



Oliveira, M.; Portela, P. & Santos, L.A. (eds.) (2012)
Radio Evolution: Conference Proceedings
September, 14-16, 2011, Braga, University of Minho: Communication and Society Research Centre
ISBN 978-989-97244-9-5

Radio journalists and the Internet: A study on perceptions

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Abstract:

This study investigates how Portuguese radio journalists evaluate the changes that have occurred in the profession since the Internet has been integrated in newsrooms. The main purpose is to understand how these professionals perceive the influence of the Internet on journalism practices, roles and ethics. In order to achieve this purpose, it was carried out a survey of 30 journalists working at the four main Portuguese radio stations newsrooms. Results confirm that Internet is considered a positive influence on journalism. The global network allows an enhancement of journalists' communicative and practical performance, but is perceived as having a limited impact on traditional journalists' roles in a democratic society.

Keywords: journalism, journalists, radio, Internet, perceptions

Introduction

The rise of the Internet as a technological innovation has influenced journalism in many different ways. It stirred shifts in the news flow, in daily journalistic routines and in professional accountability, in rules, roles, practices and ethics, in the production and consumption of news information (Deuze, 1999; Bastos, 2000; Loosen, 2002; Garrison, 2003; Díaz Noci & Arriaga, 2003; Hermans *et al.*, 2009).

As summarized by Fortunati *et al.* (2009), in terms of journalism practices, there is evidence that the Internet has brought many changes. On the positive side, the new medium has been considered a source of new opportunities for journalists. It offers the possibility of enhancing their work and enables a faster and wider interactivity with readers. From a pessimistic perspective, the Internet has introduced a new breed of professionals devoted to preparing online editions, often young and underpaid, with tight deadlines, and forced by time pressures to focus on copy-and-paste work rather than writing articles. Most of their work is produced indoors at their desks.

Some of the most fundamental questions of journalism are related to professional roles, with the way journalists perceive themselves, how they describe themselves and the extent to which their views support the 'policy function' of the media (Quandt *et al.*, 2006). In terms of professional identity, journalists have reacted with ambivalence towards the Internet. They have revealed defensive attitudes and preferences of traditional professional role conceptions. Journalists, both print and online, continue to rate the interpretative/investigative and disseminator functions as very important. Thus, even if journalists' tasks have changed, they continue to rate as crucial for their profession the investigation of governmental decisions, the analyses of complex issues, and the ability to get relevant and verified news to the public as quickly as possible.

Journalism ethics seem to be changing and newcomers seem to be able to mingle traditional and new normative values. It is the case of Portuguese online professional journalists: the majority believes that 'traditional' journalists and online journalists should share a common ground of ethical values and standards (Bastos, 2008). Today, they all face new and complex ethical dilemmas in a media industry context marked by cost-cutting strategies that have transformed journalists into scoop seekers at any cost and have imposed them the need to recycle stories and manipulate them in order to continuously provide readers with "new" content (Davies, 2008). The creation of content in the global news industry takes place under increasingly precarious conditions, as the reliance on agency feeds grows, and as journalists are expected to do more with less time, fewer resources and colleagues (Deuze e Marjoribanks, 2009).

The pressure on online newsrooms has also been increasing due to the new demands in terms of audience expectations. In fact, media organizations are quite aware of what the public wants, and immediacy is pointed out as a very important factor for online news consumers. Still, they also expect accuracy and depth which, altogether, have new implications in terms of journalists' professional practices (Nguyen, 2010). Media organizations expect from digital contents the capacity to attract the public and, thus, features as free access, immediacy, interactivity, multiple choices will have an impact in the way news are produced and published. Furthermore, internet implied new technological skills, transforming practices and professional roles with different levels of acceptance amongst journalists. The multimedia concept is applied to the news production process and the journalists' ethos becomes dimmer in face of the recent challenges such as production roles, access to sources and public interaction. The response to this transformation is variable, even though, some of the studies point out that TV and radio newsrooms seem to adjust easier than newspapers or magazine newsrooms (Brown & Groves, 2010; Witschge & Nygren, 2009).

The aim of this study is to provide an empirical approach to the perception that Portuguese radio journalists have of the changes brought by the Internet in their everyday practice, professional role, and ethics. It is part of a wider research project on journalism and the Internet in Portuguese mainstream news media (Bastos, Lima & Moutinho, 2010) and follows closely the goals and methodological approach used in a previous international study by Fortunati *et al.* (2009). The current investigation has been conducted in the first semester of 2010. Our main research questions are: How are the features and innovations associated with the Internet perceived by Portuguese radio journalists? What are the main changes that have occurred, or may occur, in the various fields of the profession following the advent of the Internet? In journalists' perception, do these changes raise or lower standards of journalism?

Over the past decade, these topics have been investigated in several countries, with different methods. In Portugal, Bastos studied the impact of the Internet in the main Portuguese media newsrooms (2000) and investigated practices, professionalism and ethics of Portuguese online journalists working in mainstream media (2008). In this country, scarce investigation was made in both these areas, and even less in the specific area of broadcast journalism. In fact, few studies deal with the impact of the Internet on radio and television journalism.

The study of the relations between radio and Internet seems to reveal fewer differences than other media environments. In fact, it can be complementary since radio is the one medium that easier adapts itself to Web 2.0 and, furthermore, amplifies the social networks from the ether (Cardoso *et al.*, 2009).

Radio did not have to change but to adjust itself to a new technology, according to similar transformations made through its entire history, which some scholars, such as Fidler, call the *radiomorphosis* (Prata, 2008; Cardoso *et al.*, 2010). Even tough, and in spite of the referred proximity, radio has not been able to take full benefit from the potential that Internet can provide.

A Portuguese study concludes that online newspapers emerging from broadcast media (radio and television), broadly are the ones that take best advantage from Internet (Zamith, 2008). In this study, a chart

including 22 online news media was constructed with the purpose of measuring the global use of Internet potential. In this rank, two radio stations are in the first five best listed.

Several reasons can be provided in order to explain the under utilization of Web potential. Cardoso (2009) points five main causes that are strongly connected with production and reception: profitability/projects' funding; online audiences remaining in low levels; feeble citizen participation; increasing interactivity in radio programs in traditional broadcast; journalists' resistance to a greater flexibility in their professional cores.

Technological improvement brought a change in labor practices, transforming routines and professional demands, speeding up production and opening all the process to new capacities. An empirical study carried both in Sweden and in England enhances the relation between media companies' economical strategies and new professional roles developed by practitioners and the way they can transform the very core of the journalist profession (Witschge & Gunnar, 2009). Accordingly, and in a more centered level, these changes often put in question the traditional radio journalist's role, now transformed in an interactive multimedia journalist (Garrand, 2006) or even a net handler (Saíz Olmo, 2005). The classical cognition process was also modified and demands a newly web reasoning. Internet entered in practitioners lives at the end of the XX century, a bit more than two decades, but, even so, professional identity and self-representation as well as traditional journalistic routines cannot be replaced by the gesture of a simple click.

Internet generated new routines in radio newsrooms, which affected the way sources are treated, the general newsmaking process, or even the way that newsrooms assimilated the former online sections in their global production system. Radio journalists were used to handle sound but after these changes he's confronted with new challenges and had to learn new skills involving new languages as well as new tools. A study concerning Portuguese radio stations shows a progressive convergence process (Bonixe, 2009) and, accordingly, journalists develop multitasks skills, and are no longer limited to sound productions. Every day, practitioners have to deal with new technological challenges, new forms of expression, new routines and new ethical demands. Portuguese news radio stations take Internet seriously. However, their most important effort is made towards the traditional broadcast format, and, therefore, the organization is predominantly planned to support it. This reality is strongly entangled with the way radio people approach technology. Radio production staff regards it, mostly, as a tool that takes influence over professional routines the means for distribution and broadcast contents. Technology facilitates the diversity of contents and allows migrations to all kinds of platforms (Crisell & Starkey, 2009), the multiplicity of channels and thematic profiles, and broader sources of income (Cardoso *et al.*, 2009). In radio evolution process technology had a central role but, nevertheless, scholars tend to put it in a secondary level. Studies show a greater attention on contents and often forget the production process or the way they are distributed. Accordingly, the sound product is considered the transformation agent and the technological platform is disregarded (Cardoso, 2010; Herreros, 2008; Meditsch, 2001; Crisell & Starkey, 2009; Priestman, 2002; Cordeiro, 2004; Campos & Pestana, 2003). This conceptualization is clearly opposed to the technological determinism and has consequences in the way practitioners adapt to the new reality, delaying the global transformation of this medium.

Theoretical background

In order to interpret the changes occurring in the profession of journalism, one needs to consider both how this profession is socially constructed and how these socially shared meanings emerge from the relationships between journalists and their social context. Far from being static, these meanings and relationships are continuously reshaped and negotiated by social actors, with different levels of power (Fortunati *et al.*, 2009). The theoretical framework assumed in this study follows the approach outlined by these authors. Based on previous propositions by other authors, they look at journalism as a "social construction", which coconstructed meanings are rooted in the social relationship between journalists, publishers and readers. It is a framework that points

towards systemic complexity rather than simplification of analyses. Conceptualizing journalism in this way, they argue, allows us to see it as a phenomenon that is neither inevitable nor unilateral. In this framework, journalism is made of different images, ideologies, and perspectives that are generated by various actors and negotiated along the different lines of power existing in their relationships. In our study, though, the attention is focused mainly on journalists' perspective, foregrounding their acceptance, use, and vision of the Internet. Publishers and readers, however, remain on the scene as actors who influence the work environment in the newsrooms and with whom journalists confront.

In this context, it becomes relevant to understand how the adoption processes of digital technologies evolve in the profession of journalism. Over the last decade there has been much debate about the impact of the rise of the Internet and other digital technologies on traditional news media. One dominant focus in earlier studies was the technology-driven approach. These studies suggest that news content is determined by the available technologies. Hence, changes in journalism can be explained predominantly by technological developments (Hermans *et al.*, 2009). Technological determinism is also common among journalists when reflecting on changes in their profession. Several studies show that journalists credit great power to technology. In their minds, many if not most of the changes taking place in contemporary journalism are essentially *technology driven* (Örnerbring, 2010). According to Örnerbring, there are at least two reasons for the persistence of technological determinism as an explanatory factor among journalists with regard to their own work: first, technology is a highly integrated and therefore very tangible part of the everyday working life of journalists; and second, the technological paradigm for explaining change in journalism has deep historical roots.

Despite the insights provided by the initial technological determinism approach, later work dealing with the relationship between journalism and technology has generally rejected technological determinism in favor of more nuanced explanations. Hermans *et al.* (2009) formulated one model that stems from the integrated perspective of social constructivism. Here, the adoption of innovations is seen as a complex interaction process between professional, organizational, and economic factors. With this in mind, the role of social context factors, such as working conditions, workplace organization, and professional values, should be taken into consideration when studying the adoption of technological innovations in news media. Hermans *et al.* studied how the use of Internet applications by journalists working in mainstream news media is influenced by social context factors, such as background characteristics, work-related factors, and the perceived utility of Internet use as part of the daily journalistic routines. They suggest that implementation of technological innovations not only leads to changes in the daily routines of journalists, but also leads to redefining notions about themselves as professionals. Although journalists may be seen as a homogeneous occupational group, they are not expected to use all possibilities provided by the Internet to an equal extent and for the same purposes. Earlier studies indicate that differences occur between journalists in terms of how, and to what extent they use the Internet in their daily work (Garrison, 2000; Bastos, 2000; Hui-Ming, 2001; Niebauer *et al.*, 2000).

Research questions

The purpose of this research is to understand how radio journalists perceive and evaluate the changes occurring in their profession following the advent of the Internet. The main interest is to investigate this perception and evaluation across gender, age, length of work experience, intensity of Internet use, and degree of familiarity with the Internet.

As regards changes in journalist functions and practices, the research question is:

RQ1. Is the Internet considered a source of new opportunities in terms of work enhancement, speed, and opportunity to reach and interact with a wider audience?

Our hypothesis is:

H1) Younger journalists are more receptive in accepting the Internet and should appreciate more the opportunities that it provides for the improvement of their work practices.

As regards to the changes in professional identities, the research question is:

RQ2) Do journalists rate positively the changes wrought by the Internet on their traditional profile, especially on the gatekeeper, investigative, and disseminative functions?

Our hypothesis is:

H2) Most journalists may have difficulty to identify significant changes on their traditional role.

As regards to ethics, the research question is:

RQ3) Are journalists developing a new ethical outlook that mingles traditional and new values?

Our hypotheses are:

H3a) Older journalists may passively resist change, may seek to emphasize traditional roles, and may look at the online world as irreconcilable with traditional values.

H3b) Low and high Internet users, as well as male and female journalists, differ in the evaluation of the credibility of online news.

Sample and methodology

Four of the main Portuguese radio stations newsrooms were chosen: the public radio station RDP and the privately owned TSF, Rádio Renascença and Rádio Clube Português (shortly after the survey, the ending of this radio station was announced). The convenience sample involved 30 radio journalists. The research applies the questionnaire used in the international study made by Fortunati *et al.* (2009). The original questionnaire, elaborated in English, was translated and adapted by the researchers in to Portuguese. Afterwards, it was submitted to participants, through an online platform.

With the purpose of investigating the role of the Internet in newsrooms recognized or foreseen by journalists, we focused our study on some features of the profession: everyday practices, professional identity and ethical issues. All questions use the psychometric Likert scale, in which respondents specify their level of agreement to a statement. In order to compare all questions and calculate value means, we convert all the answers into a scale where 1 indicates a strong negative influence of the Internet to that factor and 5 a strong positive impact. For each question we calculate the 95% confidence interval for the mean and the median.

We also obtained personal data such as gender, age, newspaper, length of work experience, intensity of use and degree of familiarity with the Internet. Group comparisons were explored through analyses of variance and post-hoc analyses. Composite factor scores were computed and submitted to regression models in order to identify the importance of the personal variables.

Participants

Most participants work at the radio station TSF and Rádio Renascença. Male respondents represent 64,1% of the total. The average age is 34 years old and the average salary is 1.393,88 per month. In average, respondents have 12 years of professional experience in journalism, have had 15 hours of professional training in the last year, use the Internet for journalistic reasons since 2001, and spend 5 hours a day using the Internet for professional purposes.

Results

Work enhancement

According to our sample, the answer to our first research question (“Is the Internet considered a source of new opportunities in terms of work enhancement, speed, and opportunity to reach and interact with a wider audience?”) is clear: on the whole, the Internet is considered as having a positive influence on journalism.

		Statistic	
WORK	Mean	3,8370	
	95% Confidence Interval for Mean	Lower Bound	3,5359
		Upper Bound	4,1381
	Median	4,0000	
INTERACT	Mean	3,4410	
	95% Confidence Interval for Mean	Lower Bound	3,2310
		Upper Bound	3,6510
	Median	3,4231	
SPEED	Mean	2,9833	
	95% Confidence Interval for Mean	Lower Bound	2,7769
		Upper Bound	3,1898
	Median	3,0000	

Table 1 - Relevance of Internet on work enhancement, speed and opportunity to interact

However, some degree of ambivalence can be identified concerning the speed factor, which seems to be less relevant for radio journalists in comparison with print journalists. In fact, a previous study (Bastos, Lima & Moutinho, 2010) indicates that Portuguese print journalists ascribe greater importance to the speed factor.

It is possible to confirm the general positive perception of the Internet in their daily practices, in particular when it comes to Web searching for the latest news and for contextual information. But radio journalists still seem to have in great account traditional journalistic routines, such as face to face or telephone conversation with sources. At the same time, they valorize web search engines and information sites when it comes to finding information. News agency feeds seem to be less relevant in this process.

If we analyze closely each question, it is possible to conclude that Portuguese radio journalists consider the Internet very useful above all as a tool keep updated with the latest news, to have access to national governmental documents and to find background material for investigation. Web is seen as less useful to fact checking or to search for basic reference information, such as addresses or phone numbers. Consequently, it comes with no surprise to verify that if they stopped using the Internet, speed in the process of newsgathering would be the most negative effect. It would also be more difficult to live broadcast relevant news and to keep updated with the latest news. In all items regarding this issue, results show that, in general, the effect on journalistic work would be negative or very negative. According to our respondents, the impact would be less negative on matters related to fact checking or the development of investigative journalism projects.

Most radio journalists strongly agree that multimediality is a new important component to present the news and that in the long run online journalism is necessary and progressive for the radio stations. They also

agree that the Internet opened new possibilities for the radio stations defending, at the same time, that the news should be published online as soon as possible regardless the traditional radio station timings. On the other hand, they strongly disagree with the statement according to which radio sites get in the way of traditional radio stations. When asked if citizen journalism and blogging can be considered serious journalism, most journalist's show their disagreement. Furthermore, journalism "do it yourself" is not perceived as being a possible threat to radio journalism.

In terms of perceptions on the influence of the Internet on their practices, respondents strongly agree that the importance of technological skills increased considerably with the Internet and that the online publications allow the development of more attractive news formats. They also admit that there is some information that they could find only through the Internet. Hence, they consider the Web an important information resource. In contrast, they agree less with the statement according to which working for multiple platforms bring more rewards to the journalist work.

In terms of relation with the audience, there is a large consensus among our respondents around the statement according to which the combination of traditional radio and Internet potential benefits the public. In their view, the public demands radio stations to make use of Web potential. The relation with the public is also seen as an important advantage of online journalism. On one hand, respondents disagree with the statement according to which traditional radio is more reliable than online radio but on the other recognize that the public prefers traditional radio when it comes to important issues. They are less clear regarding the statement according to which the public wants news not interaction with journalists, since they point to a middle of the table "do not agree nor disagree".

In order to verify which are the most important variables in predicting variation in work enhancement, speed and opportunity to interact with the public we use the Stepwise method which adds predictor variables to the regression that best correlate with the dependent variable, and subtracts predictor variables that least correlate. This way one generates a regression equation using only the predictor variables that make a significant contribution to the prediction.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3,654	,179		20,397	,000
Training	,551	,265	,406	2,081	,049

Table 2 – Coefficients obtained using Stepwise (Dependent Variable: WORK)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4,721	,393		12,026	,000
Gender	-,778	,172	-,669	-4,515	,000
Age	-,950	,201	-,839	-4,727	,000
net_use	,712	,190	,649	3,750	,001
net_connect	-,078	,036	-,338	-2,164	,043

Table 3 – Coefficients obtained using Stepwise (Dependent Variable: INTERACT)

The number of hours of training is the only variable that explains the perception of the Internet role on the work enhancement, but it is not relevant to explain interaction with the audience. Regarding this last factor, the decisive variables are gender, age, Internet use (it considers the number of years using Internet for professional reasons) and Internet connection (it regards the number of hours using the Internet on daily bases for journalistic purposes). *Ceteris paribus*, older journalists, male, intensive Web users and professionals using Internet more recently tend to evaluate less positively the influence of Internet on interaction with the audience. None of the variables explain the perception of journalists regarding speed. Nevertheless, it is possible to confirm that, similar to the interaction analysis, *ceteris paribus*, younger and female journalists tend to evaluate more positively the role of Internet over speed.

As regards to our first hypothesis, according to which younger journalists are more receptive in accepting the Internet and should appreciate more the opportunities that it provides for the improvement of their work practices, it was confirmed.

Female and younger journalists tend to evaluate more positively the influence of Internet on journalistic work enhancement.

Changes in professional role

As regards to our second research question (“Do journalists rate positively the changes wrought, after the advent of the Internet, on their traditional profile, especially on the gatekeeper, investigative, and disseminative functions?”) it is possible to confirm that respondents rate the changes as generally positive: means and medians are superior to 3 in all matters regarding the traditional profile. Nevertheless, radio journalists seem to evaluate less positively the relevance of the Internet on the gatekeeper role, since the lower bound of the 95% confidence for the mean is less than 3.

		Statistic	Std. Error
GATEKEEPER	Mean	3,1067	,12345
	95% Confidence Interval for Mean	Lower Bound	2,8542
		Upper Bound	3,3591
	Median	3,1000	
INVESTIGATIVE	Mean	3,4444	,09855
	95% Confidence Interval for Mean	Lower Bound	3,2429
		Upper Bound	3,6460
	Median	3,4167	
DISSEMINATION	Mean	3,3222	,10137
	95% Confidence Interval for Mean	Lower Bound	3,1149
		Upper Bound	3,5296
	Median	3,3333	

Table 4 - Relevance of Internet on traditional profile

On the whole, radio journalists ascribe great importance to the influence of the Internet on professional functions such as getting news as fast as possible, keeping contact with the public, broadcasting credible information or signal new tendencies and ideas. In their assessment, Internet has also a positive impact in other functions. For instance, maximizing the audience or assuming responsibilities towards the public reactions to the journalistic work. These perceptions are also identical to those of European journalists studied by Fortunati *et al.* (2009), who see the Internet as the driver of a new role, more visible and public, for the readership. On the other hand, more traditional and historical roles of journalists, such as being democracy watchdogs, providers of in-depth analyses or to be spokespersons for groups, are seen as less significantly influenced by the Internet. The global network permits an enhancement of journalists' communicative and practical performance, but is perceived as having a limited impact on traditional journalists' functions and journalism roles in a democratic society. These kinds of perceptions are similar to those of European journalists (Fortunati *et al.*, 2009) and Portuguese print journalists (Bastos, Lima & Moutinho, 2010).

In terms of perceptions on the influence of the Internet on their roles, respondents consider that radio journalists can enhance their work by delivering it through different platforms. In their view, radio stations must migrate to the Internet if they want to survive. They also strongly agree that online journalism provides journalists with better tools to deliver contextual information. On a more negative side, Internet is perceived as having some responsibility in transforming journalism in a more sedentary or at the desk job. At the same time, respondents do not see a clear relation between the Internet and the raise of journalistic superficiality.

Therefore, these sorts of perceptions introduce a certain degree of ambivalence on the answer to our second hypothesis, according to which most journalists may have difficulty to identify significant changes on their traditional roles, since they tend to emphasize empirical achievements instead of important changes in their professional identity. The hypothesis is confirmed only to a certain degree.

Regarding the discussion of the factors that explain the perceptions of Internet influence on the traditional profile, we calculate a variable collecting the mean of answers given by each respondent. Using the same stepwise

method as before, we conclude that age, gender, income and intensive use of Internet statistically explains changes wrought on traditional profile of journalists.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5,886	,563		10,453	,000
Age	-1,295	,250	-1,025	-5,176	,000
Gender	-,781	,202	-,601	-3,873	,001
Income	,001	,000	,574	3,141	,005
net_connect_2	-,557	,213	-,414	-2,619	,017

Table 5 - Coefficients obtained using Stepwise (Dependent Variable: PROFILE)

The signs of coefficients obtained by the stepwise method in the regressions indicate that *ceteris paribus*, younger, female, less intensive users and journalists with more income are more enthusiastic regarding the Internet influence on traditional profile. It is possible to observe in the next figures the observed differences by gender and age of the Internet influence on some traditional roles of journalism.

Professional ethics

The answer to our third research question, “Are journalists developing a new ethical outlook that mingles traditional and new values?”, is ambivalent: all central measures are close to 3, but we observe a great dispersion of values, indicating that journalists have a non-consensual perception on the matter.

		Statistic	Std. Error
ETHICS	Mean	3,1028	,08967
	95% Confidence Interval for Mean		
	Lower Bound	2,9194	
	Upper Bound	3,2862	
	Median	3,0833	

Table 6 - Relevance of Internet on Ethics

Nevertheless, most respondents strongly agree that the Internet allows the use of a higher diversity of news sources and is a useful tool to double check information. Again, the instrumental side of the Internet, rather than the professional one, is clearly stressed here. At the same time, they recognize that the Web increases the volume of information hard to confirm and to distinguish in terms of credibility. Respondents do not consider

Internet a threat to the quality of journalism but are not clearly convinced that the interactive side of it can help turn journalism into a more credible profession in the eyes of the public. To some extent, they also agree that the online journalism sacrificed accuracy because of the speed required by continuous deadlines.

In respect to our hypothesis H3a, according to which older journalists may passively resist change, may seek to emphasize traditional roles, and may look at the online world as irreconcilable with traditional values, it is not confirmed. By the contrary, it is somehow surprising to find out that older journalists have a more positive perception of the Internet regarding this matter: the coefficients obtained by the stepwise method in the regressions indicate that, *ceteris paribus*, journalists with more experience and more hours of training are more enthusiastic on the positive influence of Internet on ethics. Although ANOVA test indicates, for the age variable, that the hypothesis of group means being equal is not rejected, it is possible to conclude that older journalists are globally more optimistic about the relationship between Internet and ethics.

As regards to our hypothesis H3b, according to which low and high Internet users, as well as male and female journalists differ in the evaluation of the credibility of online news, it is confirmed: ANOVA testing reveals that the division of journalists according to the number of years using the Internet is relevant to explain differences and reveals that perceptions of women are different from men. In fact, as we can observe in the boxplot presented in figure 5, males have more fear of the possible negative impact of Internet on ethics.

In sum, journalists with more experience on the Internet do not fear possible negative impacts on the ethics dimension and do not seem to passively resist change. Again, these results are identical to those found by Bastos, Lima & Moutinho.

Conclusion

This research confirms, at a Portuguese level, the main results which have emerged both in the study by Fortunati *et al.* (2009) and by Bastos, Lima & Moutinho (2010) concerning the influence of the Internet on journalism since it also allows the identification of two main ambivalent perceptions by journalists. On the one hand, Portuguese radio journalists positively assess the impact of the Internet on major journalistic practices. Internet is seen as an optimizer of journalistic routines that gives them opportunity to enhance their research capabilities and communicative performance. On the other hand, Internet is perceived as having a limited influence on the traditional role of journalism in the context of a democratic society. Portuguese radio journalists also tend to perceive the Internet above all as a useful tool that serves practical needs and purposes (speed, diffusion, information gathering, interaction) and not so much an instrument that enhances journalism traditional roles (watchdog, gatekeeper, provider of analysis and interpretation, to influence upon political agenda and public debate).

On the whole, Portuguese radio journalists underline positive consequences of the Internet on journalism, in particular when it comes to Web searching for the latest news and for contextual information. They consider the global network very useful above all as a tool keep updated with the latest news, to have access to national governmental documents and to find background material for investigation. At the same time, they ascribe great importance to the influence of the Internet on professional functions such as getting news as fast as possible, keeping contact with the public, broadcasting credible information or signal new tendencies and ideas. In a more negative perspective, the global network is perceived as having some responsibility in transforming journalism in a more sedentary or at the desk job. The Web increases the volume of information hard to confirm and to distinguish. Their assessment on the impact of online journalism is also positive in general. Nevertheless, online journalism is considered to have sacrificed accuracy because of the continuous deadlines pressure.

Furthermore, this research confirms that radio journalists' perceptions depend on a series of variables, particularly age and gender, since female and younger journalists tend to evaluate more positively the influence of Internet on work enhancement and older journalist are more optimistic about the relationship between Internet

and ethics. Low and high Internet users, as well as male and female journalists, differ in the evaluation of the credibility of online news.

At this point, some caveats should be stressed regarding this study. Our respondents worked for the four most important news radio stations. Thus, it is possible that the views expressed may not correspond entirely to the universe of Portuguese radio journalists. Further research, with enlarged and randomized samples, could expand our results taking in consideration other kind of radio stations and newsrooms. Although the sample of our study can be considered representative, the number of observations should be higher if one wants to include more parameters in the study.

The research, however, adds new perspectives in Portuguese journalism studies concerning the relation between radio journalists and the Internet, a field scarcely studied in Portugal. It should also be taken in consideration that it makes part of a broader and deeper study on the influence of the Internet on Portuguese news media in general.

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