Social*, 80, 1-19.  
<https://www.doi.org/10.4185/RLCS-2022-1513>

## RESUMEN

La universidad española, desde hace más de una década, apoya la creación de grupos de investigación en el ámbito de las ciencias sociales para que articulen proyectos de investigación, en especial competitivos nacionales o internacionales, para que forjen líneas consolidadas de investigación y para garantizar la calidad y la excelencia en la investigación. De este empeño institucional han ido surgiendo en las diferentes disciplinas numerosos grupos de investigación con más o menos actividad e investigación en su haber, tanto en el ámbito nacional como en el internacional. Al igual que en otros campos, también en las ciencias de la comunicación se puede encontrar un elenco considerable de grupos de investigación. Los resultados del estudio realizado contabilizan un total de 213 grupos en todo el territorio nacional dedicados a investigar algún aspecto de los fenómenos comunicativos. De cada uno de estos grupos se han analizado 17 variables para conocer sus principales características y su actividad investigadora. De este modo, además de analizar quién o quiénes dirigen el grupo, su composición y desde qué universidad desarrollan su actividad, también se analizan las líneas principales de investigación y los proyectos y publicaciones que han realizado en los últimos diez años. Las principales conclusiones ratifican los resultados obtenidos en otros estudios que analizan otros aspectos de la investigación en comunicación: se constata cierta brecha de género, pues los grupos los dirigen más los hombres que las mujeres; y se detecta cierto centralismo territorial que privilegia las ciudades principales de la geografía española (Madrid y Barcelona).

**PALABRAS CLAVE:** Grupos de investigación; Comunicación; Investigación; Investigación en comunicación; Género; Universidades.

## ABSTRACT

The Spanish university, for more than a decade, has supported the creation of research groups in the field of social sciences that articulate research projects of a certain size to forge consolidated lines of research and guarantee quality and excellence in research. From this institutional endeavor, numerous research groups with more or less activity and research have emerged in the different disciplines, both nationally and internationally. As in other fields, a considerable number of research groups can be found in communication sciences as well. The results of the study carried out include a total of 213 groups throughout the national territory dedicated to investigating some aspect of communicative phenomena. From each of these groups, 17 variables have been analyzed to find out their main characteristics and their research activity. In this way, in addition to analyzing who or who leads the group, its composition, and from which university they carry out their activity, the main lines of research and the projects and publications they have carried out in the last ten years are also analyzed. The main conclusions confirm the results obtained in other studies that analyze other aspects of communication research: a certain gender gap is found since the groups are directed more by men than by researchers, and certain territorial centralism is detected that privileges the main cities of the Spanish geography (Madrid and Barcelona).

**KEYWORDS:** Research groups; Communication; Research in communication; gender; Universities.

**CONTENT:** 1. Introduction. 2. Objectives. 3. Methodology. 4. Results. 5. Discussion 6. Conclusions. 7. Bibliography 8. Curriculum Vitae

Translation by **Paula González** (Universidad Católica Andrés Bello, Venezuela)

## 1. Introduction

The Organic Law 6/2001, of December 21<sup>st</sup>, on Universities, in its article 40.2 indicates that “Research, without prejudice to the free creation and organization by Universities of the structures that, for their development, they determine and to free individual research, will be mainly carried out in research groups, Departments, and University Research Institutes”. And later, in article 83.1, it states that the research groups recognized by the University “may enter into contracts with individuals, Universities, or public and private entities to carry out scientific, technical, or artistic work, as well as for the development of specialization teachings or specific training activities”. (Ministry of Education, Culture, and Sport: 24/12/2001). In other words, the law still in force today places research groups at the same level as university departments and institutes.

In the same way, and taking into account the mandate of the law, the statutes of the Spanish Universities include in their articles the obligations that the groups must carry out at the same time that they develop in a more detailed way their tasks, their validity, how their formalization should be regarding the number of teachers, organizational dependency, etc. The importance, at least on paper, that the Universities give to the research groups lies in the fact that the universities request an external evaluation (ANECA, regional institutions, etc.) of the groups to determine their rank, which is organized in a different way for each University.<sup>1</sup>

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<sup>1</sup> For example, the UCM divides the groups into four categories: excellent, good, acceptable, and questionable, while the URJC does so into three categories: high-performance, consolidated, and emerging.

This contribution is inserted in meta-research studies, a line that has gained great strength in recent years. In the beginning, in the 90s, several research works studied the state of communication research in Spain when there were hardly any Communication Faculties, Caffarel et al. (1989), Cáceres and Caffarel (1993), Jones (1994, 1998), but it is in these last two decades where there is abundant literature that analyzes the state of communication research, from which we only reference texts that speak of the Spanish case: Almirón and Reig (2007); Arcila et al. (2013); Caffarel et al. (2017 and 2018, b and c); Fernández and Masip (2013); López Escobar and Martín Algarra (2016); Gaitán et al. (2018); Lozano et al. (2020); Martínez Nicolás (2009); Martínez Nicolás and Saperas (2016); Peñafiel et al. (2019); Rodrigo Alsina and García Jiménez (2010); Saperas (2016), De las Heras et al. (2018), among others. We also find abundant literature on partial developments of Meta-research in Communication, studying different supports: competitive research projects: Barranquero and Limón (2017); Gaitán et al. (2016); doctoral theses: Blázquez (2015); Delgado et al. (2006); Jones et al. (2000); Repiso et al. (2011); the study of scientific articles in indexed journals: López P. and Vicente, M (2011); Martínez Nicolás and Saperas (2011), or contributions to communication conferences: Rodríguez Gómez (2016); Gómez-Escalonilla and Izquierdo Iranzo (2020).

For the study of research groups in Spain it is worth highlighting: Izquierdo et al. (2008); Torres and Ramahí (2013), Tur Viñes and Núñez (2018). These last authors highlight the scarce tradition of studies on groups in the field of Social Sciences and, in our case, in Communication, being much more frequent in other areas, especially in bio-sanitary, in the same way, that researchers in communication demand these spaces for the development of their work and request the academic authorities and the institutions in charge of promoting research to provide the groups with a greater institutional presence (Caffarel et al., 2018a) since they are not usually represented on Faculty Boards, Government Boards, Cloisters, research commissions, although, as we said before, their figure is included in the general and autonomous norm that regulates the operation of Universities. It should be noted that in the recent document published by the Ministry of Science and Innovation to define the strategy of science, technology, and innovation in the next six years, there is only one mention of research groups and it is to claim them as places where the infrastructures available for science and its dissemination can be used (Ministry of Science and Innovation, 2020).

## 2. Objectives

The main objective of this work is to study communication research groups in public and private Spanish universities that offer degrees or postgraduate degrees in communication. The scope of the object, research groups, is, in turn, part of the R+D+i Project "Maps of communication research in Spanish Universities from 2007-2018". MapCom (PGC: 2018-093358-B-I00), whose purpose is to establish an interactive map of Meta-research in communication in Spain from 2007 to 2018 based on the repertoire and analysis of the following documents: doctoral theses, competitive R+D projects, scientific articles published in the journals with the greatest impact on Communication, referenced books in those years, papers presented at AEIC congresses in the same period, and, finally, a repository of research groups on Communication in Spain. In the R+D project "The Research System in Spain on social communication practices. Map of Projects, Groups, Lines, Study Objects, and Methods. (MapCom)", antecedent to the current MapCom, some of these documents have already been studied, although in a shorter time frame (2007-2013), specifically doctoral theses and R+D projects, while scientific articles, referenced books, and contributions to congresses are specific objects of study of this current project. Regarding the study of the groups, it happened that another research led by Victoria Tur and Patricia Núñez (2018) addressed the study of the groups following the methodology of geographic areas proposed by MapCom, the result of which was a repository of research groups in Spain, included in the MapCom website that offers all its open data repertoires ([www.mapcom.es](http://www.mapcom.es)). This repository of groups has been updated within the framework of

the current project "Maps of communication research in Spanish Universities 2007-2018" since some of the groups are no longer active and new ones have appeared. A precedent for this work was the FUGIC meeting (Spanish acronym for *University Forum of Research Groups in Communication*) which, within the framework of the MapCom project, was held at the URJC in March 2019, a forum in which the groups debated the problems and concerns that they had as groups to carry out their research activity (Lozano et al., 2021).

Thus, this contribution updates the data and aims to identify and analyze, from different perspectives, the research groups in Spanish universities that offer degrees or postgraduate degrees in communication. Besides knowing the number of groups that operate in Spanish territory, it is interesting to know the distribution of these groups by universities and Autonomous Communities, as well as knowing the weight of professors in their composition and the gender of who is proposed as a chief researcher or director of the group in question. Likewise, their activity is analyzed, both the lines of research that they follow and the number of publications and research projects carried out by the census groups.

### 3. Methodology

Our objective is to analyze the groups, which are hosted under the heading *research groups* on the institutional websites of public and private Spanish universities with Communication studies. To do this, from January to April 2020, an exhaustive search of communication research groups was carried out on the websites of the Universities that offer degrees or postgraduate degrees in communication. In Spain, 55 universities offer degrees and postgraduate degrees in Communication spread over 15 Autonomous Communities (Asturias and Cantabria are left out for not having communication studies).

The first difficulty was to verify that universities host research groups on their websites in multiple ways; Either the groups are attached to the vice-chancellor for research, or they are hosted in the research pages of the faculties, or in the departments themselves, for which the search was extended to these three levels. University: referencing only those groups that belonged to communication studies, regardless of the area of knowledge, search criteria used by Tur and Núñez (2018) to prepare their repository; Faculties of Communication in their different nomenclatures (Communication Sciences, Information Sciences, Social Sciences and Communication, etc.), and thirdly, we look at the departments, in many of which the research groups to which their professors belong are referenced.

Thus, we obtained a repository of groups that we proceeded to analyze from the information provided by the university or the group's own website, which we could access, if it existed, in three ways: through the links to the group that the universities posted (not too common), by the institutional information of the groups provided by the website of the corresponding university, and, thirdly, by doing a Google search of the title of the group that would take us, if it existed, to its website.

Once we obtained the group repository, we proceeded to empty 17 variables plus two internal control variables, variables to identify the name of the group, acronym, University, Autonomous Community, name of the director or person in charge of the group, the number of members, how many from the university, how many from another Spanish or foreign institution, gender of the person in charge and the team, lines of research, publications, and competitive European and national projects granted in the last 10 years, since this is the time frame proposed by the project in which we work and in which this contribution is inscribed.

Once the emptying had been carried out, to guarantee the reliability of the data, an email was written to those in charge of the groups asking for the missing information, which allowed, on the one hand, to eliminate the “dead” groups, that is, those without activity; and on the other, completing and debugging the database. Finally, a census of 213 communication research groups in Spanish universities with communication studies was obtained.

For the exploitation of the data, we have used the SPSS Statistics and Microsoft Excel tools for the quantitative analysis of the identification variables of the groups: name of the group, University of affiliation, public or private nature of the University, Autonomous Community, Name of the director, Gender of the director, Number of members of the group, gender percentage of its members, members outside the University, web address. For the variables of research production and transfer, we have crossed the affiliation data with the number of competitive European and national R+D projects. In this sense, it should be noted that only the projects that were identified with their affiliation have been taken into account: Ministry or corresponding body, identification number, and year/s discarding those that the groups indicate as competitive projects without stating their affiliation. In case of doubts, the name of the project has been contrasted with the database of R+D+I projects that another subgroup of the MapCom project has prepared during the last six months.

For the analysis of the lines of research, a more qualitative strategy has been followed by finding a greater diversity of cases, since each group defines their fields of study in their own way. This lack of homogeneity in the definition of the research lines makes it difficult to know and characterize the groups and their research activity, solving the complex casuistry with an analysis that has tried to group similar areas by re-categorizing proposed lines related to the same topic or disciplinary field, which has made it possible to differentiate and characterize some groups from others based on what they research.

## **4. Results**

In Spain, there are a total of 55 public and private universities that offer degrees in communication spread over 15 Autonomous Communities. From the analysis of their websites, based on the search for research groups, 46 have been identified that do have groups, that is, 83.6%. In principle, this data supports the importance that both the University law and other laws of lower rank (autonomic) and the university statutes themselves grant to research groups.

### **4.1. Groups and Universities and Autonomous Communities**

A total of 213 groups have been identified in 46 universities. Not all universities have the same number of research groups. As Table 1 indicates, the Complutense University of Madrid, with 37 groups, stands out, which has 10 more groups than the sum of groups from the Autonomous Universities of Barcelona and Seville, the second and third universities with the highest number of groups and which are the oldest public universities with communication studies, which would explain the consolidation of the greater number of groups. The CEU Cardenal Herrera University also occupies a position in the Ranking of Universities, as it has 10 research groups, even though it is private. They are followed in position by the universities of Alicante, Granada, Murcia, the Basque Country, and the Francisco de Vitoria University, which have 7 groups each, and within a short distance Pompeu Fabra, Ramón Llull, CEU San Pablo, and Rey Juan Carlos University with 6 research groups in each of the universities that have been mentioned. The University of Castilla La Mancha, Valladolid, and Jaime I have five groups, followed by the universities of Malaga, Navarre, Carlos III, Católica San Antonio de Murcia, Salamanca, Oberta de Catalunya, and the International

University of La Rioja with 4 research groups operating in these universities. The Galician universities (Vigo, Santiago, and A Coruña) and the Pontificia de Salamanca and San Jorge University contribute with three groups each, while Nebrija, Burgos, the University of Vic, Zaragoza, and the Miguel Hernández de Elche University contribute with two groups each. To these Universities, the following should be added with a single group: Distance University of Madrid, Abat Oliba, Cádiz, Deusto, Extremadura, Girona, Huelva, La Laguna, Valencia, European Miguel de Cervantes, International of Catalonia, and Rovira Virgili.

**Table 1.** *Ranking of Universities with the largest number of research groups*

Position	University	Nº of groups
1	COMPLUTENSE UNIVERSITY OF MADRID	37
2	AUTONOMOUS UNIVERSITY OF BARCELONA	16
3	UNIVERSITY OF SEVILLE	11
4	CEU CARDENAL HERRERA UNIVERSITY	10
5	UNIVERSITY OF ALICANTE UNIVERSITY OF GRANADA UNIVERSITY OF MURCIA UNIVERSITY OF THE BASQUE COUNTRY / EHU FRANCISCO DE VITORIA UNIVERSITY	7
6	CEU SAN PABLO UNIVERSITY POMPEU FABRA UNIVERSITY RAMON LLULL UNIVERSITY REY JUAN CARLOS UNIVERSITY	6

Considering the public or private ownership of the universities, it is observed that 17 universities are private, counting 58 groups, that is, 27% of the total, while the 29 public universities contribute 155 groups, almost 73%. The average number of groups in private universities is 3.4, while in public universities the average would be 5.3 groups per university. Based on this average, it should be noted that of the 13 universities that have more than 6 research groups, 4 are private universities: Cardenal Herrera Oria University, which, with 10 groups, occupies the fourth position; the Francisco de Vitoria University the 5<sup>th</sup> with 7 groups, and the CEU San Pablo and the Ramón Llull University with 6 groups ranked in the 6<sup>th</sup> position. Later on, we will see that these universities, the private ones, are the ones that obtain the least number of competitive research projects.

The analysis has taken into account the distribution of research groups by universities, grouped in their Autonomous Communities; This variable, as occurs in the rest of the documents analyzed in the MapCom Project, allows its translation to interactive maps as was done in the first project that completed its longitudinal analysis in 2013.

**Table 2.** *Distribution by Autonomous Communities*

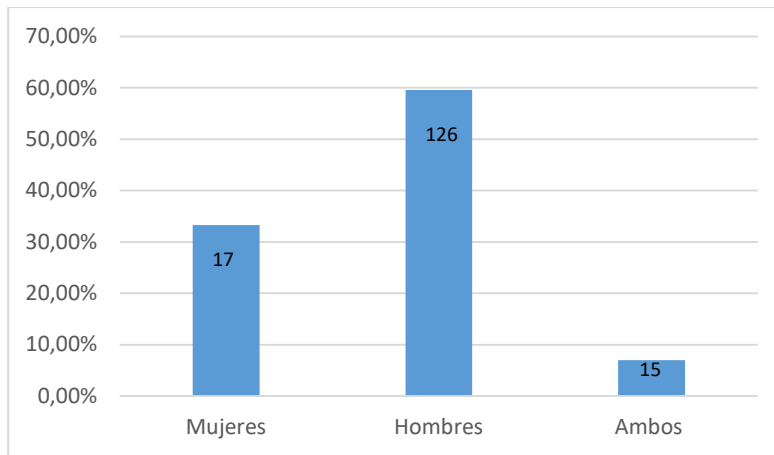
Position	Autonomous community	N <sup>a</sup> of groups
1.	Community of Madrid	65
2.	Catalonia	38
3.	Valencian Community	25
4.	Andalusia	24
5.	Castile and Leon	15
6.	Murcia region	10
7.	Galicia	9
8.	Basque Country	8
9.	Aragon	5
10.	Castilla la Mancha	5
11.	Navarre	4
12.	La Rioja	4
13.	Estremadura	1

The first Autonomous Community in the number of groups, not in the number of universities, is the Autonomous Community of Madrid with 63 consolidated research groups. This figure is distributed among 7 universities, 4 private and 3 public, and it is in the Complutense University of Madrid where the largest number of groups are concentrated: 37 (58.7%), 10 groups more than the sum of those who the other universities of the Community contribute. In the second place, is the Autonomous Community of Catalonia with 38 research groups and with the same characteristics as that of Madrid, since a single University, the Autonomous of Barcelona, brings together 16 of the 38 groups (42%), although in this Community, the number of universities is greater: 9 compared to 7 in Madrid. The Valencian Community, with 25 groups, occupies the third position, with a smaller number of universities: 5, and the Community of Andalusia occupies the fourth place with 24 groups also distributed in 5 universities, among which Seville stands out with 45%.

Logically, as the number of universities per autonomous community decreases, the number of groups also decreases, although the proportionality concerning the number of universities is not the same. The Community of Murcia stands out, for example, in which its 10 groups are distributed between two Universities.

#### **4.2. Groups and gender**

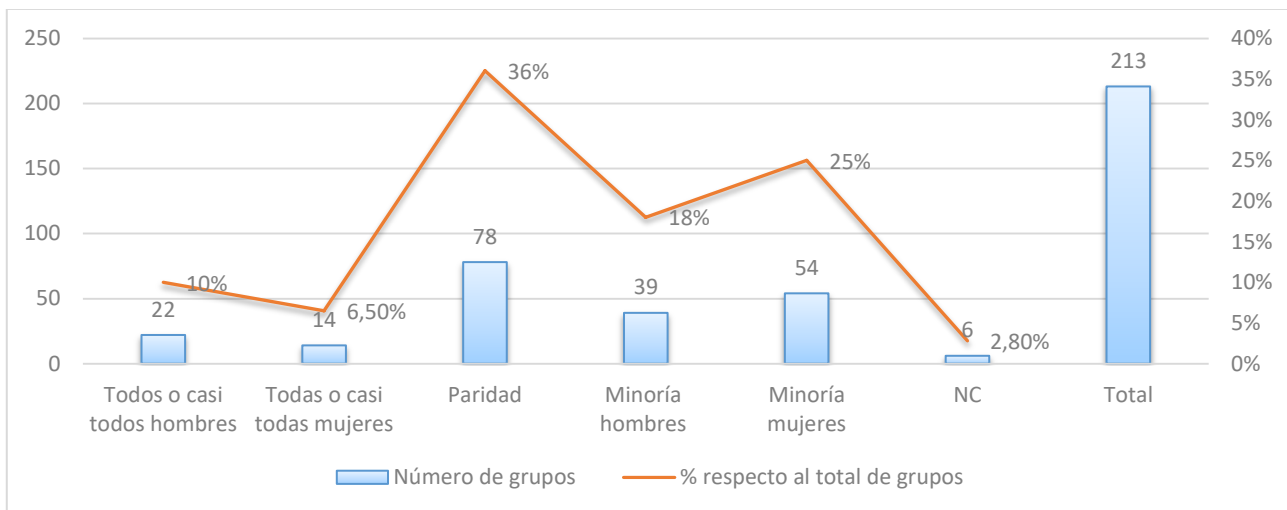
If we take into account the gender variable of the group director, we find the following results in Graph 1 from the coding in three categories: Woman, Man, or both in the case that there is more than one director and they are of different genders.



**Graph 1:** *Percentage of groups by gender*

Even adding the 17 groups led by women and the 15 groups led by “both” does not reach parity: there are 126 groups (59.6% of groups) led by men compared to 33.3% of groups led only by women or both (7%).

If we take into account the number of members of the group according to the gender variable, five categories have been distinguished: All or almost all men; All or almost all women, Parity (50% men and women); Men are the minority (less than or equal to 33% of men), and Women are the minority (less than or equal to 33% of women). The results are shown in graph 2, with the exception that in 6 research groups we have not been able to analyze this variable because they do not identify the names of the group members.

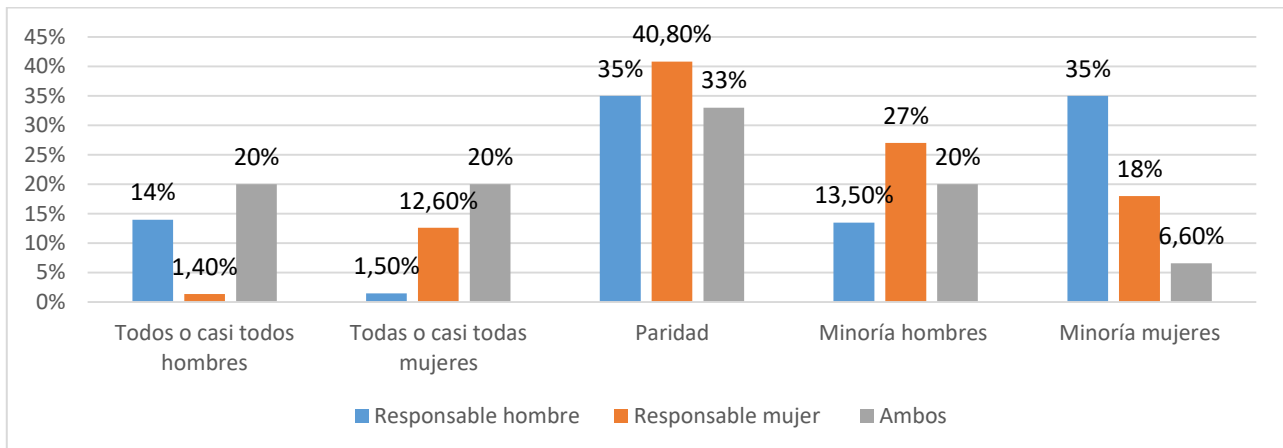


**Graph 2:** *Presence of men vs women in the composition of the group*

Parity in research teams is reached only in 36% of the groups compared to the total of them, a figure well below that recommended by the Horizon 2020 program of the European Union that advocates for gender equality in research (Horizon 2020), if we add to that that 10% of the groups do not have women in their teams or that in another 25% women represent only 33% or less of the team, the outlook is bleak.



If we relate the number of men and women that make up the research groups according to the gender of the person in charge/director, we obtain the following data reflected in Graph 3.



**Graph 3:** *Percentage of women in the group according to the gender of the person in charge*

When the management of the group is in the hands of a man, it is inclined in a greater percentage, that their groups are formed by almost all men (14%) or by a minority of women (35%), the women directors also show this tendency but to a lesser extent since 12% of women choose entirely female groups, compared to 14% of men who choose male groups, and with 27% choose that there is less than 33% of men compared to 35% of groups that present this characteristic of having a minority of women when the director is a man. In other words, female directors discriminate less by gender than male group directors.

#### 4.3. Competitive national and European groups and projects

Since we are analyzing communication research groups at the Spanish University, it seems interesting to cross these groups with their research activity reflected in their websites. From this point of view, we take into account competitive European projects and R+D projects from national calls. The projects granted by the Autonomous Communities have not been considered because, as they are different calls, they would not allow a comparative analysis between the groups from different universities and, therefore, from different communities.

**Table3.** *Number and percentage of competitive projects (national and European)*

Total number of groups	No. of groups that obtain European R+D+i projects	No. of groups that obtain national R+D+i projects
213	38	118
100%	18%	55%

Of the universe of 213 groups, 175 (82%) do not have or have had in the last twelve years competitive European research projects, and only 38, 18%, have obtained European research projects, although they are distributed by universities and Autonomous Communities in different ways. Catalonia, with 12 European projects and 6 universities, is the Community that occupies the first place. On the contrary, the Autonomous Community of Madrid is striking, in which only 3 groups of 3 universities (Complutense, Rey Juan Carlos, and CEU) have obtained European projects.

By centers, three universities stand out with more than 8 European projects: Salamanca, Complutense de Madrid, and Oberta de Catalunya. The rest, 35 groups, have less than 5 European projects referenced on their websites, although it should be noted that the groups from the University of Granada, like those from the University of Valladolid, have 5 European projects.

It is understood that the R+D projects of state calls signify the recognition of the greatest prestige of the research work since it is necessary to compete for the concession of public funding assigned to the universities to cover the expenses and the projects are selected through peer-review through the State Research Agency. From the analysis of the competitive projects that research groups reference on their websites, we see that the number of groups that have achieved R+D projects in the different state calls increases, in comparison with the above-mentioned European projects. The categories that we have used to encode the data have been "none", "up to four", "up to eight", "up to twelve", and "up to sixteen". 118 research groups have achieved a state R&D project, and of the remaining 95 groups, 77 groups have obtained up to 4 R+D projects, another 12 groups up to 8 projects, 2 groups up to 12, and, finally, 4 research groups have obtained up to 16 projects, with a total of 214 projects identified in the database with the reference number of the State Agency.

In the MapCom1 project, now completed, 315 national projects granted between 2007 and 2018 were identified and studied (Lozano et al., 2020) through data provided by the Ministry. In this article, we have studied the national projects that the groups declare on their websites to have obtained and that they document with the reference number, and, as we have just pointed out, there are 214. Therefore, 101 projects that have not been requested, or at least there is no evidence, within a research group, this fact leads to thinking that it is not always the research group that usually requests and obtains the concession of competitive projects.

From a more detailed analysis of the projects awarded to communication research groups in Spain, the following significant data are obtained. The groups that say they do not have competitive national projects are the same, except for four, which do not have European projects either. On the contrary, of the 38 groups that have been awarded European projects, they also have, and in greater numbers (more than 16, more than 12, more than 8), competitive state projects. 61 research groups indicate that they have obtained a national project and no European one.

From the general analysis of comparing research groups with recognized research in competitive European and/or national projects, it can be concluded that having a consolidated research group is not a requirement to obtain competitive projects when, on the contrary, it could be thought that it is within these groups where there is common work and shared lines of research that would facilitate the bureaucratic requirements and, above all, background and track record requirements to obtain those projects.

#### **4.4. Groups and research lines**

As has been commented in the methodology, the analysis of the research lines of the groups has represented a challenge for their study given the existing diversity, since each group identifies its lines of research in its own way, which is why their number varies so much, in some cases more than 10 topics, and their own definition. To characterize the groups according to these lines and to know what they are researching, this casuistry has been classified, differentiating the groups based on the homogeneity or dispersion in their lines of research, grouping, afterward, the thematic variety in specific areas that allow characterizing this research of Spanish groups.

And the first thing that can be distinguished is that there are groups that do not identify their lines of research. In total, 20, which constitutes slightly more than 9% of the total of 213 registered groups, a figure that, even if it is minimal, has to be interpreted in relation to the main objective of the research groups, which is to research. If they are created for research and do not have research lines, their activity must be questioned. Indeed, the fact that they do not indicate the lines of research does not mean that they do not have them, it may also be that they do not publish them. In fact, most of them do not have a website, and, even the ones that do, some do not publish their research lines on their website, as Claes et al. (2021) point out. This fact could be interpreted as that these groups have been created "ad hoc" with a sum of professors who do not have a tradition of working together, but who meet for some special interest, such as presenting themselves to a specific call and, therefore, do not have as much interest in defining their fields of work. This argument is supported by the fact that only 4 of these groups have carried out an R+D+i project and only 2 have carried out a European one. But the most evident thing of their scarce activity is that more than half of these groups do not have any publication, even when they tend to be large groups, since 12 groups have more than 9 members and 5 more than 15. If groups with more than 15 professors indicate that they do not have any publication, it is more likely that it is because they do not specify it than that they do not actually publish anything. These groups that do not identify their lines, are mostly led by a male professor, only 6 by female professors, and are from various universities, although significantly the 6 groups from the University of Granada must be highlighted, to which we must add the three from the Autonomous University of Barcelona, 2 from the University of Malaga, another two from the University of Zaragoza, and two more from the Rey Juan Carlos University, the rest is distributed among other Spanish universities.

The second classification of groups according to their research lines is made up of groups that research areas that do not focus on communication. In total, 18 have been computed. In some cases, it is justified by the boundary delimitation of the disciplinary field, for example, the 5 groups that have research lines typical of documentation or the 4 related to art. There are also two others focused on issues of anthropology, two on urban planning, another two groups focused on exclusively economic aspects, and others related to diseases, religion, or drugs. The existence of these groups that research such different objects can be explained because they can research aspects related to these topics in the media, or that they research these foreign issues because they belong to departments of other areas that are assigned to Faculties of Communication Sciences, because they teach in those degrees, although their research activity and disciplinary reference are far from communicative phenomena. This indicates that in the conformation of the map of the research groups, it is necessary to take into account, not so much the center or faculty where the groups are assigned, but the research they carry out.

The rest of the groups do research communicative phenomena, that is, research that focuses on aspects directly related to mass communication, communication in organizations, or the field of interpersonal communication. Within these groups that research communication, it is possible to distinguish those that have a defined line and whose proposals are related to a lesser or greater extent with that line, maintaining a certain coherence with the projects in which the members have worked, from other groups whose research lines are made up of an amalgam of very disparate thematic proposals, in such a way that the same group can research: the influence of communication, communication in organizations, new technologies, the ethical-legal framework of communication, and audiovisual narratives; or another group such a wide range of topics such as: childhood, meta-research, business communication, internet, scientific dissemination, communication and the disabled, local business, the elderly, corporate responsibility, studies on perception and influence, or audiovisual quality. This is the case in about 70 groups, a third of the total. This may respond to the confluence, in the same group, of more than one research team, professors of the group who work

jointly on a specific project, as suggested by Rey Rocha et al. (2008). But it is more likely that when the lines of research are numerous and very different from each other, they do not actually refer to the lines of the group, understanding them as the common interests shared by the teachers, but rather the sum of individual concerns or areas of specialization of the members. This shows the current dynamics when forming the research groups, prioritizing the number of participants, and not so much the uniting of common interests and specialties. In fact, these groups are usually numerous, since only 10 have less than 7 members, the rest have more, even 8 have more than 15 teachers, who are usually male, since those led by women are a minority, and there are only 10 in which there is parity or female professors prevail in their composition.

Although this dynamic of grouping professors exists, more groups identify one or two clear lines of research in their research efforts, areas that constitute the main axes of research for Spanish groups. Among these areas are the three disciplinary fields that currently divide communication, since it is possible to distinguish between the lines of research those more focused on journalism from those that analyze phenomena typical of the audiovisual field or public relations and advertising.

In this way, 25 groups are distinguished, that focus on various aspects of journalism: professional deontology, sources of information, analysis of the journalistic message, international, scientific, and political journalism, genres, cyber-journalism, or those who raise issues on the quality of information. In the characterization of these groups, no clear pattern is observed in terms of the university, autonomous community, or characteristics of their composition, except that a certain pre-eminence of male professors over women is detected, since they only direct 9 groups, the rest are directed by male professors, except for two, who maintain mixed management.

Regarding the audiovisual field, 18 groups indicate as lines of research aspects related either to theoretical aspects, "Theory of audiovisual text"; methodological aspects, "Methodology for the analysis of audiovisual texts", or some more specific aspect of audiovisual media, such as the line that researches "Techniques and strategies of television programming" or "Audiovisual narrative and script", or the one that focuses on audience research or the "Iconographic and textual analysis in photography, film, and television." Other lines address the study of videogames, television, or the four groups that specifically analyze the cinematographic medium. Most of these research groups that focus on audiovisuals are characterized by having more than 10 publications but few research projects, only 3 groups have European projects, and 5 national projects, which gives clues that this line is not very competitive although it is productive in terms of publications. Madrid also stands out, 7 Madrid groups research audiovisuals, from any of the three public universities that offer communication degrees or even from a private center. The weight of male leadership also stands out, since only one is led by a woman and another has equal leadership.

There is practically the same proportion of groups that specialize in advertising and public relations, 17 specifically, more in the field of advertising than in that of public relations, although there are some that address both areas, focusing, for example, on strategy, neuromarketing, social responsibility, advertising quality, creativity, planning, or audiences and messages. In these groups whose lines of research are focused on advertising and public relations, women prevail more, both in the direction and in their composition.

Besides the three areas that divide the research lines of the groups in a correlative way to how communication studies do, other lines characterize the fields of work of communication research groups in our country. One of these lines of work is the one that concentrates the research from the critical perspective since 9 research groups dedicated to researching from this line of research have been detected. The other topic that concentrates the research activity of the research groups is the

phenomena related to education, which some group calls "Educommunication" since eleven groups focus on these aspects where communication serves educational interests (use of ICT in education, audiovisual media in educational settings...) or at least interferes with education (influence of communication in education, digital literacy, or communicative competence of educators). Another line of research that stands out from those followed by communication groups is phenomena related to communication and new technologies. This more technological side, where issues such as the digital gap, techno-politics, web analytics, social networks, ICT and the media, among others, are addressed, is the line of research that 6 research groups follow.

To these lines of research are added other more specific topics that concentrate the research effort of other groups. In this way, four can be computed that address identity issues, another four about communication history, and another four specifically about marketing. To these themes that characterize the research of these groups, we must add other 4 research groups that focus on researching issues of communication ethics, the latter stand out because they are led by women. Also led by women are the 4 groups whose lines of research are focused solely on analyzing communication from a gender perspective, although in one case they have a third of men in their composition, in two groups there is parity, and the fourth, from the Complutense University, is made up by women.

## 5. Discussion

Gender is a variable that appears in many of the research works, at least in Social Sciences, following the recommendations of the Horizon 2020 program of the European Union, in which it urges that the subject of gender be an essential and transversal element in scientific research. In Spain we find similar texts, Otero Hermida et al. (2020); Sánchez de Madariaga (2011).

Therefore, we can compare the result obtained from this approach with that presented by other approaches to meta-research analyzing this gender perspective. The percentage of 33% of research groups led by women that are obtained in this study is related to the average of 29.2% of R+D projects also led by women (Lozano et al., 2020). Therefore, the glass ceiling reported in other texts can be observed (Martín Algarra et al., 2018; Caffarel et al., 2018c); Izquierdo et al., 2020) in which it is evidenced that women CRs are a minority compared to men CRs, when, moreover, being the CR of a national competitive project is merit highly recognized by the Academy. Thus, there is more gender discrimination at the highest levels of scientific research, such as projects and research groups, and not so much at the lowest levels, as in doctoral theses and communications, where it has been found that balance is achieved (Gómez-Escalonilla and Izquierdo Iranzo, 2020).

Along with gender distribution, the results obtained in this study can be compared with other approaches made previously, such as the one carried out by Torres and Ramahí (2013). Regarding the census, in the Torres and Ramahí study, 87 research groups were registered, a figure considerably lower than that registered in our study: 213. This difference may respond to the temporal evolution, since in four years the research groups have grown in Spain, but also because in the approach of these authors, only the research groups of public universities are considered and here the private centers, that represent 27% of the total, have also been considered.

The lines of research can also be compared since in Torres and Ramahí's (2013) research they also choose to group the different thematic proposals into different categories, although using a different classification. Despite this, comparisons can be made; Thus, for example, the percentage of groups that focus on issues of journalism represent 7% in the research carried out by Torres and Ramahí, while in the present study it represents 12%, although in that research both theories and applied

communication were distinguished as lines of research, areas that have remained distributed according to the area in question in our approach. In any case, the percentage of groups that dedicate themselves to journalism versus audiovisual is higher in our study, while in Torres and Ramahí's approach the audiovisual (20%) exceeds journalistic topics. In both cases, the groups that focus on advertising and public relations lines are a minority and more those that research advertising rather than public relations. There is also agreement on the weight of the groups that approach communication from a critical perspective, called by the authors *the line of cultural industries*.

## 6. Conclusions

The study carried out allows us to notice the importance of the research groups of the faculties or centers with communication studies when analyzing the situation of communication research in our country since they represent a significant figure to take into account: 213 groups registered in 46 universities throughout the national geography.

Although they are distributed throughout the territory, not all centers are equal in terms of the number of groups. From this point of view, the Complutense University (Community of Madrid), the Autonomous University of Barcelona (Catalonia), and the University of Seville (Andalusia) stand out as they are the three universities with the largest number of groups: 37, 16, and 11 respectively, figures that are explained because these three universities, together with the privately managed University of Navarra, were the ones that first created Communication Faculties and, therefore, their consolidation is greater. Also due to its geographical location, since the Communities of Madrid, Catalonia, Valencia, and Andalusia are the ones that contribute the greatest number of groups; This is due to two causes: the number of universities in each of these communities, which is greater, and that each of them contributes with a single university, Complutense in the case of Madrid, Autonomous of Barcelona in Catalonia, Seville in Andalusia, and Herrera Oria in Valencia, 35% of the total groups analyzed. And the fourth position in the ranking is for the CEU Cardenal Herrera Oria University, with 10 research groups, the first private university in the number of research groups.

Although the CEU of Valencia stands out for the number of groups, the rest of the private universities also contribute their quota, because they are followed by Francisco de Vitoria, with 7 groups, and CEU San Pablo and Ramón Llull with 6 groups each, occupying respectively the 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> position in the general ranking, with all private centers representing 27% of the total groups analyzed.

Of the private universities that are at the Top, Francisco de Vitoria does not provide any competitive national and/or European research project, CEU San Pablo only one national project from one of its 6 groups, and, except Ramón Llull, as well as Cardinal Herrera Oria, who have 50% of their groups with competitive projects, they are groups with little research activity. Neither do the public university groups have much activity at the national or international level since only 38 groups, 18% of the total, have obtained a competitive European project and 118 groups, 55% of the total, contribute national competitive projects.

Thus, practically half of the groups do not have national projects, and even many of them do not have publications, nor lines of research, or they define them with an amalgam of objects that suggest a mere addition of particular research and not a consolidated and stable line shared by all. All of this allows us to conclude that many of the registered research groups do not have a stable activity, but rather have that circumstantial character of having been created "ad hoc" with a sum of professors who do not have a tradition of common work, but who meet for some special interest, such as appearing for a specific call or counting in the statistics. In this sense, it can be said that more than

research groups they are really grouped professors, and not just a few, since large groups prevail, in many cases exceeding 15 members in each group. Suffice it to point out, however, that the majority show a pattern of combining the research effort around common interests, which is a good sign of the state of research in this field, given the atomization with which it has been researched so far and the current need to create more stable programs or entities that allow them to compete in better conditions both at the national level and at the European or global level.

And if Spain follows the path set by the scientific policy guidelines by consolidating research groups in the field of communication, it should also do so in terms of equality, since groups led by women are a minority compared to those led by men, evidencing, once again, that the Spanish university does not meet the criteria that the European Union legislates for research teams through the Horizon 2020 document.

This low percentage of women group directors, 33%, actually shows a glass ceiling in research, since inequality occurs at the higher levels of scientific research, in chairs, group management, or R+D+i projects, and it is being equaled in doctoral theses, communications presented to congresses, or lower-level university teaching bodies. On top of representing discrimination, the low level of leadership by women in the groups also has other consequences for the research teams, since it has been found that research groups have less decompensation for women when they are led by women, compared to men directed groups who tend, in turn, to have a majority of men on their teams, which exacerbates and will exacerbate these gender differences in access to science in the future.

## 7. References

- Almirón, N. y Reig, R. (2007). The communications research in Spain: The political economy epistemological approach. *American Communication Journal* 9(2). <https://idus.us.es/handle/11441/28229>
- Arcila, C., Piñuel, J. L. y Calderín, M. (2013). The e-Research on Media & Communications: Attitudes, Tools and Practices in Latin America Researchers. [La e-investigación de la Comunicación: actitudes, herramientas y prácticas en investigadores iberoamericanos]. *Comunicar*, 40, 111-118. <https://doi.org/10.3916/C40-2013-03-01>
- Barranquero, A. y Limón, N. (2017). Objetos y métodos dominantes en comunicación para el desarrollo y el cambio social en las Tesis y Proyectos de Investigación en España (2007-2013). Dominant objects and methods in communication for development and social change in Spanish PhD thesis and research projects (2007-2013). *Revista Latina de Comunicación Social*, 72, 1-25. <https://doi.org/10.4185/RLCS-2017-1151>
- Blázquez, M. (2015). *Tesis Doctorales en las Universidades Españolas durante el periodo 1977-2014*. <http://mblazquez.es/tesis-doctorales-en-las-universidades-espanolas-durante-el-periodo-1977-2014/>
- Cáceres, M. D. y Caffarel, C. (1993). La investigación sobre comunicación en España. Un balance cualitativo. *Telos*, (32), 109-124. <https://bit.ly/3qrUnwd>
- Caffarel, C., Domínguez, M. y Romano, V. (1989). El estado de la investigación de comunicación en España (1978-1987). *C.I.N.CO. Cuadernos de Investigación en Comunicación*, 3, 45-57.

- Caffarel, C., Gaitán, J. A., Lozano, C. y Piñuel, J. L. (2018a). La investigación en comunicación en España: un problema para sus investigadores en Aarón Rodríguez y Samuel Gil Soldevilla, *Investigar en la era neoliberal. Visiones críticas sobre la investigación en comunicación en España*. Colección Aldea Global.
- Caffarel, C., Ortega, F. y Gaitán, J. A. (2017). Investigación en Comunicación en la Universidad Española en el periodo 2007-2014. Communication studies research within Spanish universities spanning the years 2007 to 2014, *El profesional de la información*, 26(2), 218-227. <https://doi.org/10.3145/epi.2017.mar.08>
- Caffarel, C., Ortega, F. y Gaitán, J. A. (2018b). La Investigación en Comunicación en España: Debilidades, Amenazas, Fortalezas y Oportunidades. Communication research in Spain: Weaknesses, threats, strengths and opportunities, *Comunicar*, 56, 61-70. <https://doi.org/10.3916/C56-2018-06>
- Caffarel, C., Izquierdo, P. y Núñez Puente, S. (2018c). ¿Cómo investiga la mujer cuando investiga sobre la mujer en comunicación?, en Rodríguez Rodrigo, Estrella (Coord): *Propuestas de investigación en áreas de vanguardia*. Tecnos, ed. Universitaria. 73-86.
- Claes, F., Barranquero, A. y Rodríguez-Gómez, E. (2021). Proyección y transferencia de los grupos de investigación de la Comunicación en España a partir del análisis de sus sitios web. *Profesional de la información*, 30(2). <https://doi.org/10.3145/epi.2021.mar.24>
- De las Heras, C., Martel, T., y Jambrino, C. (2018). Análisis de las redes académicas y tendencias científicas de la comunicación en las universidades españolas. *Revista Prisma Social*, 22, 229-246. <https://bit.ly/3zX71rB>
- Delgado López-Cozar, E., Torres Salinas, D., Jiménez-Contreras, E. y Ruiz-Pérez, R. (2006). Análisis bibliométrico y de redes sociales aplicado a las tesis bibliométricas defendidas en España (1976-2002): temas, escuelas científicas y redes académicas. *Revista española de documentación científica*, 29(4), 493- 524. <https://doi.org/10.3989/redc.2006.v29.i4.306>
- Fernández, D. y Masip, P. (2013). Tres décadas de investigación española en comunicación: hacia la mayoría de edad, [Three Decades of Spanish Communication Research: Towards Legal Age] *Comunicar*, 41, 15-24. <http://dx.doi.org/10.3916/C41-2013-01>
- Gaitán, J. A., Caffarel, C., Lozano, C. y Piñuel, J. L. (2018). Condiciones y rendimientos de la Investigación en Comunicación: la visión de los académicos. *CIC. Cuadernos de Información y Comunicación*, 23, 105-123. <https://doi.org/10.5209/CIYC.60910>
- Gaitán, J. A., Lozano, C. y Piñuel, J. L. (2016). Prospectiva de la investigación sobre TV a partir de los Proyectos I+D y Tesis doctorales de 2007 a 2013 en las Facultades españolas de comunicación. *Revista de la Asociación Española de Comunicación*, 6(3), 51-59. <https://doi.org/10.24137/raeic.3.6.7>
- Gómez-Escalonilla, G. e Izquierdo-Iranzo, P. (2020). Contribuciones científicas presentadas en los congresos de la Asociación Española de Investigación de la Comunicación (2007-2018). Papers presented at the conferences of the Spanish Association for Communication Research (2007-2018), *Profesional de la información*, 29(4). <https://doi.org/10.3145/epi.2020.jul.40>



Horizonte 2020. Igualdad de género en la investigación y la innovación. <https://bit.ly/3zXbY3w>

Izquierdo Iranzo, P., Gaitán Moya, J. A. y Caffarel-Serra, C. (2020). Mapa de la mujer como sujeto y objeto de la investigación en comunicación en España. *Comunicació: Revista de Recerca i d'Anàlisi*, 37, 31-52. <https://doi.org/10.2436/20.3008.01.189>

Izquierdo, M., Moreno, L. M. e Izquierdo, J. M. (2008). Grupos de investigación en contextos organizacionales académicos: una reflexión sobre los procesos de cambio y los retos futuros. *Investigación bibliotecológica*, 22(44), 103-141. <http://www.scielo.org.mx/pdf/ib/v22n44/v22n44a7.pdf>

Jones, D. E. (1994). *Investigació sobre comunicació al'Espanya dels noranta*. Centre d'Investigació de la Comunicació i Universitat Autònoma de Barcelona. Cultura y comunicación social: América Latina y Europa Ibérica. Generalitat de Catalunya.

Jones, D. E. (1998): Investigación sobre comunicación en España. Evolución y perspectivas, *ZER, revista de Estudios de Comunicación*, 5, 13-51.

Jones, D. E., Baró, J., Landa, C. y Ontalba, J. A. (2000). *Investigación sobre comunicación en España: aproximación bibliométrica a las tesis doctorales (1926-1998)*. ComCat.

López, P. y Vicente, M. (2011). Métodos y técnicas de investigación dominantes en las revistas científicas españolas sobre comunicación (2000-2009). En José Luis Piñuel, Carlos Lozano y Alberto García (Eds.): *Investigar la comunicación en España*, AE-IC/URJC, 665-679.

López-Escobar, E. y Martín Algarra, M. (2016). Communication teaching and research in Spain the calm and the storm, *Publizistik* (2017), 62, 83-105. <https://doi.org/10.1007/s11616-016-0306-4>

Lozano, C., Gaitán, J. A., Caffarel, C. y Piñuel, J. L. (2020). Una década de investigación universitaria sobre Comunicación en España, 2007-2018. A decade of scholarly research on Communication in Spain (2007-2018), *El Profesional de la Información*, 29(4). <https://doi.org/10.3145/epi.2020.jul.12>

Lozano, C., Gaitán, J. A., Piñuel, J. L. y Caffarel, C. (2021). Los grupos de investigación consolidados en la praxeología de la Comunicación. *RAE-IC, Revista de la Asociación Española de Investigación de la Comunicación*, 8(15), 119-142. <https://doi.org/10.24137/raeic.8.15.6>

Martín Algarra, M. L., Serrano-Puche, J. y Rebolledo, M. (2018). La mujer en la investigación en comunicación en España: un análisis de la producción científica (2007-2013). *adComunica*, 15, 65-87. <http://dx.doi.org/10.6035/2174-0992.2018.15.5>

Martínez Nicolás, M. (2009). La investigación sobre comunicación en España. Evolución histórica y retos actuales. [The Communication Research in Spain. Historical evolution and current challenges]. *Revista Latina de Comunicación Social*, 64, 1-14. <http://dx.doi.org/10.4185/RLCS-64-2009-800-01-14>

Martínez Nicolás, M. y Saperas, E. (2011). La investigación sobre Comunicación en España (1998-2007). Análisis de los artículos publicados en revistas científicas. Communication research in Spain, 1998-2007. An analysis of papers published in Spanish communication journals, *Revista*

*Latina de Comunicación Social*, 66, 101-129. <http://dx.doi.org/10.4185/RLCS-66-2011-926-101-129>

Martínez Nicolás, M. y Saperas, E. (2016). Objetos de estudio y orientación metodológica de la reciente investigación sobre comunicación en España (2008-2014). Research focus and methodological features in the recent Spanish communication studies (2008-2014), *Revista Latina de Comunicación Social*, 71, 1.365- 1.384. <https://doi.org/10.4185/rlds-2016-1150>

Ministerio de Educación, Cultura y deporte (2001): Ley de Universidades, ley Orgánica 6/2001, de 21 de diciembre, de Universidades. «BOE» núm. 307, de 24 de diciembre de 2001.

Ministerio de Ciencia e Innovación (2020). EECTI, Estrategia española de ciencia, tecnología e innovación (2021-2027). <https://www.um.es/documents/1718090/18815392/EECTI-2021-2027.pdf/3d5a599b-49bb-444c-924d-bcdaeffd250e>

Otero Hermida, P., Cañibano Sánchez, C. y Castro Martínez, E. (2020). *Mujeres e innovación 2020, Observatorio mujeres, ciencia e innovación*. Ministerio de Ciencia e Innovación.

Peñafiel, C., Ronco, J., Videla, J. y Echegaray, L. (2019). Percepción y análisis de la comunidad universitaria sobre el sistema actual de investigación de la comunicación en España. Perception and analysis of the university community in terms of the current system of communication research in Spain, *Revista Latina de Comunicación Social*, 74, 1521- 1541. DOI: [10.4185/RLCS-2019-1397](https://doi.org/10.4185/RLCS-2019-1397)

Repiso, R., Delgado, E. y Torres, D. (2011). Análisis bibliométrico y de redes sociales en tesis doctorales españolas sobre televisión (1976/2007). Bibliometric and social network analysis applied to television dissertations presented in Spain (1976/2007). *Comunicar*, 37(XIX), 151-159. <http://dx.doi.org/10.3916/C37-2011-03-07>

Rey Rocha, J., Martín Sempere, M. J., y Sebastián, J. (2008). Estructura y dinámica de los grupos de investigación. *Arbor*, 184(732), 743-757. <https://arbor.revistas.csic.es/index.php/arbor/article/view/219/220>

Rodrigo-Alsina, M. y García-Jiménez, L. (2010). Communication theory and research in Spain: A paradigmatic case of a socio-humanistic discipline. *European journal of communication*, 25(3), 273-286. <https://doi.org/10.1177/0267323110373458>

Rodríguez-Gómez, E. (2016). Aportación científica de los congresos de la AEIC (2008-2014): reseña histórica y estado actual de la investigación en Comunicación. *Historia y comunicación social*, 21(1), 115-137. [https://doi.org/10.5209/rev\\_HICS.2016.v21.n1.52687](https://doi.org/10.5209/rev_HICS.2016.v21.n1.52687)

Sánchez de Madariaga, I. (2011). Políticas de género en la ciencia: Suprimir sesgos y promover la excelencia” en *Situación de las mujeres en la Ciencia española*, Unidad de mujeres. Ministerio de Ciencia e Innovación.

Saperas, E. (2016). Cuatro décadas de investigación comunicativa en España. Los procesos de institucionalización y de profesionalización de la investigación (1971-2015). *Anuario Electrónico de Estudios en Comunicación Social “Disertaciones”*, 9(2), 27-45. <https://doi.org/10.12804/disertaciones.09.02.2016.02>

Torres, E. y Ramahí, D. (2013). Análisis y valoración de aspectos básicos sobre los grupos de investigación en comunicación en España. *Estudios sobre el Mensaje Periodístico*, 19, 481-490. [https://doi.org/10.5209/rev\\_ESMP.2013.v19.42134](https://doi.org/10.5209/rev_ESMP.2013.v19.42134)

Tur-Viñes, V. y Núñez-Gómez, P. (2018). Grupos académicos españoles de investigación en Comunicación. Spanish Academic Research Groups in Communication. *Communication & Society*, 31(4), 173-192. <https://doi.org/10.15581/003.31.4.173-192>

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**Research ID:** B-7475-2019