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# Communication research in Spain: Weaknesses, threats, strengths and opportunities

# La investigación en comunicación en España: Debilidades, amenazas, fortalezas y oportunidades

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#### Abstract

This article presents the methodological strategies, results and a critical analysis of the national research project MapCom "The Research Sphere on Communication Studies Social Practices, Map of Projects, Groups, research objects and methods". We present the results obtained within the first two phases of the research project. The complete sample of objects for analysis was selected within this time span, all doctoral research and research projects were included. We performed a specific analysis of descriptive variables associated to gender, objects of study, funding, more present methodologies, as well as a comparative analysis between research projects and doctoral theses from a perspective of the objects of study and the methodologies implemented. We contextualize the work with a comparative analysis of research in Social Science and Humanities in the same period analysed in Spain. We performed an analysis of the weaknesses, threats, strengths and opportunities which were detected within the analysis, and we propose recommenddations aimed at developing a "Strategic Action Plan for Competitive Research in Communication". The analysis of this research concludes with the observation of similarities between the objects of study, but also of the differences between the objectives of the investigations when we compare doctoral theses and research projects in the analysed period. We also carried out a comparative analysis of the 12 most relevant universities in Spain, in order to identify differences, similarities and research patterns in research teams or groups, associate doctoral programs and universities.

#### Resumen

Este artículo presenta las estrategias metodológicas, los resultados y un análisis crítico del proyecto de investigación nacional MapCom «El sistema de investigación en España sobre prácticas sociales de Comunicación, Mapa de Proyectos, Grupos, Líneas, Objetos de estudio y Métodos». Se ofrecen los resultados obtenidos de las dos primeras fases del proyecto de investigación en el conjunto del país y muestra total seleccionada de los objetos de estudio, tesis doctorales y proyectos de investigación. Se realiza un análisis



específico de variables descriptivas asociadas a género, objetos de estudio, financiación, metodologías más presentes, así como un análisis comparado entre proyectos de investigación y tesis doctorales desde una perspectiva de los objetos de estudio y las metodologías implementadas. El trabajo se contextualiza con un análisis comparativo de la investigación en Ciencias Sociales y Humanidades en el mismo periodo analizado en España. Se hace un análisis de las debilidades, amenazas, fortalezas y oportunidades que han sido detectadas y se ofrecen recomendaciones orientadas a desarrollar un «Plan de Acción Estratégico para la Investigación Competitiva en Comunicación». El análisis concluye con la constatación de las semejanzas entre los objetos de estudio, pero también de las diferencias entre los objetivos de las investigaciones cuando se comparan tesis doctorales y proyectos de investigación en el periodo analizado. Se lleva a cabo igualmente un análisis comparativo de las 12 universidades con mayor relevancia en España, con el objeto de detectar diferencias, similitudes y patrones de investigación en grupos de investigación, doctorados asociados y universidades.

# Keywords / Palabras clave

Communication research, University, doctoral research, research and innovation projects, research methods. Meta-investigación en comunicación, Universidad, tesis doctorales, proyectos de investigación, métodos de investigación.

# 1. Introduction and object of research

The research system on communication social practices in Spain has become increasingly interesting in the last few years within our scientific context. Quantitative and qualitative research on the project map, groups, lines of research, objects of study and methods is a field of study that has turned into an institutionalized discipline under research associations, particularly under the Spanish Communication Research Association (AE-IC). An objective as well as scientifically and methodlogically rigorous analysis of those projects, research teams, lines of research, objects of study and methods that underpin Communication as an area of knowledge and research has just been completed in Spain.

Research on communication research practices and methodologies within our cultural context can be traced back to the late 20<sup>th</sup> century. A large portion of this research was hosted by the Spanish Association of Communication Researchers (AICE), the predecessor of the AE-IC. Along these lines, on the occasion of the twentieth anniversary of the establishment of the first University Schools of Communication Science in Spain, Caffarel, Domínguez and Romano (1989), Caffarel and Cáceres (1993), and Jones (1994; 1998; 2000), among other authors, examined the who, what, how and where of communication research, as well as the most studied topics and the methods for approaching research works.

Alsina and Jiménez (2010) have subsequently focused on communication research: a paradigmatic case of a socio-humanistic discipline. Arcila and Piñuel (2013) have broadened the scope of ecommunication and Latin American researchers' practice. The bibliometric framework analysis is dealt with by Delgado & al. (2006), Castillo and Xifra (2006), Fuentes and Arguimbau (2010), Repiso & al. (2011) and, more recently, by Blázquez (2015). As for the analysis of meta-research in Communication, it is worth highlighting the works of Fernández and Masip (2013), Martínez and Saperas (2009; 2011), López and Vicente (2011), and Almirón and Reig (2007) on the predominant research methods and techniques in Spanish scientific journals, and mainly the studies of Piñuel & al. (2011; 2015; 2016; 2017) regarding communication research; its object of study being the methodological and theoretical mapping in Spain and Latin America. The interest in meta-research studies also led to a couple of monographic issues, one of them in "Comunicar," edited by Giménez-Toledo and Jiménez-Contreras (2013), and a more recent one in "Disertaciones," edited by Martínez-Nicolás and Vicente-Mariño (2016). These two issues address historical, epistemological and methodological aspects of communication research in Spain and Latin America.



This article presents the results of the national research project MapCom, funded by the Ministry of Economy and Competitiveness, 2013-16. The research project breaks down the mapping of its objects of study into four geographical areas, which can be found at www.mapcom.es. This article displays the aggregate results of its first two completed stages: Phase I, the repository of doctoral theses and research projects, and Phase II, expert group discussions based on the Phillips 66 technique. Finally, Phase III provides a survey of the sample universe of researchers in Spain listed in the academic registers of those universities offering graduate and postgraduate communication studies. The results are currently under statistical analysis, and they shall be examined in future publications.

#### 2. Methodology and sample selection

The methods applied, including those related to the sample selection and data analysis, covered three stages:

- Phase I, the repository of doctoral theses and research projects, selecting the whole universe available within the analysed years (www.mapcom.es) (Caffarel, Ortega, & Gaitán, 2017). The analysis related to the universe of research projects covers the whole sample of national, competitive and funded research projects conducted, and doctoral theses presented, between 1 January 2007 and 31 October 2014.

The following link shows the guide for document analysis and recording in the Mapcom project, (https://goo.gl/X1qEfb). This questionnaire which was used in the content analysis protocol includes 28 coding questions with their respective categories to be analysed by the researchers, and it was hosted at the online coding service in a secure computing environment provided by E-Encuesta. For further information on the analysis protocol, see Annex 1: Guide for document analysis and recording (pp. 17-22) as well as Annex 2: Codebook for the post-coding of open variables (pp. 23 and 24) (https://goo.gl/2Li5mT). The coding was done by previously trained project researchers between September and December 2015. Also, in order to minimise inaccuracy, a quality control of coding was performed between January and February 2016.

- Phase II consisted in the development of discussion groups made up of communication experts; the Phillips 66 technique-methodology was applied. Participants were invited by letter, and they were selected following a profile suitability analysis. The groups were made up as follows: one of them was composed of main researchers (also designated as principal investigators) with at least two R&D projects; another group comprised consolidated research team leaders; the third group was formed by members or spokespeople of scientific societies (associations, research networks, etc.); the fourth group included university research managers (Vice-Rectors, Deans, Heads of Postgraduate Studies, etc.); there was also a fifth group, made up of people responsible for result dissemination (editors and conference directors, members of scientific journals, etc.); finally, junior researchers made up the sixth group. The experts for each group were selected on the basis of gender guotas and territorial origin (by Universities and Areas). Three meetings were held applying the Phillips 66 technique: one of them took place in Madrid, including experts convened under the joint responsibility of Areas 1 and 2 of the project; another meeting was held in Barcelona, subject to Area 4; the third meeting took place in Malaga, under the responsibility of Area 3. With the aim of addressing the debates within those six groups, the proposed topics referred to the strengths. weaknesses, opportunities, and threats (SWOT) related to the objects of study, research objectives and lines of work, including groups, programs, grants, evaluations, academic claims and calls for funding. Research methodologies: samples, techniques, triangulation, etc. Dissemination of research results: conferences or workshops and publications, among others.

All meetings, both group, and universal meetings, were recorded to ensure that data were adequately collected. This required the involvement of technical staff and equipment, as well as the participants' express consent to the procedure. The working sessions applying the Phillips 66 technique did not exceed five hours including breaks (a full morning, from 9 am to 2 pm). The logistics entailed transportation arrangements, one-night accommodation, and daily allowances at the end of



the sessions. The working debates were recorded in digital form, which enabled a digital transcription monitored by an expert company and expert technical staff. These transcripts were subsequently analysed through different qualitative and quantitative techniques.

- The project's third stage, Phase III, included a survey of the sample universe of researchers in Spain listed in the academic registers of those universities offering communication graduate and postgraduate studies, as well as of those researchers listed in scientific societies. As of 19 September 2017, all data have been gathered, and we are currently analysing the results. The main purpose of this last stage was to map the results in order to find out about how academic researchers in the communication domain are socially represented regarding their scientific activities. This third stage is a necessary supplement to the prior phases when it comes to drafting a map of projects, groups, lines, objects of study and research methods on communication social practices in Spain. In this third phase, we also gathered the opinion of a representative sample of communication research stakeholders in our country. Below are the most significant results and conclusions.

#### 3. Analysis and results

Below is an analysis of the results obtained from the surveys applied to the documents in Phase 1, as well as of the results yielded by the Phillips discussion groups during Phase II of the Mapcom project. The categories of analysis are defined in the link to the survey included in the previous section, along with the methodology used to obtain the descriptive variables of doctoral theses and research projects.

It is worth examining the scientific production associated with the main institutions conducting communication research in Spain. We deem appropriate to analyse the percentage distribution of doctoral thesis (TD) and research project (PI) production for the top 12 universities within the analysed time period, since these schools represent almost three-fourths of the overall sample examined from 2007 to 2013. Figure 1 shows the percentage distribution of these items.

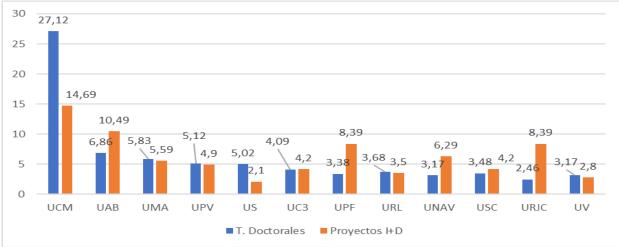


Figure 1. Percentage of doctoral theses and R&D Research projects are broken down by Universities.

Considering the 12 universities that produce the highest percentage of documents to the overall analysed universe, representing 73.38% of the examined doctoral research and 75.54% of the research projects, we observe that the ranking differs depending on whether we deal with doctoral theses (TD) or research projects (PI). In the first case, the Universidad Complutense de Madrid-UCM provides 27.1%, the Universidad Autónoma de Barcelona-UAB ranks second (6.86%), and the Universidad de Málaga-UMA ranks third (5.83%) in the production of Ph.D. holders. Upon the analysis of those Universities contributing the most research projects to the universe, we can notice some major differences; the UCM remains in the lead with 14.69%, and the UAB also ranks second



with 10.49% of the research projects. However, the Universidad Pompeu Fabra-UPF and the Universidad Rey Juan Carlos-URJC are tied at 8.39%, and they share the third position. Furthermore, it is worth highlighting that these two Universities' workers profile is comparatively younger than that of other more "veteran" schools with older faculty members. These institutions are considerably close to the top schools in terms of led research projects (PI) during the analysed period. We can assert that "relative youth" of the staff and relative leadership in research projects development are positively correlated with achieving a good position in leading research projects. The Universidad de Navarra-UNAV ranks fifth in the production of research projects (6.29%); it is the only private university in this communication research excellence list.

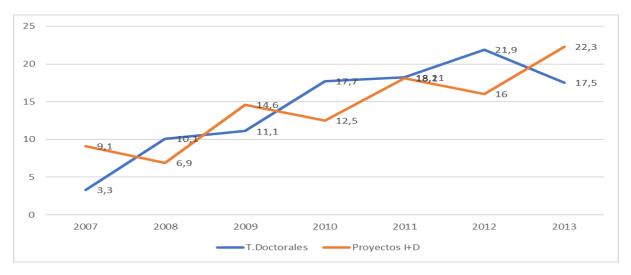


Figure 2. Percentage distribution of doctoral theses and research projects broken down by years.

The number of research projects and doctoral theses has progressively increased in the period considered. In 2007, the percentage of doctoral theses and research projects was 3.3% and 9.1% respectively, and by the end of the relevant period, i.e., 2013, research projects amounted to 22.3%, and doctoral theses represented 17.5% of all documents. It is worth noting that the odd-numbered years of the period, 2007 and 2009, show an almost identical percentage of theses and projects, i.e., 18.2% and 18.1%. Nevertheless, in 2013 the percentage of research projects exceeded that of doctoral theses. During even-numbered years, there is a greater percentage of doctoral theses than of projects; there could be a productive "synchronization" of doctoral theses being defended in the years following relative peaks of research projects, as well as following the cycles when research project results are defended. This hypothesis will have to be tested by cross-checking objects of study in doctoral research and correlated research projects and duration in future research.



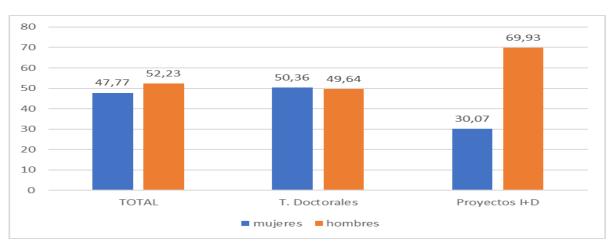


Figure 3. Breakdown of doctoral theses and research projects by gender in Spain for the period 2007-2013.

Figure 3 shows a gender breakdown between doctoral theses and research projects in Spain over the period analysed. There is an almost perfect balance in the gender distribution of Ph.D. holders: 50.36% of women and 49.64% of men. Nevertheless, when we take research projects into account, there is an imbalance. Women only head or lead 30.07% of research projects, which contrasts with 69.93% of projects led by men, i.e., more than twice as many. We have also noticed that only 3 out of 10 research projects are led by women. If we only analyse research projects, considering gender and university of origin, we will obtain the following breakdown shown in Figure 4.

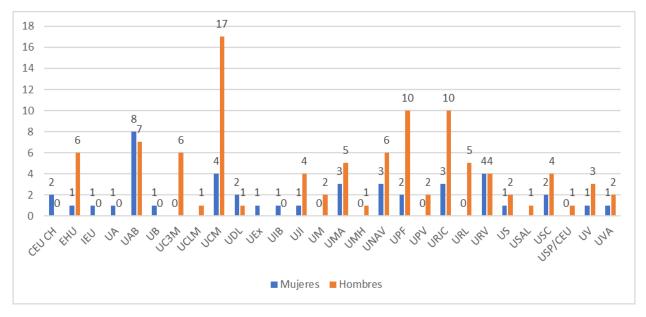


Figure 4. Total number of R&D research projects broken down by gender and university in Spain for the period 2007-2013.

Figure 4 shows that the Universidad Autónoma de Barcelona (UAB) is the only University with more women than men leading research projects in the series: 8 projects are headed by women, and men lead 7. The following universities only have competitive projects led by women in the relevant time series: CEU-CH, IEU, UA, UB, UEx, and UIB. Remarkably, UCLM, UM, UMH, USAL and USP/CEU only have men leading their projects. The greatest imbalance can be seen in the UCM, where there are only 4 projects where women appear as main researchers (IPs) versus 17 projects led by men.



Another descriptive variable of research projects is the amount of financial aid obtained by them. First, it is worth noting that the data provided by the Ministry of Economy and Competitiveness fail to include all the R&D Projects covered by this research. Indeed, these projects have been provided by the researchers themselves, since there is no easy, transparent or open access to this information. According to our estimates, performed by Caffarel & al. (2017) and based on a representative sample of the projects within Area I, the average yearly funding per project would range between EUR 18,000 and 20,000 for three-year projects.

Furthermore, following an analysis of the subjects addressed by all doctoral theses and research projects throughout the time series, we obtain the percentages shown below (Figure 5).

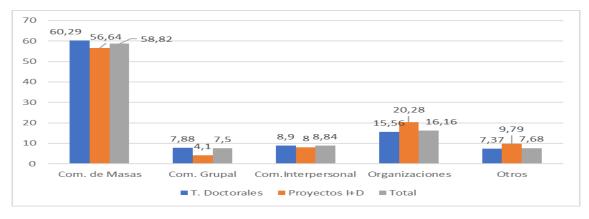


Figure 5. Most relevant objects of study in doctoral theses and R&D research projects.

In this regard, 56.64% of research projects study mass media, whereas the analysis of bodies or organizations ranks second with 16.16%, followed by those works addressing interpersonal communication (8%). Significant differences can be found between the objects of study of doctoral theses and research projects. The latter is more likely to address bodies or organizations, whereas doctoral theses are more inclined towards the group and/or interpersonal communication. Differences in no case exceed 4.72 percentage points.

When we dumped the documents to be analysed, we asked ourselves about the purpose of the relevant research works amongst four possibilities: "describing the dimensions or perspectives of communication practice as an object of study;" "explaining the features of a subject of study in order to propose models;" "evaluating or validating research models or objects of study," and "intervening following models to modify behaviours or social processes." The data obtained show a major difference between doctoral theses and funded research projects (Figure 6).

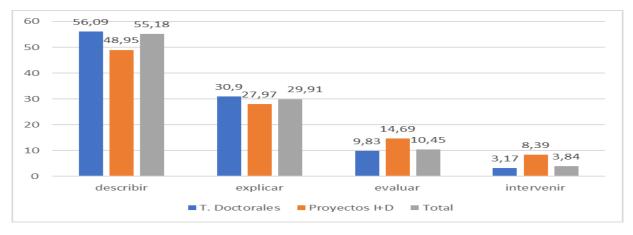


Figure 6. Purposes of Research broken down by doctoral theses (TD) and research projects (R&D).



The purpose of "describing" has a majority presence in both doctoral theses and research projects (55.18% on average considering all the analysed documents), 48.95% in research projects and 56.09% in doctoral theses. There is a greater percentage difference regarding the remaining three purposes. The purposes of "intervening" or "evaluating" are the minority objectives overall (3.84% and 10.45% respectively), and they also mark the difference between research projects and doctoral theses; 8.39% of research projects are aimed at "intervening" versus 3.17% of doctoral theses, and 14.69% of projects aim to "evaluate," as opposed to doctoral theses, that show a 9.83% for this research purpose. As regards the purpose of "explaining," percentages show that the majority objective for doctoral theses is explanatory (30.9%), which exceeds the percentage of research projects that intend to "explain" (27.97%).

# 4. Consensus, weaknesses, threats, and opportunities found in Phillips 66

Below are the most significant points of consensus found in Phase II: discussion groups made up of communication experts based on the Phillips 66 technique. The purpose of these sessions was to detect the most significant points of consensus regarding the object of study in the strengths, weaknesses, opportunities, and threats in communication research as well as in connection with the actors of the communication research value chain in Spain. These debates were held in three different facilities located in the project's coordinated areas. There were three research group dynamics in Madrid, Malaga, and Barcelona, totaling 24 discussion groups. Each event was planned to be split into 6 expert discussion groups, as stated before. The groups of participants in the three facilities were broken down as follows: 1) A group was made up of main researchers. (GIP. Main Researchers); 2) Another group comprised consolidated research team leaders (GIC, Consolidated Research Teams): 3) The third group was formed by members or spokespersons of scientific societies (GSC, Scientific Societies Group); 4) The fourth group included university research managers (GGUI, University Research Managers Group), 5) Another group was composed of people responsible for result dissemination (GGDR, Result Dissemination Managers Group); 6) Junior researchers made up the sixth group (GIJ, Junior Researchers Group). Group sessions, two rounds thereof, and group debates were audiovisually recorded and transcribed for subsequent analysis. These files are available at www.mapcom.es for reference purposes or further analysis.

The most significant conclusions we have been able to draw from the analysed objects in connection with the research questions during the project's second stage have been aggregated and summed up in the following table.

| Table 1. Consensus of weaknesses, threats, strengths and opportunities found in Phase II, Phillips66 and "Strategic Action Plan for Competitive Research in Communication"-corollary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weaknesses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Threats                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <ol> <li>Little funding for research projects and research<br/>teams from national and regional plans in Spain.</li> <li>Scientific research in communication is funded by<br/>few universities, and it is concentrated in those<br/>schools, mainly public ones, and in specific<br/>Autonomous Regions, namely: Madrid, Catalonia,<br/>Andalusia, and Valencia. Centralized selection<br/>processes.</li> <li>Lack of incentives to attract and consolidate<br/>research and junior researchers in research<br/>projects with mainly descriptive methodologies.</li> <li>There is a need to internationalise research<br/>projects beyond the comfort zone Spanish-Spain-<br/>Latin America.</li> </ol> | <ol> <li>Lack of continuity in academic careers.</li> <li>Little funding for research projects involving<br/>junior and senior researchers.</li> <li>Lack of support to the development of scientific<br/>editorial projects in the area of communication<br/>associated with international quality indexes.</li> <li>The perversion of the "ANECA effect" in the<br/>scientific career and the publication of research<br/>results. A changing playing field along with biased<br/>and random criteria.</li> <li>Loss of "critical mass" in the form of potential<br/>students interested in Communication and related<br/>areas.</li> </ol> |



| <ol> <li>Women still face a glass ceiling regarding their<br/>access to managerial-leadership positions, as well<br/>as regarding access to appropriate career profiles<br/>to lead international and/or national research<br/>projects.</li> <li>Delays in the academic career progression of<br/>junior researchers due to existing "academic<br/>progress" barriers. Lack of excellence programs<br/>associated with emerging junior research versus<br/>the EU's science policy in programs such as ERC<br/>or H2020, among others.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ol> <li>6. Lack of scientific journals in Spanish indexed in<br/>Scopus and/or JCR.</li> <li>7. Little relative weight of communication within<br/>Social Science research.</li> <li>8. Precarious funding of communication Ph.D.<br/>programs and grant and career programs.</li> <li>9. Consolidation of emerging master's degrees and<br/>Ph.D. programs in Latin America and the United<br/>States; the competitive and comparative advantage<br/>of the Iberian Peninsula as a land of training for<br/>Ph.D. and master's degree holders is disappearing.</li> <li>10. Brain drain; expert researchers are leaving the<br/>Iberian Peninsula.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Strengths                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Opportunities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ol> <li>Social and economic interest in communication<br/>research.</li> <li>Dynamism of national and international scientific<br/>societies. Establishment of communication ties<br/>between scientific and language "islands."</li> <li>Significant emerging presence of not only young<br/>but also senior researchers in scientific events and<br/>meetings in Europe, English-speaking countries,<br/>and Latin America.</li> <li>The network of university schools with<br/>communication programs, including both<br/>consolidated and new emerging schools. Solid<br/>master's degree programs and new approaches<br/>regarding interdisciplinary Ph.D. programs. The<br/>interest in studying in Spanish within the<br/>international, European, American and Asian<br/>communities.</li> <li>Consolidated and emerging communication<br/>research talent is being repatriated and/or attracted<br/>from top international communication research<br/>centres back to Spanish centres. Europe is<br/>attractive, and so is Spain as a country of science,<br/>including new national and specific programs to<br/>attract talent implemented by Universities and<br/>Autonomous Regions seeking academic<br/>excellence.</li> </ol> | <ol> <li>Involvement in transnational and international research projects; development of multilingual publishing.</li> <li>Development of new areas of work and job profiles revolving around specialised training centres in communication and related areas.</li> <li>Presence of communication as an object of study in other areas of research, such as big data, ICT or neuroscience.</li> <li>Establishment of scientific networks between science in Spanish and science in English, in Latin America, North America, and Spain-Europe.</li> <li>The appearance of Open-source publishing projects related to the consolidation and creation of journals in regional and global indexes such as Scopus, JCR, ESCI, and Latindex.</li> <li>Future consolidation of a Spanish-speaking emerging science market in America and Europe-Spain.</li> <li>Developing and emerging area of knowledge to be developed in the process of improving the positive social and entrepreneurial perception; positive transfer of communication research results to society and business.</li> </ol> |

Research data collected through the second phase transcripts and considerations of the authors and of the analysed groups (GIP, Main Researchers), (GIC, Consolidated Research Teams), (GSC, Scientific Societies Group), (GGUI, University Research Managers Group.) (GGDR, Result Dissemination Managers Group) and (GIJ, Junior Researchers Group).

The previous table summarises the weaknesses and opportunities found in our country for communication research. In our view, it is essential that universities, in agreement with public authorities (the main funders of academic research), design a "Strategic Action Plan for Competitive Research in Communication," allowing to face, in an adequate and realistic manner, the opportunities posed by digital society, big data, neuroscience, artificial intelligence, and fully digital communication for an area of knowledge influenced by other disciplines yet absolutely central to understand the new social, economic, cultural and political paradigms faced in current times.



### 5. Discussion and conclusions

The analysis of weaknesses, threats, strengths, and opportunities found during Phases I and II is the starting point to make recommendations aimed at developing a "Strategic Action Plan for Competitive Research in Communication" in Spain over the next decade. Our analysis ultimately confirms the similarities between objects of study, but it also notes the existing differences between the purposes of research works by comparing doctoral theses and research projects during the analysed time period. A comparative study of the 12 most relevant universities in Spain, with the aim of finding differences, similarities and research patterns in research teams, associated Ph.Ds., and Universities, will require more comprehensive analyses. It is worth noting that Universities with the greatest relative weight and leadership in communication research belong to Madrid, Catalonia, and Andalusia; these are the Autonomous Regions with the most university centres, research teams and research historical traditions. Size, belonging to these "leading" regions, "young" staff, and being a public research centre are the variables that mostly correlate to communication research in Spain; they mostly explain "variance," with the sole exception of the Universidad de Navarra.

Furthermore, it is worth pointing out that communication research in our country is underrepresented in terms of awarded research projects, since only 1% of the projects out of all the Social and Human Science gets awarded, in spite of the fact that the relative weight of doctoral theses on communication is 2%. Additionally, research projects show a predominance of documentary and descriptive methodologies vis-à-vis experimental or intervention methodologies. This pattern of research strategies is even more significant regarding doctoral theses.

Our comparative analysis between research production of doctoral theses and research projects has allowed finding some significant imbalances summarised below, which are also coupled with recommendations with the aim of implementing a "Strategic Action Plan for Competitive Research in Communication."

- Regarding the gender in scholarly authorship, there is an imbalance in favour of men for both kinds of research works. However, this imbalance becomes greater within research projects. There is a need for an active affirmative action policy by universities to put women in leading positions in research teams and projects.
- Whereas the objects of study are similar for doctoral theses and research projects, the purposes differ significantly. Doctoral theses mainly pursue exploratory or diagnostic objectives (description and explanation), but projects show a preference for assessment or therapeutic aims (evaluation and intervention). Better funding is required, as well as an active implementation of "more advanced" and scientific methodologies to test hypotheses; not only descriptive methods but also exploratory, prospective or active intervention methods.
- In doctoral theses and research projects, mass communication (whether from traditional or online media) is the most frequent object of study. Aside from this, studying group communication discriminates more in doctoral theses when the purpose of research is intervention, whereas interpersonal communication has a greater influence when the research objective is the evaluation. Objects of study must be renewed, and we should move away from the comfort zone of "traditional" methodologies and "well-known" subjects; these are to be replaced by renewed objects of study and methods closer to cross-sectional areas of knowledge, inquiring about new matters using both traditional and renewed methodlogies, moving towards interdisciplinarity.

Finally, we must contextualise the production of doctoral theses and research projects within the Spanish research framework. We have found that communication research has progressively increased in the analysed period. However, its share or relative weight in Social and Human Science amounts to just one doctoral thesis for every 20 theses presented in university. Similarly, it barely has one research project for every 40 Social Science projects funded in Spain.

When weighing the presence of social research, and particularly communication research, in Spanish research altogether, we draw the following conclusions: first, 4 out of 10 R&D projects funded in Spain are Social Science projects; second, 3 out of 10 doctoral research presented in



university fall into the area of Social and Human Science. Nevertheless, the relative weight of communication research is even lower; indeed, it does not even reach 2% out of the total number of theses or 1% of funded research projects. Furthermore, communication research loses the relative advantage, which characterises social research, i.e., a greater production of funded projects with respect to the production of presented theses.

Communication research is an area of study that will be further developed in our country, following the consolidated trends in increasingly more communication-oriented societies and markets. This Mapcom research project shall be completed, extended and complemented during Phase III by the conclusions pointed out in this article. The theoretical and methodological innovations displayed in this study should be longitudinally applied in our country, and they must be transferred to culturally close environments in Latin America (Piñuel & al., 2016) and Europe, in order to shed light on the state of the art of research in an increasingly more important area of knowledge. There is a need for exploring variables such as "quality," "impact," "internationalisation," or the "scope" of the scientific research we conduct and wish to conduct in our research teams. It is critical to implement a strategic plan providing communication studies with stable and consistent funding, as well as to provide scientific dissemination and improving techniques and methodologies to analyse objects and objectives. These are compelling needs in order to take that leap towards internationalisation and to fully gain a scientific status in global languages since our universities have a merely emerging presence in this regard. As can be expected from any excellence research, Mapcom I will be followed by Mapcom II, which will allow for completing, further analysing, and moving forward along the strategic lines sketched in this paper.

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