

# Students' Perceptions of Communication Design in Media: Case Study of Portuguese and Spanish Communication Students

Fátima Gonçalves, Joaquim Brigas, Jorge Gonçalves

**Abstract**—The proliferation of mobile devices in society enables the media to disseminate information and knowledge more rapidly. Higher education students access these contents and share them with each other, in the most diverse platforms, allowing the ubiquity in access to information. This article presents the results and respective quantitative analysis of a survey applied to communication students of two higher education institutions: one in Portugal and another in Spain. The results show that, in this sample, higher education students regularly access news content believing traditional news sources to be more credible. Regarding online sources, it was verified that the access was mostly to free news contents. This study intends to promote the knowledge about the changes that occur in the relationship of higher education students with the media, characterizing how news consumption is processed by these students, considering the resulting effects of the digital media evolution. It is intended to present not only the news sources they use, but also to know some of their habits and relationship with the news media.

**Keywords**—Students' perceptions, communication design, mass media, higher education, digital media.

## I. INTRODUCTION

NOWADAYS, in view of the increasing multiplication of the available information easily accessible, both in traditional media and in the new media, new competences are required of society, namely in the training and education of people [1], [2]. In other words, alongside the skills to read critically, mobility, social networks [3], platforms and digital tools have highlighted other basic needs for student training [4]. The literacy of graphic information for the press can be understood as the set of skills and knowledge that allow the understanding and use of graphic representations in the construction of news resources, which represents an essential component of the communicative process [5], [6]. Thus, increasingly, in this age of information and constant search for knowledge, communication, through graphic representations, is part of the science of visual communication [7], [8]. Being cumulative, the more it grows in volume and the more difficult refinement it becomes to transmit the amount of information that constitutes it [9]. With technological progress, visual culture is increasingly determined by graphical representations of information and journalism is not alien to this social phenomenon [10]. Visual culture, understood as the ability to

communicate through visual codes, requires visual literacy, that is, skills in interpretation and use of visual messages [11]. The design of communication for publications [12] is in a complex period due to the process of constant redefinition, caused by the popularity and proliferation of online media [13] with social media to assume, increasingly, a role in the circulation of information [14]. With society producing more information than it can assimilate and consume, it is necessary that the data might be turned into useful information and that communication design converts it into accessible and effective communication [15]. With communication design becoming more relevant in the social communication and in the media, it is essential to reflect on the role of future professionals in order to equip them with skills in these areas, since the ability to communicate visually [16], in an effective way, has become a current requirement.

This study was developed using the methodology of the exploratory studies, with an essentially quantitative approach. In general, it was intended to determine whether communication students in higher education institutions have a good level of literacy in matters related to the press, enabling them to understand and critically evaluate the different aspects of the press and its contents. This study aims to analyze students' interest in news; evaluate the importance that students attribute to different characteristics present in the press; characterize the infographic literacy of the students and analyze the importance of different forms of communication used by the press (text, images, video, audio, etc.).

## II. METHODOLOGY

This article is based in a quantitative method analysis which is explained in this section.

### A. Evaluation Tool

For the development of the questionnaire, and in order to allow some comparability of results, the questionnaires [17], [18] and [19] were used as reference. A random sample was used with a previously selected target audience: higher education students attending social communication courses at the Polytechnic of Guarda and the University of Vigo. All students participated voluntarily in the inquiry by completing a questionnaire in the classroom. The questionnaire consisted of

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two parts. The first part collects demographic data and the second part measures students' perceptions and attitudes of their relationship with the media. The questions in the second part consisted of five-point Likert-type scale about the interest and preference in news, confidence in media and habits of access to media.

### B. Characterization of the Sample

In this study, the sample consists of communication students ( $n = 256$ ) enrolled at the Polytechnic of Guarda (Portugal) and at the University of Vigo (Spain). 144 students from the Polytechnic Institute of Guarda (56.2%) and 112 students from the University of Vigo (43.8%) were surveyed. When analyzing the data resulting from the application of the survey, the sample consists of 34% male respondents and 64.4% female respondents (Table I).

TABLE I  
CHARACTERIZATION OF THE SAMPLE BY INSTITUTION AND GENDER

Gender	Polytechnic of Guarda		University of Vigo		TOTAL	
	N	%	N	%	N	%
Male	49	19.1	38	14.9	87	34
Female	93	36.3	72	28.1	165	64.4
Didn't answer	2	0.8	2	0.8	4	1.6
Total	57.2	56.2	112	43.8	256	100

Regarding age, the majority of respondents, 55.1%, are between 20 and 23 years old; 25.8% under 20 years of age; 11.3% are between 24 and 26 years old; 6.3% over 30 years of age; and with 0.8% are in the range between 27 and 29 years. 0.8% of respondents did not respond (Table II).

TABLE II  
CHARACTERIZATION OF THE SAMPLE BY GENDER AND AGE GROUP

Gender	Age group (years) %					TOTAL
	<20	20-23	24-26	27-29	>30	
Male	7.0	19.1	4.7	0.8	1.6	34.0
Female	18.8	35.2	6.6	0.0	3.9	64.5
Didn't answer	0.0	0.8	0.0	0.0	0.8	1.6
Total	25.8	55.1	11.3	0.8	6.3	100

### III. RESULTS

When questioned about the level of interest in news consumption, most students claim to be "very interested" (38%) or even "extremely interested" (14%), Fig. 1. There were also significant variations in the interest in news according to gender and age group. Regarding gender, the female are less "extremely interested" in news content, compared to the male gender (10% vs. 21%).



Fig. 1 Interest in news consumption

As for the age group, there is an increase in the level of interest as age increases, with the age group of 27-29 years being more interested in news (50%).

Regarding the level of news consumption (Fig. 2), the first conclusion observed is that online media, more specifically social networks, are the main means of informing students. About three out of four students identify social networks as one of the resources that use "always" (75%); in second place are the news aggregators (71%); television is the third most widely used news resource (66%); the press in fourth (48%); and radio is a source of news for just over a fifth of the respondents (22%).

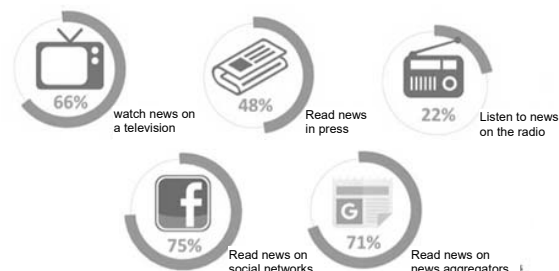


Fig. 2 News consumption

The majority of respondents showed greater confidence in news coming from traditional media (59%), compared to social networks (21%). Following the same line, it is verified that almost half of the respondents are more distrustful, as regards the credibility of the news (46%) coming from these access platforms.

Fig. 3 presents the results of ways to access the news. Online access is the most used way to access news (71%), followed by paper (29%). The consumption of news through online access does not properly represent a reduction in the importance of traditional news media. Regardless of online access to news consumption, more than 65% of respondents continue to be consumers of television news and nearly half (48%) continues to consult print newspapers.



Fig. 3 Ways to access the news

The frequency of viewing press releases (magazines and newspapers) in online media is higher than using these offline media. The vast majority of students consults online media "several times a day" (34%) and/or at least once a day "daily" (47%).

The frequency of access to news on offline media is somewhat lower, although a considerable percentage of students are seen as frequent consumers: about one in five of the students consult offline news at least once a day, i.e. "daily" (20%) and about one-ninth do it "several times a day" (11%).

When questioned about how they access the news, almost one-third of respondents reported that they paid to access news (30%), presenting considerable adherence to the purchase of news content. However, more than 80% of respondents access the news content for free or on loan, Fig. 4. Thus, the results obtained reinforce the idea that paying to access news is far from being part of most students' habits. The consumption of news mostly occurs at home, and Fig. 4 shows that four out of five respondents, in fact, access news at home with 81%. Away from home, the favorite places for news consumption are social spaces (49%) and study places (32%).



Fig. 4 Ways of access the news

When questioned about the importance they attribute to 15 characteristics of the press as factors used in the construction of news content, they considered "extremely" important: "actuality" of the news (43%); "ethics" (39%); "information's location" (34%), "writing style" (33%), "multimedia" (31%), "cover" and "usability" (both 29%), "news coverage" (27%), "quality of navigation" and "interactivity" (both with 25%). Lower emphasis is put on "content attractiveness" 22%, "archive" and "layout" (both 21%) "usefulness" (18%) and "services" (16%).

In concern of effective understanding of news, Fig. 5 notes that about nine out of ten respondents consider the "image" element (87%) as "very" and "extremely" effective when reading news content, followed by text (80%); video (74%); audio (60%) and finally, also with a relevant percentage of the respondents, infographic (58%).

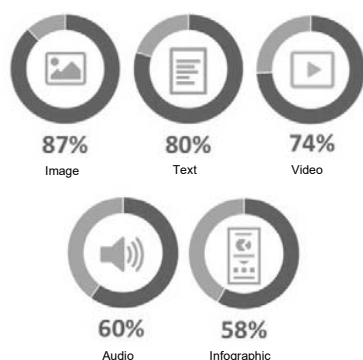


Fig. 5 Effectiveness of audiovisual elements understanding news

Nowadays, the increase in the flow of information and ease of access has altered the way society interacts with the media, and the press in particular and there is a greater difficulty in

filtering the most relevant contents. With the media giving more attention to information visualization and looking for increasingly simple and intelligible forms for the representation of news content, infographics have been increasing their presence, being a relevant qualitative element in the context of the journalistic activity and becoming an important competitive differential. Regarding the infographics' analysis by the university population, almost half of the respondents know what an infographic is (48%), appearing in this context as an important visual resource for the media, in the construction of news by iconographic means. The percentage of students who usually consult infographics increases as the scholar year advances (40% up to 80%), while, conversely, the percentage of students who do not know what an infographic is decreases (40% to 0%). Given the preferential means of consulting infographics, it is verified that three out of five respondents consult online infographics (59%). Consultation on television and in the press shows a similar trend, with only about one in ten respondents (15% and 13% respectively).

When questioned about the effectiveness of infographics in information literacy, 17% of respondents "fully agree", half "agree" (50%), about one-third "do not agree or disagree" (30%) and only a very small percentage "disagree" (3%). However, if we take into account the set of agreement in the effectiveness of the infographics, 67% agrees that this element helps in the understanding of news. Nevertheless, the results obtained reinforce the idea that there are many students without formed opinion.

As regards the substitution of textual elements for infographics, it is found that more than half of the respondents (52%) agree that this element can replace a text. It should be noted that a large majority of respondents admit that any news information can be turned into infographics (70% vs. 30%).

The two news subjects recognized as most important by the students are: "actuality" (74%) and "culture and spectacles" (60%). This is followed by news of "politics" and "sports" (both with 35%), news of "economy" (26%) and "classified" (10%).

There are variations in gender preference. It is confirmed that in the themes "sport" and "politics" traditionally more associated with the male preferences, there are higher rates of interest in the male versus the female.

In the category of the most consulted magazines, 44% show interest in "general" magazines, 29% in "sports, health and wellness" magazines, 24% in "technical or scientific" magazines, 22% in magazines of "politics, economy or finance" and, lastly, both with 20%, "didactic, cooking or decoration" and "social or entertainment" magazines.

In addition to presenting themselves as one of the main means of consulting news (75%), social networks are recognized as important access platforms by substantially altering the circulation and dissemination of news, Fig. 6.

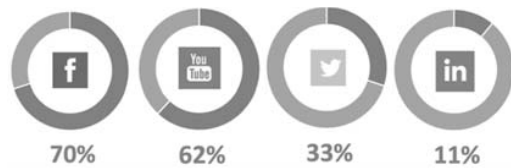


Fig. 6 News access through social networks

Facebook is the most used social network to access news: more than 70% use social networks to access news updates or texts for analysis and deepening of news do so through this social network.

YouTube appears as the second most used network for news consumption (62%), thirdly Twitter (33%) and, with a much smaller expression, is LinkedIn (11%). It is verified that the country influences the choice of news access platform. In the case of Twitter, the overall use of this network in news consumption in Spain is much higher than in Portugal (67% vs. 8%). The remaining platforms have similar values.

News aggregators were identified as the second preferred news source (71%). Google News is the most widely used, with more than half of respondents reporting regularly (51%).

#### IV. CONCLUSION

The introduction of digital technologies, in everyday life, changed the habits of news consumption and social networks are presented as a favorite mean of communication, changing the way they produce and distribute news. Social networks have transformed the panorama of news information, spaces where the media have been forced to have an active presence, in order to achieve an increasingly technological society. Thus, social networks are currently part of the news consumption process, proving to be one of the most expressive aspects of the revolution generated by digital integration.

Habits of access to news sources illustrate well the impact of digital integration on the news consumption process, suggesting that migration processes, for the online side, are increasingly unavoidable.

Newspapers, in their online aspect, stand out among the news resources, presenting themselves as the preferred news source. However, the analysis also reveals that paying for news is still far from being part of the news consumption habits of the overwhelming majority of students.

The way we communicate has been largely marked by the increasing use of visual and audiovisual elements, which increasingly play an essential role in the content produced by the media. It is a trend that is not indifferent to the press, whose language has become increasingly visual, incorporating more and more graphic elements in its contents.

As regards the online press, there has been a growing use of audiovisual content, such as: photo galleries, animations, infographics, videos, podcasts, etc., which have been increasingly adopted in the construction of content, creating news more appealing and easily intelligible.

The ability to communicate visually depends on the existence of hierarchies and choices, elements and forms used in the construction of news content, but there are other characteristics

that must be taken into account. Driven by the evolution of technology, the use of a visual language continues to be decisive in the construction of informative contents.

In conclusion, the results show very clearly the relevance of social media to the circulation and consumption of news and refer to the existence of a relationship of complementarity (qualitative) between textual and visual elements.

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