Performance of journalistic professional roles in digital native media news in Spain: Toward a journalistic micro-culture of its own

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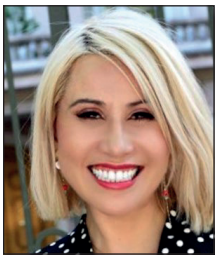

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Abstract

On the basis of the argument that media platforms generate journalistic micro-cultures and that the nature of journalistic roles is contextual, the possible existence of a journalistic model of digital native media coherent with its own professional culture is addressed. Through a content analysis of a sample of 2,729 news items published in four Spanish digital native media, the presence of six professional roles (interventionist, watchdog, loyal-facilitator, service, infotainment, and civic) is measured and compared with the implementation of these roles in news items published in press, radio, and television (*N* = 3,362). In addition, the factors that influence the presence of each role in the news of the selected digital native media are analyzed. The results show that digital native media distinguish themselves by putting into practice all the journalistic roles, except for the civic one, to a greater extent than other platforms. Likewise, the service role presents similar levels of presence in the four newspapers analyzed, indicating an approach to audiences more as customers than as citizens. In terms of the factors associated with the presence of each role, we found that the subject matter of the news item has a greater predictive capacity in all roles than other elements. Although we cannot confirm the existence of a journalistic micro-culture, we do find some particularities of the digital native media, mainly stemming from the need to build audience loyalty.

Keywords

Professional roles; Journalistic models; Professional cultures; Born-digital media; Media platforms; Online media; Cybermedia; Digital media ecosystem; Content analysis; Spain.

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1. Introduction

From the beginning of the digital press in the mid-1990s to the present day, what was born as a modest and simplified replica of the printed newspaper in digital format ("the electronic newspaper"), and which lacked a strategic vision of the future, has been absolutely transformed, in terms of its business, organizational, and professional structure as well as in terms of news production, and obviously, its content and scope.

The chronology and stages of the evolution of digital media in Spain have been thoroughly analyzed gradually by different works, the most recent and exhaustive update of which can be found in the monograph by **Salaverría** and **Martínez-Costa** (2021). It is indeed the first of these authors (**Salaverría**, 2021) who established a chronological map of the evolution of cyberjournalism, distinguishing seven stages, from the "experimental" one of 1995 to the current one, defined as "robotization."

Despite the often-adverse structural conditions, the advance of digital journalism has been unstoppable, mainly owing to technology, which has acted as a real lever for transforming the media ecosystem. Technological tools have allowed for a spectacular improvement in the management, structural organization, presentation, and publication of content, especially since the implementation of content management systems (CMS). The compatibility between different programs also resulted in the formal enrichment of content, especially graphic and audiovisual content, as well as in the articulated integration of languages and formats, which made it possible to create new multimedia and interactive narrative plots, unique to digital publications and a motivating factor for their use. In addition, it is important to highlight the massive implementation and extension of the so-called social web, whereby the online media extend to the collaborative participation of the audience. These new formats demanded, in turn, new production routines. Finally, the aggregation of all these components, together with another determining factor, the permanent updating of content, gave rise to what one might call a web information model or style, which within the limitations and capabilities of each medium or channel, has been implemented and has permeated the rest of the media. In the words of **Martínez-Acosta**

> "emerging digital media have in many cases led both productive and narrative innovation processes, which have contributed to improving the quality of content" (2019, p. 77).

Digital native media are a consequence of this development. **Nicholls** *et al*. (2018) establish two phases: a first one in the 1990s with the emergence of portals such as *MSN* or *Google News*, and a second wave from 2005 onward with media producing their own content instead of relying mainly on collection and electronic copy. It is indeed during the last great economic crisis when digital native media begin their great growth (**Negredo** *et al*., 2020a). These new media differ from traditional brands in terms of their business models, distribution strategies, corporate organization, and editorial priorities (**Vara**, 2020).

However, the literature on how the structural characteristics of a medium determine a logic of content production moves between two perspectives: the generalist and the particularist (**Reich**, 2011). For those who hold with the generalist view, journalists in all media produce their news in much the same way. However, according to the particularist perspective, reporters on each platform employ particular practices according to the "logic of the medium." This distinction is directly related to what has been called the affordances of media platforms (**Mellado** *et al.*, 2021). Within this particularist perspective, in this paper we propose that there may be a micro-culture (**Ericson**; **Baranek**; **Chan**, 1989) specific to digital native journalistic media (see, for example, **Mellado**; **Scherman**, 2021), with the understanding that a journalistic model may be fragmented into different micro-cultures that represent a certain degree of heterogeneity. **Martínez-Nicolás** has pointed out several differentiating factors of journalistic cultures:

> "the ownership of the companies (public or commercial media), the scope of dissemination (state, regional, transnational), the editorial orientation (quality press, sensationalist press), the type of media (press, radio, television), the mode of dissemination (conventional, on line)" (2015, p. 158).

Thus, digital native media generate their own features within the journalistic culture in which they are inserted and with which they share distinctive features.

Furthermore, in research on professional roles, few studies have addressed the similarities and differences, both between journalists working on different platforms (evaluative level of roles) and the roles present in different types of media (performative level), and those that have been carried out reveal contradictory results that do not allow for the balance to be tipped in favor of either of the two perspectives.

> Digital native newspapers in Spain present certain particularities in the materialization of professional roles with respect to the rest of the media on other platforms

On the basis of the argument that media platforms generate journalistic micro-cultures and that the nature of professional roles is situational, historical, and therefore contextual (**Mellado**, 2020), we address herein the possible existence of a journalistic model of digital native newspapers coherent with their own professional micro-culture, analyzing the implementation of six professional roles in the news content of digital native media and its comparison with three other platforms (press, radio, and television). Through a content analysis of a sample of 2,729 news items published in four Spanish digital native media, the presence of six professional roles (interventionist, watchdog, loyal-facilitator, service, infotainment, and civic) is measured and compared with the implementation of these roles in news items published in press, radio, and television (N = 3,362). In addition, we analyze which factors –thematic beat, news sources, media size, political orientation– are associated with the presence of each role in the digital native media. The study is part of the *Journalism Models in the Multiplatform Context* research project (CSO2017-82816-P), which is encompassed in the international *Journalistic Role Performance project*: *https://www.journalisticperformance.org*

2. Digitalization and journalistic routines

The media and communications industry, and consequently the journalistic profession, have undergone a profound transformation since the beginning of the twenty-first century. **Albarran** (2010) highlights technology as possibly the most dramatic of the macro forces –globalization, economics, regulation, social change, technology– that converge interdependently in this process and are a catalyst for change.

Digital media emerge in this ecosystem, understood as

> "products and services that come from the media, entertainment and information industry and its subsectors" (*WEF*, 2016, p. 5),

where products of previously consolidated journalistic brands from outside the online environment (legacy digital publications) coexist with new publications, labeled in the literature as digital-born, digital-native, online-native, pure players, or start-ups (**Salaverría**, 2020). The latter, immersed in digital culture, which is collaborative, data-driven, customer-centric, and innovative (*WEF*, 2021), disrupted the media industry, altering everything from business models and forms of production and distribution to consumption habits in a path paved by the struggles of traditional platforms in their search for a place in this new environment (**Harlow**, 2018, p. 543-544). Traditional media have been forced

> "to search for new journalistic strategies, formats, and narratives similar to those being developed by the new media" (**Rojas-Torrijos**; **Caro-González**; **González-Alba**, 2020, p. 160).

Nevertheless, **Majó-Vázquez** *et al*. (2020) found that traditional media are considered to be the most authoritative sources and retain much of the control over audience flow, and although young audiences confer intermediary power to digital native media, they are still far from displacing traditional branded media.

At the same time, digitalization and the emergence of digital media, as well as their increasingly strong role as gatekeepers and content providers of intermediaries (via social media, search engines, and news aggregators) (**Magin**; **Stark**, 2020) transform the journalistic profession and journalism, to which a subfield is added with the digital label. This change in the professional profile and ways of working is indisputable, to the point of updating the training of future journalists with renewed curricula with competencies

> "that have incorporated not only the technological transformation, but also the socioeconomic changes of the societies of the third decade of the millennium" (**López-García**, 2021, p. 2).

Among the new tools and practices in journalism, **Van-der-Haak**, **Parks** and **Castells** (2012) highlight networked journalism, which now involves the product of journalistic practice to networks of various professionals and citizens, although the practices of meaning construction are generally not distributed. Likewise, digitalization does not put an end to the intermediation function of journalism, despite the fact that it is based on new inclusive capabilities (**Sorrentino**, 2016).

Journalism has had to rethink its relationship with the public as key to its sustainability (**Lawrence** *et al.*, 2019). Interactivity changed the relationship between the individual and the media, shifting the emphasis from persuasion to relationship building (**Chan-Olmsted**, 2006). Today, web analytics makes it difficult for journalists to ignore feedback from their audiences (**Tandoc**, 2019), and among their skills are understanding metrics and audiences (**Anderson**; **Bell**; **Shirky**, 2012).

On the contrary, the media must adapt to the logics of social media to remain visible to the audience, and a strategy for this may be the intensification of the use of news banalization (**Magin**; **Stark**, 2020), a term under which the concepts of eroding of boundaries, tabloidization, infotainment, hard and soft news, and sensationalism are placed in hierarchical order (**Otto**; **Glogger**; **Boukes**, 2017). However,

> "the supply of public interest journalism that serves the needs of citizens in a democratic society has always been scarce in the media marketplace when compared with sensationalism, gossip, entertainment, propaganda, and misinformation" (**Medina-Laverón**; **Sánchez-Tabernero**; **Breiner**, 2021, p. 1).

Some studies reveal that the use of audience metrics has a negative impact on news quality (**Fürst**, 2020; **Palau-Sampio**, 2015), and indeed the definition of quality applied to the journalistic product –determined by criteria such as relevance, neutrality, or impartiality, not depending on consumer preferences– differs from that used in the economic sphere, presented as the capacity to satisfy consumer needs (**Wellbrock**, 2016). At the same time, journalists face the complicated combination of quality with the speed imposed by new media, and there is a feeling among professionals that combining the two is an arduous task (**Ramírez-de-la-Piscina** *et al.*, 2015).

Perreault and **Ferrucci** (2020) argue that digital journalistic practices are no longer an element of individual adoption, but rather have become organizationally embedded within the field, and that digital journalists reflect on their own *doxa*, for example, addressing traditional journalistic concerns such as the watchdog function of the media and journalistic autonomy. In addition, the journalists who these authors interviewed describe their work as audience oriented to a greater extent than in traditional media.

This leads us to consider the existence of a change in the concept of journalism. At the end of the first decade of online journalism, **Deuze** (2003) proposed to identify the effect of the online practice of journalism on the profession and its culture. Identifying four types of online journalism and analyzing them in terms of key characteristics of online publishing –hypertextuality, interactivity, and multimediality– he argues not only that the practice of online journalism has consequences for the type of journalism produced on the web but also that its characteristics and online journalism, in fact,

> "connect to broader and more profound changes and redefinitions of professional journalism and its (news) culture as a whole" (**Deuze**, 2003, p. 203).

In the same vein, **Waisbord** (2019) states that digital journalism presents opportunities and threats for traditional journalism, forcing the latter to reevaluate their connections with social actors, adapt to new circumstances, and revalidate their identity when news is everywhere.

Carlson and **Usher**'s examination of the manifestos –as meta-journalistic discourses– of several digital news startups reveals how these, in their view,

> "do not disrupt underlying and long-held journalism ideals and traditional aspirations" (2016, p. 576).

Other studies show the coexistence of traditional and new principles in digital native media (**García-Orosa**; **López-García**; **Vázquez-Herrero**, 2020). **López-del-Ramo** and **Olivera-Zaldua** (2013) did not identify differences between the production and treatment of content in their study of 20 native and migrated digital media, above all in the numerical contrast in staff and the possible use of synergies between different media of the same group, from which migrated newspapers can benefit with respect to native newspapers.

Benson *et al.* (2012) conclude that, in general, online news across media systems (although somewhat less consistently in Denmark, the country studied as representative of the corporate media system) tends to be lighter and somewhat more sensationalist, feature more advertising, and be more open to deliberation, opinion, and non-journalistic voices. Meanwhile, **Brown** *et al.* (2016) identify that news topics considered to be hard news in online publications received sensationalist treatment with the same frequency as traditionally sensationalist categories.

3. Professional roles and news content

Research on professional roles in recent years has shifted its interest from the evaluative level of professional roles to the performative level (journalistic practice reflected in news content), taking into account that the news not only reflects the perceived functions or roles of journalists (the roles at the evaluative level), but also the influences that stem from decisions made within the newsroom and from negotiations with different reference groups (**Mellado**, 2015).

In this paper, we start from **Mellado**'s (2015; 2020) conceptualization of the performance of professional roles manifested along 6 independent dimensions generated from three domains:

- the presence of the journalist's voice in the news;
- the relationship of journalism with those in power; and
- the way in which the audience is approached (**Donsbach**, 2012; **Eide**; **Knight**, 1999; **Hanitzsch**, 2007).

The first domain analyzes the passive versus active posture of journalists as actors in the news. A passive attitude is based on neutrality and distance between the journalist and the facts, while in the interventionist pole, that is, the more active attitude, professionals have a voice in the news, even supporting certain ideologies and/or certain social groups.

The second domain refers to two journalistic roles through which journalists and the media establish their relationship with the elites in a society:

- the watchdog role seeks to monitor those in power, calling attention to possible abuses and irregularities. This journalistic dimension is evident when the news includes questioning, criticism, or accusations against those in power, including investigative reporting or coverage of external investigations and showing the conflict between the media and the powerful;
- the loyal-facilitator role materializes in two ways, either by cooperating with those in power to protect the status quo, or by fostering a sense of belonging to one's own country and strengthening national prestige and patriotism.

Finally, three roles are differentiated on the basis of different understandings of the audience –as citizens, spectators, or clients:

- service journalism approaches the public as a clients, providing information, knowledge, and advice about goods and services that the audience can apply in their daily lives;
- infotainment journalism addresses the audience as a spectator;
- whereas the civic role is based on offering the audience information and training regarding demands, rights, and duties and other issues related to the exercise of citizenship and their participation in social, political, and cultural life (**Mellado**; **Van-Dalen**, 2017).

These roles are not mutually exclusive and can be present in the same news item, with the ability to be combined to generate intermediate roles (**Mellado**, 2020). For example, given the interdisciplinary nature of the interventionist role in journalistic practice, one may expect a correlation with and the generation of changes in other journalistic roles (**Mellado**, 2020). **Humanes**, **Alcolea-Díaz** and **González-Lozano** (2021) found the combination of the interventionist role with the watchdog, civic, and infotainment roles in their study of the television channels *La sexta* and *Antena 3*.

Role co-occurrence can also exist between professional functions from different domains (**Mellado**, 2020). In terms of the domain of power relations, the watchdog and loyalist-facilitator roles can coexist. For example, in media systems characterized by political parallelism, watchdog orientation might correlate positively with elite support orientation if a news story criticizes or denounces the wrongdoing of some actors while supporting other political elites.

> "The presence of the service role characterizes all the digital native newspapers analyzed, and they also put into practice all the other journalistic roles, except for the civic role, to a greater extent than the press, radio, and television"

Such co-occurrences of different roles may also arise within the audience relationship domain. The first is the coexistence of civic, information, and entertainment roles, mixing elements of public life and features of citizenship and entertainment. The second involves the civic and service roles, while a third match may occur between the service and infotainment roles.

Finally, it is also possible to address specific combinations of roles between the domains of power relations and audience approach. The first involves the civic and watchdog roles, producing a news performance that evokes an audience that is critical of those in power. A second combination occurs between the infotainment and watchdog roles, with news that includes the joint presence of surveillance and scandal, emotionalization, or the private lives of those in power. In the above-cited study, these combinations were found in the news programs of *La sexta* (**Humanes**; **Alcolea-Díaz**; **González-Lozano**, 2021).

Finally, studies on the performance of professional roles have sought to go beyond mere description and typologies, seeking explanatory variables of a different nature and level of analysis. In this work, we have selected predictors grouped in three blocks.

News topics have been shown to be important predictors of role materialization in different contexts and media (**Mellado**; **Lagos**, 2014; **Hellmueller** *et al.*, 2016; **Mellado** *et al.*, 2017; **Wang** *et al*., 2017; **Humanes**; **Roses**, 2018; **Mellado** *et al.*, 2017; **Márquez-Ramírez** *et al.*, 2020; **Mellado** *et al.*, 2021). Thus, the watchdog role is more present in news related to crime and courts, the civic role is mainly put into practice in the coverage of protests or human rights, and the service role is primarily associated with health or education news.

News sources are also one of the external influencing factors that can determine the materialization of roles in news content, since as indicated above, journalistic performance is expressed both in the decisions made in the newsroom and in interactions with reference groups. The selection of news sources is related to the materialization of certain roles, so that the watchdog role, the loyal-facilitator role, or the civic role are each found to have a greater presence depending on the sources used in news production (**Hellmueller**; **Mellado**, 2016). For example, **Tandoc** *et al*. (2020) found that the number of sources was positively associated with the six roles analyzed herein.

At the organizational level, characteristics such as the type of media, the size of the organization, and the nature of its ownership have also been identified as predictors of role performance (**Mellado**; **Lagos**, 2014; **Hellmueller** *et al.*, 2016; **Mellado** *et al.*, 2017; **Wang** *et al*., 2017; **Humanes**; **Roses**, 2018; **Mothes**; **Schielicke**; **Raemy**, 2020). In general, the infotainment role is more present in popular newspapers, while the watchdog role is practiced to a lesser extent in the public media. In terms of ideology, the more progressive media tend to implement the watchdog and civic roles to a greater extent.

4. Professional roles in digital journalism

Traditionally, research on professional roles has focused on the study of a single media platform, whereas works comparing similarities and differences between different information platforms –press, television, radio, and internet– are scarcer (**Mellado**; **Vos**, 2017) and have produced inconclusive results.

Thus, **Cassidy** (2005) identified no differences between online journalists and their print colleagues. **Quandt** *et al.* (2006) found that the two most important roles for American and German journalists were those related to neutral journalism and interpreter. **Willnat**, **Weaver** and **Wilhoit** found that, in the United States, journalists working in any type of media, including online, tend to value the interpretive role of journalism more than citizens, while citizens value the disseminating role more (2017, p. 433). **Fahy** and **Nisbet** (2011), with respect to science journalists in online media in the English-speaking sphere, stated that the traditional role of disseminator of scientific advances had been replaced by a more interactive journalistic model with the public. **Schmitz-Weiss**, in a study on digital journalists in Latin America, found that the populist mobilizing model was the most present, relating this model above all to the roles of

> "giving people a chance to express their views on public affairs, and pointing people to possible solutions to today's problems in comparison to the other countries" (2015, p. 90).

Agarwal and **Barthel** (2015) found in their study that digital journalists were strongly committed to the role of power adversary, rejecting the roles of populist disseminator and mobilizer, which for those authors further emphasizes the idea that norms for online journalists are being formed in new media. **Ferrucci** and **Vos** (2017), in their study based on in-depth interviews, found differences between the roles considered to be most important for digital journalists versus traditional journalists. Digital journalists report the disseminator role as being unimportant, arguing that they should focus on context and analysis in connection with the needs of the audience. However, they did not consider the watchdog role central, contrary to the above-mentioned study by **Agarwal** and **Barthel** (2015). **Henkel** *et al*. (2020), in turn, found more similarities than differences between online and traditional journalists, as both broadly share the same professional ideology centered on the notion of objectivity, and online journalists, particularly those working for digital native media, show significantly less interest in the critical "watchdog" role than their traditional colleagues.

The findings of **Mellado** *et al*. (2021) referring to the Chilean media system suggested that differences in news content were a complex phenomenon that could not be attributed solely to technological characteristics, but rather to the nature of news production, where news-gathering routines and organizational factors play an important role. However, some differences were found in the implementation of professional roles, since while traditional print media presented a greater presence of loyal, civic, service, and infotainment roles, digital media were associated with a greater presence of disseminator and watchdog roles (**Mellado** *et al.*, 2021).

In the Spanish case, the presence of professional roles in the news published in digital native media has not been addressed.

On the basis of this literature review, the following formal research questions are posed:

> RQ1: Are there significant differences in the presence of interventionist, watchdog, loyal-facilitator, civic, service, and infotainment journalistic roles between digital native media and other platforms (print, radio, and television)?
>
> RQ2: Which intermediate roles are most present in digital native media?
>
> RQ3: What individual and organizational factors –topics, news sources– or organizational characteristics –media size, political orientation, specific media– best explain the differences in the presence of journalistic roles in digital native media?

5. Methodology

A content analysis of news stories (*N* = 2,729) published in four digital native media (*El confidencial*, *okdiario*, *eldiario.es*, and *HuffPost Spain*) during 2020 was conducted (Table 1). These four media were selected because of their audience penetration, for which we utilized *Digital News Report Spain 2020* (**Negredo-Bruna** *et al*., 2020b) as a source. In addition, these media represent different editorial lines (Table 1) in which each medium has been identified with the majority ideology of its audience according to the *Post-electoral Study General Elections 2109* of the *CIS* (2019). To make the comparison with traditional media, a sample of 3,362 news items in eight media (*Antena 3*, *La sexta*, *La 1*, *SER*, *Onda cero*, *El país*, *La vanguardia*, and *El mundo*) was used, which were analyzed following the same protocol and methodology as that applied to analyze the news of the digital native media to guarantee the comparative analysis (Table 2, Annex 2).

Table 1. Characteristics of the sample of content analyzed

Media	No. of news items analyzed (%)	Launch year	Owner	Editorial line	Weekly audience
El confidencial	743 (12.2)	2001	*Titania Compañía Editorial, S.L.*	Center-right	6/14
Okdiario	838 (13.8)	2015	*Dos Mil Palabras, S.L.*	Right	6/12
Eldiario.es	511 (8.4)	2012	*Diario de Prensa Digital S.L.*	Left	7/17
HuffPost Spain	637 (10.5)	2012	*Prisa Noticias*	Center-left	3/7

Sample

To avoid biases derived from daily and monthly variations, the sample was selected by dividing the year into two 6-month periods: January–June and July–December. For each 6-month period, a constructed week was created by randomly selecting start dates on a Monday in January and a Monday in July. Using intervals of 3–4 weeks, the sample was drawn from the following days: a Tuesday, a Wednesday, a Thursday, a Friday, a Saturday, and a Sunday. This procedure made it possible to include 7 days in each period for a total sample of 14 days during the year (Annex 1). Thus, the analysis of each of the 7 days of the week was guaranteed for each period, and each month of the year was represented by at least 1 day, avoiding the overrepresentation of any period.

In a second step, the home pages of the websites were "captured" at two fixed points during the sampled days: one at 11:00 a.m. and one at 11:00 p.m., so that the greatest amount of content variability was collected. The home pages and their respective links were opened in real time and saved.

Finally, the unit of analysis was each news item, defined as the set of verbal, and where appropriate, sound and/or visual elements referring to the same event/subject/person. All news published on the following previously defined topics was analyzed: government, politics and electoral campaigns, economy and business, police and crime, courts, defense/national security, education, health, environment, energy, transportation, housing, accidents and natural disasters, religion and churches, labor and employment, demonstrations and protests, social problems, media, sports, science and technology, lifestyle, culture and entertainment, celebrities, and other. The topics were defined in the analysis protocol prior to coding, generating 3 variables with 24 categories, so that for each news item the presence of up to 3 themes was measured. These were then recoded, transforming each theme into a dichotomous variable (presence/absence). Editorials and opinion pieces, as well as weather news, horoscopes, supplements, sponsored content, billboards, and hobbies, were not included in the content analysis.

Measurements and coding

To carry out the coding, we followed the operationalization proposed by **Mellado** (2015) to measure the presence of professional roles in the news, which has been validated in subsequent studies (**Mellado** *et al.*, 2017; **Mellado** *et al.*, 2021; **Humanes**; **Roses**, 2018; **Humanes**; **Alcolea-Díaz**; **González-Lozano**, 2021).

The coding manual included the operational definitions of interventionist, watchdog, loyal-facilitator, service, infotainment, and civic role performance. Five indicators were used to measure the presence of the interventionist role, nine for the watchdog role, eight for the loyal-facilitator role, five for the service role, five for the infotainment role, and nine for the civic role (Table 2). Each indicator was measured on the basis of presence (1) or absence (0). In the case of some indicators, we also coded for the actor or action toward which the journalist's or source's comment was directed. We transformed these indicators into dichotomous variables to calculate the main roles and place all our measures on the same scale. Additionally, we assume on the basis of the theoretical foundation of the literature on role performance (**Lynch**, 2007; **Me-**

Table 2. Indicators for each role and level of intercoder reliability

Professional roles	Indicator
Interventionist (Ka 0.78)	Journalist's point of view/opinion
	Interpretation
	Call to action
	Use of qualifying adjectives
	Use of the first person
Watchdog (Ka 0.79)	Information on lawsuits or administrative proceedings
	Journalist questioning
	Third-party questioning
	Journalist criticism
	Third-party criticism
	Journalist discovery
	Third-party discovery
	Report based on external research
	Investigative report
Loyal-facilitator (Ka 0.87)	Advocacy/support of activities
	Policy advocacy/support
	Positive image of the elites
	National progress/successes
	Comparison with other countries
	National triumphs
	Country promotion
	Patriotism
Service (Ka = 0.85)	Impact on daily life
	Suggestions and advice (complaints)
	Suggestions and advice (individual risks)
	Information for consumers
	Tips for consumers
Infotainment (Ka 0.78)	Personalization
	Private life
	Sensationalism
	Emotions
	Morbidity
Civic (Ka 0.75)	Citizen reactions
	Citizen demands
	Citizen credibility
	Education on rights and obligations
	Local impact
	Impact on social communities
	Citizen reactions
	Information on citizens' activities
	Support to social movements

llado; **Hellmueller**; **Donsbach**, 2017) that journalistic roles could coexist. Therefore, the measures were treated as not mutually exclusive.

The coding was performed by four coders who were previously trained. Pretest reliability analyses were performed, and the coding process was monitored to improve intercoder agreement. Finally, a post-test was performed to determine the reliability of the coders in the actual coding process. Using Krippendorff's alpha (Ka), the final overall intercoder reliability was 0.80 (Table 2 includes the Ka value for each role).

After performing confirmatory factor analysis (CFA), the individual indicators making up each dimension were combined to generate a final role score. For descriptive purposes, raw scores (total points divided by the total items for each role) were calculated. The individual indicators that make up each role were thus combined on a continuous scale from 0 to 1, where a higher score expresses a greater presence of each journalistic role in the news, and vice versa. Factor scores were used to test for differences in the performance of the analyzed roles.

The content analysis also included variables related to (1) general information about each news item, such as date of publication, type, and location of the news item; (2) characteristics of the news item, such as topic and geographic frame; and (3) sources cited, including number of sources, type of source, diversity of type of sources, and diversity of viewpoints (Annex 2).

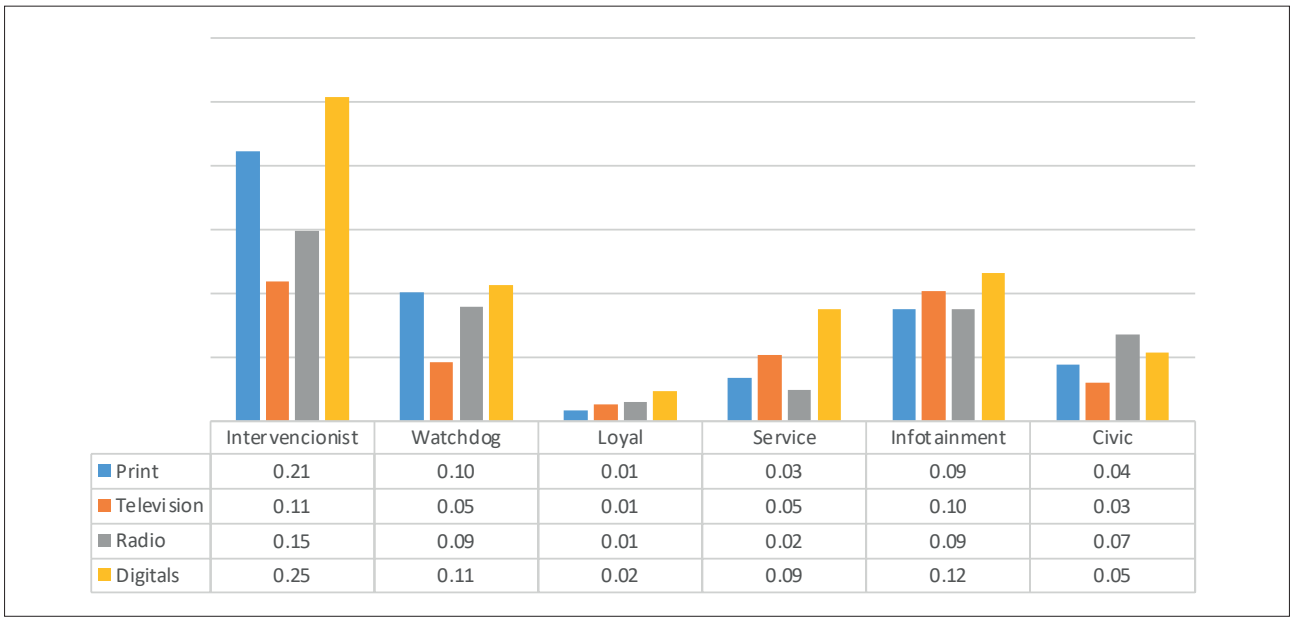
6. Results

Presence of professional and intermediate roles among digital natives

First, we measured the presence of the six journalistic roles in the four platforms that were part of the analysis to identify whether digital native media present differences with respect to the other three types of media (press, radio, and television). Analysis of variance (Anova) revealed statistically significant differences in all roles ($F_{Interventionist} = 145.421$; $p < 0.000$; $F_{Watchdog} = 48.571$; 45, $p < 0.000$; $F_{Loyal\text{-}facilitator} = 22.665$; 45, $p < 0.000$; $F_{Service} = 66.285$; 45, $p < 0.000$; $F_{Infotainment} = 10.232$; 45, $p < 0.000$; $F_{Civic} = 17.775$; 45, $p < 0.000$), although the strongest effect was identified in the interventionist role ($\eta 2 = 0.067$), with the effects being moderate for the service ($\eta 2 = 0.032$) and watchdog ($\eta 2 = 0.023$) roles and very low for the infotainment ($\eta 2 = 0.005$) and civic ($\eta 2 = 0.009$) roles.

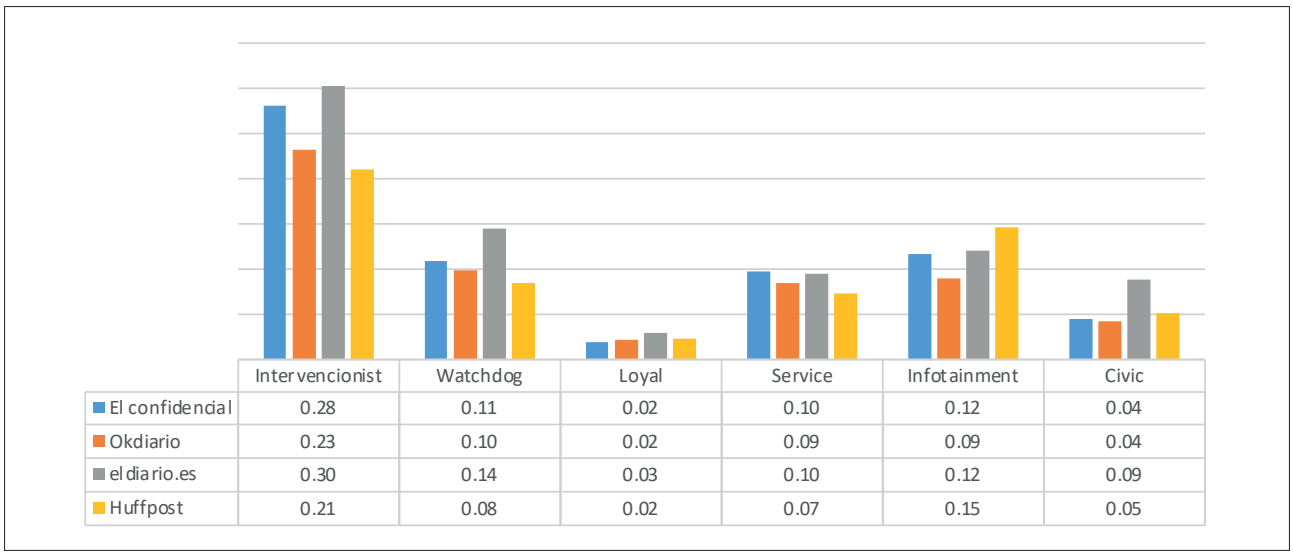
Specifically, digital native media put all these roles into practice to a greater extent than other media, except the civic role. However, it is in the presence of journalistic voice (M = 0.25; SD = 0.219) in the service role (M = 0.09; SD = 0.171) and in the watchdog role (M = 0.11; SD = 0.187) where the differences are greatest (Figure 1). Regarding the interventionist role, these results contrast with those found in Chilean online media, which are characterized by a more dissemination orientation, while in both contexts digital media are distinguished from traditional media by being more watchdog of power (**Mellado** *et al*., 2021).

When we analyzed the existence of differences in the presence of roles among the selected digital native newspapers (Figure 2), they were only found in the interventionist (F = 24.236; $p < 0.000$; $\eta^2 = 0.026$), watchdog (F = 14.842; $p < 0.000$; $\eta^2 = 0.016$), infotainment (F = 11.268; $p < 0.000$; $\eta^2 = 0.012$), and civic (F= 20.952; $p < 0.000$; $\eta^2 = 0.023$) roles, although the effect is only weak or moderate. In the loyal-facilitator and service roles, there are no statistically significant differences.



	Intervencionist	Watchdog	Loyal	Service	Infotainment	Civic
Print	0.21	0.10	0.01	0.03	0.09	0.04
Television	0.11	0.05	0.01	0.05	0.10	0.03
Radio	0.15	0.09	0.01	0.02	0.09	0.07
Digitals	0.25	0.11	0.02	0.09	0.12	0.05

Figure 1. Presence of roles in the press, radio, television, and digital media



	Intervencionist	Watchdog	Loyal	Service	Infotainment	Civic
El confidencial	0.28	0.11	0.02	0.10	0.12	0.04
Okdiario	0.23	0.10	0.02	0.09	0.09	0.04
eldiario.es	0.30	0.14	0.03	0.10	0.12	0.09
Huffpost	0.21	0.08	0.02	0.07	0.15	0.05

Figure 2. Presence of journalistic roles in digital native media news

The most interventionist digital native media are *El confidencial* (M = 0.283; SD = 0.223) and *eldiario.es* (M = 0.301; SD = 0.226), which also reach the highest values in the watchdog role ($M_{Elconfidencial}$ = 0.108; SD = 0.166; $M_{eldiario.es}$ = 0.144; SD = 0.183). *HuffPost* is highlighted as the newspaper that includes more infotainment elements in its news (M = 0.146; SD = 0.115), while *eldiario*.es caters more to the civic role (M = 0.088; SD = 0.151).

As proposed in RQ2, correlation analysis revealed the existence of several intermediate roles resulting from the co-occurrence of pure roles. Controlling for the specific publication, three intermediate roles were found (with correlation coefficients above 0.200).

The strongest combination is represented by the interventionist and infotainment roles (r = 0.274; p < 0.000), followed by the co-occurrence of the interventionist and watchdog roles (r = 0.227; p < 0.000). In both, the presence of journalistic voice is greater than that of the other roles. The third combination is that of the watchdog and civic roles (r = 0.224; p < 0.000), in which the watchdog role predominates. These last two combinations of the watchdog role with the interventionist and civic roles coincide with those found in the study of the *Atresmedia* group's channels in Spain (**Humanes**; **Alcolea-Díaz**; **González-Lozano**, 2021).

Explanatory models of professional roles in digital native media

Finally, we address which variables best explain the implementation of each of the six professional roles in the digital native media analyzed. For this purpose, multiple linear regressions were performed for each role, generating six models, all of which were statistically significant (p < 0.001). The stepwise method was used to introduce the predictor variables, grouped into three blocks (Table 3). The first is related to the subject matter of the news item and is made up of 22 variables (where each category of the original subject variable has been converted into a dichotomous indicator to be introduced into the regression analysis), to which an indicator has been added to measure the relationship of the subject matter with Covid-19. The second block of variables is related to information sources: number of sources, diversity of sources, diversity of points of view, use of expert sources, and use of witnesses. Organizational-level variables were the third block considered: size of the media, political orientation, and the specific newspaper (Annex 2).

The model for the interventionist role explains 15.9% of the variance, finding coefficients with predictive capacity in the three blocks of indicators considered. Thus, the topics most related to soft news (lifestyle, sports, entertainment and celebrities, and culture) are the ones with the greatest presence of journalistic voice, as well as other content such as health, politics, science, or environment, albeit to a lesser extent. The interventionist role is associated with the presence of a greater number of news sources and the use of experts, but not with a greater diversity of different types of sources. Finally, the presence of the voice of the media is more probable in *HuffPost* than in the rest, and more so in newspapers situated ideologically on the left.

> The most interventionist digital native newspapers are *El confidencial* and *eldiario.es*, which also attain the highest values for the watchdog role. *HuffPost* is highlighted as the newspaper that includes more infotainment elements in its news (M = 0.146; SD = 0.115), while *eldiario*.es caters more to the civic role (M = 0.088; SD = 0.151)

The watchdog role explained 30% of the variance. In this case, the subject matter is the best predictor of this role, especially associated with political issues and news regarding crime and courts, as well as economic and labor information to a lesser extent. It is also a role associated with information related to Covid-19. Diversity of

viewpoints is the predictor with the greatest explanatory capacity for the block related to sources. Organizational variables make no difference.

The model of the second role of the power relations domain (loyal-facilitator role) explains 6% of the variance. News regarding culture, politics, and the economy are the ones that show the greatest presence of the loyal-facilitator role. The rest of the predictors have less capacity, but the lack of diversity of viewpoints and the relationship with aspects related to Covid-19 are highlighted.

Table 3. Explanatory models of the materialization of professional roles

Predictors	Interventionist	Watchdog	Loyal-facilitator	Service	Infotainment	Civic
Topic						
Campaigns/policy	0.051**	0.255***	0.101***	–0.054**	0.117***	0.047**
Police/crime		0.178***			0.107***	
Courts		0.150***				
Employment		0.068***		0.044**		0.121***
Economy		0.070***	0.117***	0.144***	–0.057**	
Defense		0.040*	0.050**			0.051***
Health	–0.190***				–0.087***	
Science/technology	0.067***		0.080***	0.169***		
Religion		0.048			0.061***	0.072***
Education				0.035*		0.057**
Social problems				0.036*	0.088***	0.180***
Protests		0.040*				0.173***
Environment	0.036*					0.073***
Energy				0.066***		
Transportation			0.076***	0.087***		
Housing				0.074***		0.062***
Accidents	–0.043*					
Lifestyle	0.159***	–0.040*		0.400***		
Culture	0.082***		0.133***	0.061***	0.094***	
Sports	0.112***		0.087***		0.149***	
Media		0.032*		0.068***	0.044*	
Entertainment/celebrities	0.102***		0.086***		0.326***	–0.041*
Covid-related news	0.045*	0.071***	0.089***	0.103***		0.112***
Information sources						
No. of sources	0.222***	0.075***				0.200***
Diversity of sources	–0.090**					0.162***
Diversity of points of view		0.236***	–0.097**			–0.103***
Use of expert sources	0.095***	0.082	0.080***	0.117***		–0.038*
Use of witnesses					0.080***	0.102***
Organizational characteristics						
Media size					–0.052**	
Political orientation	–0.066**		–0.051*			–0.047*
HuffPost	–0.143***					
Adjusted R^2	0.159	0.300	0.061	0.274	0.204	0.250

The model for the service role explains 27.4% of the variance and is mainly associated with three themes: lifestyle, science and technology, and economy. In addition, it is one of the most amplified roles in relation to the Covid-19 pandemic and is also associated with the use of experts as a news source.

The model for the infotainment role explains 20.4% of the variance. Four topics have the greatest explanatory power: entertainment and celebrities, sports, politics, and crime. In relation to the other two blocks of variables, it is basically associated with the use of witnesses as a source and is more present in left-wing publications.

Finally, the model for the civic role explains 25% of the variance. Themes and indicators related to information sources are highlighted as predictors. Thus, news related to social problems, protests, and employment is addressed to a greater

extent by civic journalism. This role is also the one that is amplified to a greater extent in relation to Covid-19. All the variables in the information sources block explain the presence of this role, with the number of sources, their diversity and the lack of different points of view, and the use of witnesses being the most important.

7. Discussion and conclusions

The main objective of this study was to determine whether digital native newspapers in Spain have generated a micro-culture of their own, which is concretized in the implementation of professional roles in the news in a different way from the rest of the information platforms, in line with the particularist perspective.

The data revealed –responding to RQ1– statistically significant differences in the presence of the six roles among the four platforms. In addition, higher levels of explained variance (adjusted eta-squared) were found for the type of medium variable in all roles than for the specific medium (Table 4), except in the case of the press and for the infotainment and civic roles in digital native media. In other words, when comparing the presence of each role among the media on the same platform, the differences are smaller than when comparing the different presence of each role among platforms, with the exceptions mentioned previously. Thus, we cannot speak of a micro-culture as such, but we do find some particularities of digital native media.

Table 4. Explained variance between media and between platforms (adjusted eta-squared)

Roles	Press	Television	Radio	Digital native	Platforms
Interventionist	0.137	0.005	0.000	0.026	0.067
Watchdog	0.117	0.001	0.003	0.016	0.023
Loyal-facilitator	0.005	0.008	0.004	0.002	0.011
Service	0.120	0.003	0.004	0.003	0.032
Infotainment	0.130	0.006	0.001	0.012	0.005
Civic	0.005	0.040	0.007	0.023	0.009

Thus, it can be concluded in the first place that these media are distinguished by putting into practice all the journalistic roles –except for the civic role– to a greater extent than the media on the other platforms. However, it is the presence of the service role, which has similar levels of presence in the four newspapers analyzed, that characterizes these media. This indicates that one of the ways of attracting and retaining an audience in these publications is to focus on providing readers with useful information, in the sense of "news-you-can-use" from **Underwood** (2001, p. 100), which attempts to respond to individual needs, especially those related to consumer advice. As observed in the regression analysis, lifestyle news is the most associated with this role.

As mentioned above, one of the conditioning factors of digital media is audience metrics, and this study corroborates its reflection in the roles that digital native newspapers fulfill to a greater extent, understanding that their audiences are customers (service role) and viewers (infotainment role) especially.

On the contrary, the greatest differences between digital native newspapers are found in the interventionist, civic, and watchdog roles, which leads to the conclusion that even these roles are amplified by other variables and are not so strongly related to a journalistic model specific to digital native newspapers. Thus, more properly democratic roles (**Hallin**; **Mellado**, 2018) do not generate as much consensus as those that view the audience as a customer or spectator.

Intermediate roles (RQ2) have been identified in the digital native newspapers present in the four media: an adversarial guardian role (resulting from the concurrence of the interventionist and watchdog roles), a civic defender role (resulting from the concurrence of the watchdog and civic roles), and the role of entertainer–interpreter (resulting from the co-occurrence of the interventionist and infotainment roles). The presence of journalistic voice is part of the two strongest associations, which may reflect the central nature of the role in this type of publication.

Finally, we also wanted to analyze which factors best explain the presence of each of the roles in the digital native newspapers in the sample (RQ3). A first conclusion has to do with the explanatory capacity of the topics, which are the variables with the greatest predictive capacity in all the roles. This corroborates results from other studies that have highlighted the ability of news topics to explain the presence of professional roles (e.g., **Mellado** *et al.*, 2021). The second element that predicts the presence of roles is related to the handling of information sources, specifically to the number of sources and their diversity. Finally, it is also worth noting the limited importance of organizational characteristics, particularly the specific environment, which is only relevant in the interventionist role. This again reinforces the idea of role performance typical of digital native media.

> "The performance of the roles of digital native media is also reflected in the factors that best explain the presence of each of the journalistic roles, highlighting as main explanatory variables the topics, followed by the management of information sources, while organizational characteristics are mostly of little importance"

This work contributes to increasing knowledge regarding the roles of digital native media in Spain. Given the scarcity of studies focused on the materialization of journalistic roles in news content on these media platforms, we have obtained data for the first time that shed light on the journalistic model of digital native media, which while maintaining similarities to traditional media, also exhibits some unique features such as a greater presence of the service role and of journalistic voice. Therefore, in the case of the digital native media analyzed, the hypothesis regarding the particularist perspective is not confirmed. Future studies should address as yet unanswered questions so as to address the need for a holistic understanding of journalistic roles that includes the point of view of digital native media audiences: what audiences ideally expect regarding the roles they should fulfill, or how they perceive what the roles fulfill in practice for media and journalists.

> "The journalist's voice is part of the strongest intermediate roles identified in digital native newspapers (in those of adversarial watchdog and animator–interpreter), which could reflect the central nature of the interventionist role in this type of media"

8. References

Agarwal, Sheetal; **Barthel, Michael L.** (2015). "The friendly barbarians: professional norms and work routines of online journalists in the United States". *Journalism*, v. 16, n. 3, pp. 376-391.
https://doi.org/10.1177/1464884913511565

Albarran, Alan B. (2010). *The transformation of the media and communication industries*. Pamplona: Eunsa. ISBN: 978 84 8081 999 2

Anderson, Christopher-William; **Bell, Emily J.**; **Shirky, Clay** (2012). "Post-industrial journalism: adapting to the present". *Columbia journalism school.* Tow Center for Digital Journalism.
https://doi.org/10.7916/D8N01JS7

Benson, Rodney; **Blach-Ørsten, Mark**; **Powers, Matthew**; **Willing, Ida**; **Vera-Zambrano, Sara** (2012). "Media systems online and off: comparing the form of news in the United States, Denmark, and France". *Journal of communication*, v. 62, n. 1, pp. 21-38.
https://doi.org/10.1111/j.1460-2466.2011.01625.x

Brown, Danielle; **Harlow, Summer**; **García-Perdomo, Víctor**; **Salaverría, Ramón** (2016). "A new sensation? An international exploration of sensationalism and social media recommendations in online news publications". *Journalism*, v. 19, n. 11, pp. 1497-1516.
https://doi.org/10.1177/1464884916683549

Carlson, Matt; **Usher, Nikki** (2016). "News startups as agents of innovation: for-profit digital news startup manifestos as metajournalistic discourse". *Digital journalism*, v. 4, n. 5, pp. 563-581.
https://doi.org/10.1080/21670811.2015.1076344

Cassidy, William P. (2005). "Variations on a theme: the professional role conceptions of print and online newspaper journalists". *Journalism & mass communication quarterly*, v. 82, n. 2, pp. 264-280.
https://doi.org/10.1177/107769900508200203

Chan-Olmsted, Sylvia (2006). *Competitive strategy for media firms*. *Strategic and brand management in changing media markets.* New Jersey: Lawrence Erlbaum Associates. ISBN: 978 0 805862119

CIS (2019). *Barómetro de diciembre 2019. Postelectorales elecciones generales 2019*. Centro de Investigaciones Sociológicas.
https://www.cis.es/cis/export/sites/default/-Archivos/Marginales/3260_3279/3269/es3269mar.pdf

Deuze, Mark (2003). "The web and its journalisms: considering the consequences of different types of newsmedia online". *New media & society*, v. 5, n. 2, pp. 203-230.
https://doi.org/10.1177/1461444803005002004

Donsbach, Wolfgang (2012). "Journalists' role perception." In: Donsbach, Wolfgang. *The international encyclopedia of communication*. London: Blackwell.
https://doi.org/10.1002/9781405186407.wbiecj010.pub2

Eide, Martin; **Knight, Graham** (1999). "Public/private service: service journalism and the problems of everyday life". *European journal of communication*, v. 14, n. 4, pp. 525-547.
https://doi.org/10.1177/0267323199014004004

Ericson, Richard; **Baranek, Patricia**; **Chan, Janet** (1989). *Negotiating control. A study of news sources*. Toronto: University of Toronto Press. ISBN: 978 0 802066916

Fahy, Declan; **Nisbet, Matthew C.** (2011). "The science journalist online: shifting roles and emerging practices". *Journalism*, v. 12, n. 7, pp. 778-793.
https://doi.org/10.1177/1464884911412697

Ferrucci, Patrick; **Vos, Tim** (2017). "Who's in, who's out? Constructing the identity of digital journalists". *Digital journalism*, v. 5, n. 7, pp. 868-883.
https://doi.org/10.1080/21670811.2016.1208054

Fürst, Silke (2020). "In the service of good journalism and audience interests? How audience metrics affect news quality". *Media and communication*, v. 8, n. 3, pp. 270-280.
https://doi.org/10.17645/mac.v8i3.3228

García-Orosa, Berta; **López-García, Xosé**; **Vázquez-Herrero, Jorge** (2020). "Journalism in digital native media: beyond technological determinism". *Media and communication*, v. 8, n. 2, pp. 5-15.
http://doi.org/10.17645/mac.v8i2.2702

Hallin, Daniel; **Mellado, Claudia** (2018). "Serving consumers, citizens or elites: democratic roles of journalism in Chilean newspapers and television news". *The international journal of press/politics*, v. 23, n. 1, pp. 24-43.
https://doi.org/10.1177/1940161217736888

Hanitzsch, Thomas (2007). "Deconstructing journalism culture: toward a universal theory". *Communication theory*, v. 17, n. 4, pp. 367-385.
https://doi.org/10.1111/j.1468-2885.2007.00303.x

Harlow, Summer (2018). "Quality, innovation, and financial sustainability. Central American entrepreneurial journalism through the lens of its audience". *Journalism practice*, v. 12, n. 5, pp. 543-564.
https://doi.org/10.1080/17512786.2017.1330663

Hellmueller, Lea; Mellado, Claudia (2016). "Watchdogs in Chile and the United States: comparing the networks of sources and journalistic role performances". *International journal of communication*, n. 10, pp. 3261-3280.
https://ijoc.org/index.php/ijoc/article/view/5181

Hellmueller, Lea; **Mellado, Claudia**; **Blumell, Lindsey**; **Huemmer, Jennifer** (2016). "The contextualization of the watchdog and civic journalistic roles: reevaluating journalistic role performance in US newspapers". *Palabra clave*, v. 19, n. 4, pp. 1072-1100.
https://doi.org/10.5294/pacla.2016.19.4.6

Henkel, Imke; **Thurman, Neil**; **Möller, Judith**; **Trilling, Damian** (2020). "Do online, offline, and multiplatform journalists differ in their professional principles and practices? Findings from a multinational study". *Journalism studies*, v. 21, n. 10, pp. 1363-1383.
https://doi.org/10.1080/1461670X.2020.1749111

Humanes, María-Luisa; **Alcolea-Díaz, Gema**; **González-Lozano, Manuel** (2021). "Materialización de los modelos de periodismo en los informativos de televisión del Grupo Atresmedia: Antena 3 y La Sexta". *Profesional de la información*, v. 30, n. 5, e300514.
https://doi.org/10.3145/epi.2021.sep.14

Humanes, María-Luisa; **Roses, Sergio** (2018). "Journalistic role performance in the Spanish national press". *International journal of communication*, n. 12, pp. 1032-1053.
https://ijoc.org/index.php/ijoc/article/view/8109/2282

Lawrence, Regina G.; **Gordon, Eric**; **DeVigal, Andreu**; **Mellor, Caroline**; **Elbaz, Jonathan** (2019). *Building engagement: Supporting the practice of relational journalism*. Agora Journalism Center at the University of Oregon.
https://agorajournalism.center/wp-content/uploads/2019/04/201904-Agora-Report-Building-Engagement.pdf

López-del-Ramo, Joaquín; **Olivera-Zaldua, María** (2013). "La nueva ecología de la información y la documentación en la sociedad del conocimiento: rutinas de elaboración y gestión de contenidos en los diarios digitales españoles". *Estudios sobre el mensaje periodístico*, v. 19, n. 1, pp. 471-486.
https://doi.org/10.5209/rev_ESMP.2013.v19.n1.42533

López-García, Xosé (2021). "Redefinición de metacompetencias, competencias y habilidades de los periodistas digitales". *Anuario thinkEPI*, v. 16, e16a03.
https://doi.org/10.3145/thinkepi.2022.e16a03

Lynch, Karen-Danna (2007). "Modeling role enactment: linking role theory and social cognition". *Journal for the theory of social behaviour*, v. 37, n. 4, pp. 379-399.
https://doi.org/10.1111/j.1468-5914.2007.00349.x

Magin, Melanie; **Stark, Birgit** (2020). "More relevant today than ever: past, present and future of media performance research". *Media and communication*, v. 8, n. 3, pp. 239-243.
https://doi.org/10.17645/mac.v8i3.3536

Majó-Vázquez, Sílvia; **Cardenal, Ana S.**; **Sagarra, Oleguer**; **Colomer-De-Simón, Pol** (2020). "Media roles in the online news domain: authorities and emergent audience brokers". *Media and communication*, v. 8, n. 2, pp. 98-111.
https://doi.org/10.17645/mac.v8i2.2741

Márquez-Ramírez, Mireya; **Mellado, Claudia**; **Humanes, María-Luisa**; **Amado, Adriana**; **Beck, Daniel**; **Davydov, Sergey**; **Mick, Jacques**; **Mothes, Cornelia**; **Olivera, Dasniel**; **Panagiotu, Nikos**; **Roses, Sergio**; **Silke, Henry**; **Sparks, Colin**; **Stępińska, Agnieszka**; **Szabó, Gabriella**; **Tandoc, Edson**; **Wang, Haiyan** (2020). "Detached or interventionist? Comparing the performance of watchdog journalism in transitional, advanced and non-democratic countries". *The international journal of press/politics*, v. 25, n.1, pp. 53-75.
https://doi.org/10.1177/1940161219872155

Martínez-Acosta, María del Pilar (2019). "El mercado de los medios digitales en España". *Cuadernos de periodistas*, n. 37, pp. 77-84.
https://www.cuadernosdeperiodistas.com/media/2019/04/77_84-Pilar-Martinez.pdf

Martínez-Nicolás, **Manuel** (2015). "Investigar las culturas periodísticas. Propuesta teórica y aplicación al estudio del periodismo político en España". *Revista internacional de comunicación y desarrollo*, v. 1, n. 1, pp. 151-162.
https://revistas.usc.gal/index.php/ricd/article/view/2177

Medina-Laverón, Mercedes; **Sánchez-Tabernero, Alfonso**; **Breiner, James** (2021). "Some viable models for digital public-interest journalism". *Profesional de la información*, v. 30, n. 1, e300118.
https://doi.org/10.3145/epi.2021.ene.18

Mellado, Claudia (2015). "Professional roles in news content: six dimensions of journalistic role performance". *Journalism studies*, v. 16, n. 4, pp. 596-614.
https://doi.org/10.1080/1461670X.2014.922276

Mellado, Claudia (2020). "Theorizing journalistic roles". In: Mellado, Claudia. *Beyond journalistic norms: role performance and news in comparative perspective*. London: Routledge, pp. 22-45. ISBN: 978 1 138 38849 9

Mellado, Claudia; **Hellmueller, Lea**; **Donsbach, Wolfgang** (eds.) (2017). *Journalistic role performance: concepts, contexts, and methods*. London: Routledge. ISBN: 978 0 367869991

Mellado, Claudia; **Humanes, María-Luisa**; **Scherman, Andrés**; **Ovando, Auska** (2021). "Do digital platforms really make a difference in content? Mapping journalistic role performance in Chilean print and online news". *Journalism*, v. 22, n. 2, pp. 358-377.
https://doi.org/10.1177/1464884918792386

Mellado, Claudia; **Lagos, Claudia** (2014). "Professional roles in news content: analyzing journalistic performance in the Chilean national press". *International journal of communication*, v. 8, pp. 2090-2112.
https://ijoc.org/index.php/ijoc/article/view/2651

Mellado, Claudia; **Márquez-Ramírez, Mireya**; **Mick, Jacques**; **Oller-Alonso, Martín**; **Olivera, Dasniel** (2017). "Journalistic performance in Latin America: a comparative study of professional roles in news content". *Journalism*, v. 18, n. 9, pp. 1087-1106.
https://doi.org/10.1177/1464884916657509

Mellado, Claudia; **Scherman, Andrés** (2021). "Mapping source diversity across Chilean news platforms and mediums". *Journalism practice*, n. 15, v. 7, pp. 974-993.
https://doi.org/10.1080/17512786.2020.1759125

Mellado, Claudia; **Van-Dalen, Arjen** (2017). "Changing times, changing journalism: a content analysis of journalistic role performances in a transitional democracy". *The international journal of press/politics*, v. 22, n. 2, pp. 244-263.
https://doi.org/10.1177/1940161217693395

Mellado, Claudia; **Vos, Tim** (2017). "Conceptualizing journalistic role performance across platforms". In: Mellado, Claudia; Hellmueller, Lea; Donsbach, Wolfgang (eds.). *Journalistic role performance: concepts, contexts and methods*. New York: Routledge, pp. 106-24. ISBN: 978 1 138 78301 0

Mothes, Cornelia; **Schielicke, Anna-Maria**; **Raemy, Patric** (2020). "Journalistic role performance: an organizational-level approach". In: Mellado, Claudia. *Beyond journalistic norms. Role performance and the news in comparative perspective*. London: Routledge, pp. 186-204. ISBN: 978 1 138 38849 9

Negredo-Bruna, Samuel; **Amoedo-Casais, Avelino**; **Vara-Miguel, Alfonso**; **Moreno-Moreno, Elsa**; **Kaufmann-Argueta, Jürg** (2020b). *Digital news report España 2020*. Pamplona: Servicio de Publicaciones de la Universidad de Navarra.
https://doi.org/10.15581/019.002

Negredo-Bruna, Samuel; **Martínez-Costa, María-del-Pilar**; **Breiner, James**; **Salaverría, Ramón** (2020a). "Journalism expands in spite of the crisis: digital-native news media in Spain". *Media and communication*, v. 8, n. 2, pp. 73-85.
https://doi.org/10.17645/mac.v8i2.2738

Nicholls, Tom; **Shabbir, Nabeelah**; **Graves, Lucas**; **Nielsen, Ramus-Kleis** (2018). *Coming of age: developments in digital-born news media in Europe.* Reuters Institute for the Study of Journalism.
https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2018-12/Nicholls_Developments_of_Digital_News_Media_FINAL_0.pdf

Otto, Lukas; **Glogger, Isabella**; **Boukes, Mark** (2017). "The softening of journalistic political communication: a comprehensive framework model of sensationalism, soft news, infotainment, and tabloidization". *Communication theory*, v. 27, n. 2, pp. 136-155.
https://doi.org/10.1111/comt.12102

Palau-Sampio, Dolors (2015). "Metamorfosis de la prensa de referencia en el contexto digital: *clickbait* y estrategias de tabloide en *Elpais.com*". *Communication & society*, v. 29, n. 2, pp. 63-80.
https://dadun.unav.edu/bitstream/10171/41898/1/04.pdf

Perreault, Gregory; **Ferrucci, Patrick** (2020). "What is digital journalism? Defining the practice and role of the digital journalist". *Digital journalism*, v. 8, n. 10, pp. 1298-1316.
https://doi.org/10.1080/21670811.2020.1848442

Quandt, Thorsten; **Löffelholz, Martin**; **Weaver, David H.**; **Hanitzsch, Thomas**; **Altmeppen, Klaus-Dieter** (2006). "American and German online journalists at the beginning of the 21st century: a binational survey". *Journalism studies*, v. 7, n. 2, pp. 171-186.
https://doi.org/10.1080/14616700500533486

Ramírez-de-la-Piscina, Txema; **Zabalondo, Beatriz**; **Aiestaran, Alazne**; **Agirre, Antxoka** (2016). "The future of journalism - Who to believe? Different perceptions among European professionals and internet users". *Journalism practice*, n. 10, v. 1, pp. 71-92.
https://doi.org/10.1080/17512786.2015.1006932

Reich, Zvi (2011). "Comparing reporters' work across print, radio, and online: converged origination, diverged packaging". *Journalism & mass communication quarterly*, v. 88, pp. 285-300.
https://doi.org/10.1177/107769901108800204

Rojas-Torrijos, José-Luis; **Caro-González, Francisco-Javier**; **González-Alba, José-Antonio** (2020). "The emergence of native podcasts in journalism: editorial strategies and business opportunities in Latin America". *Media and communication*, v. 8, n. 2, pp. 159-170.
http://doi.org/10.17645/mac.v8i2.2699

Salaverría, Ramón (2020). "Exploring digital native news media". *Media and communication*, v. 8, n. 2.
https://doi.org/10.17645/mac.v8i2.3044

Salaverría, Ramón (2021). "Veinticinco años de evolución del ecosistema periodístico digital en España". In: Salaverría, Ramón; Martínez-Costa, María-del-Pilar (coords.). *Medios nativos digitales en España*. Salamanca: Comunicación Social Ediciones y Publicaciones. ISBN: 978 84 17600 60 0

Salaverría, Ramón; **Martínez-Costa, María-del-Pilar** (coords.) (2021). *Medios nativos digitales en España*. Salamanca: Comunicación Social Ediciones y Publicaciones. ISBN: 978 84 17600 60 0

Schmitz-Weiss, Amy (2015). "The digital and social media journalist: a comparative analysis of journalists in Argentina, Brazil, Colombia, Mexico, and Peru". *International communication gazette*, v. 77, n. 1, pp. 74-101.
https://doi.org/10.1177/1748048514556985

Sorrentino, Carlo (2016). "La doppia coesistenza". In: Sorrentino, Carlo (a cura di). *L'integrazione delle notizie. Come le testate giornalistiche televisive italiane si preparano alla sfida del digitale.* Milan: Focus in Media, Fondazione per la Sussidiarietà, pp. 182-187. ISBN: 978 88 97793 18 2
https://flore.unifi.it/retrieve/handle/2158/1046109/141184/rapporto%20integrazione%20notizie.pdf

Tandoc, Edson C. (2019). *Analyzing analytics disrupting journalism one click at a time*. New York: Routledge. ISBN: 978 1 138496521

Tandoc, Edson; **Raemy, Patric**; **Pasti, Svetlana**; **Panagiotou, Nikos** (2020). "Journalistic role performance: a news-story-level approach". In: Mellado, Claudia. *Beyond journalistic norms: role performance and news in comparative perspective*. London: Routledge, pp. 167-185. ISBN: 978 1 138 38849 9

Underwood, Doug (2001). "Reporting and the push for market-oriented journalism: media organizations as businesses". In: Bennett, Lance; Entman, Robert (eds.). *Mediated politics: communication in the future of democracy*. Cambridge: Cambridge University Press, pp. 99-116. ISBN: 978 0 521789769

Van-der-Haak, Bregtje; **Parks, Michael**; **Castells, Manuel** (2012). "The future of journalism: networked journalism". *International journal of communication*, v. 6, pp. 2923-2938.
https://ijoc.org/index.php/ijoc/article/view/1750/832

Vara, Alfonso (2020). "Cross-national similarities and differences between legacy and digital-born news media audiences". *Media and communication*, n. 8, v. 2, pp. 16-27.
https://doi.org/10.17645/mac.v8i2.2733

Waisbord, Silvio (2019). "The 5Ws and 1H of digital journalism". *Digital journalism*, n. 7, v. 3, pp. 351-358.
https://doi.org/10.1080/21670811.2018.1545592

Wang, Haiyan; Sparks, Colin; Lü, Nan; Huang, Yu (2017). "Differences within the mainland Chinese press: a quantitative analysis". *Asian journal of communication*, v. 27, n. 2, pp. 154-171.
https://doi.org/10.1080/01292986.2016.1240818

WEF (2016). *Digital media and society implications in a hyperconnected era*. World Economic Forum. January.
https://www.weforum.org/reports/digital-media-and-society-implications-in-a-hyperconnected-era

WEF (2021). *Digital culture: the driving force of digital transformation*. World Economic Forum. June.
https://www.weforum.org/reports/digital-culture-the-driving-force-of-digital-transformation

Wellbrock, Christian M. (2016). "The internet's impact on journalistic quality". In: Lugmayr, Artur; Dal-Zotto, Cinzia (eds.). *Media convergence handbook - vol. 1. Journalism, broadcasting, and social media aspects of convergence*. Heidelberg: Springer, pp. 83-97. ISBN: 978 3 662 52642 2

Willnat, Lars; **Weaver, David H.**; **Wilhoit, G. Cleveland** (2017). "The American journalist in the digital age: how journalists and the public think about journalism in the United States". *Journalism studies*, v. 20, n. 3, pp. 423-441.
https://doi.org/10.1080/1461670X.2017.1387071

Annexes

Annex 1. Specific sample collection days during 2020

Month	Day
January	Wednesday, 29
February	Thursday, 20
March	Friday, 20
April	Saturday, 11
May	Sunday, 10
June	Monday, 8
June	Tuesday, 30
July	Tuesday, 7
August	Wednesday, 5
August	Thursday, 27
September	Friday, 25
October	Saturday, 17
November	Sunday, 15
December	Monday, 14

Annex 2. Description of the variables of the analysis protocol included in the regression analyses

Topic	1 = government 2 = politics and electoral campaigns 3 = economy and business 4 = police and crime 5 = courts 6 = defense/national security 7 = education 8 = health 9 = environment 10 = energy 11 = transportation 12 = housing 13 = accidents and natural disasters 14 = religion and churches 15 = labor and employment 16 = demonstrations and protests 17 = social problems 18 = media 19 = sports 20 = science and technology 21 = lifestyle 22 = culture 23 = entertainment and celebrities 24 = other
Relationship with Covid-19	Dichotomous variable that mediates that of the news with aspects related to the Covid-19 pandemic
No. of sources	Total number of sources cited in a unit of analysis
Type of source	The presence of each source was coded dichotomously (presence/absence) for each item
Diversity of sources	0 = absence of sources 1 = one-sided coverage (all sources are of the same type, e.g., all are political sources) 2 = multiple types of sources
Diversity of points of view	0 = absence of viewpoints (no sources included) 1 = unilateral coverage (all sources agree on the same point of view or opinion) 2 = multiple points of view (different points of view are included)
Use of expert sources	Presence/absence of sources of information that are consulted as specialists in a specific area
Use of witnesses	Eyewitness statements are generally identified by direct or indirect quotations
Media size	1 = small (fewer than 50 journalists in the newsroom) 2 = medium (50–200 journalists in the newsroom) 3 = large (more than 200 journalists in the newsroom)
Political orientation	1 = left 2 = center-left 3 = center 4 = center-right 5 = right