



# Toward a taxonomy of newspaper information quality: An experimental model and test applied to Venezuela dimensions found in information quality

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## Abstract

The quality of information from communication media is a topic that has been dealt with by various theorists through the analysis of the final products of information. This research work offers an analysis model of the quality of information of printed news media by the use of three indexes of categories and structured dimensions that will allow for the assessment and evaluation of the quality of information from the media, and the identification of the incidence of political-economic conditions of the journalistic environment's macro-environment. For this, an experimental test of two Venezuelan media outlets was performed. Their use allowed us to conclude that political polarization and discourse of social confrontation, as well as economic factors such as inflation and pay scales had a proportionally direct effect on the quality of information products.

## Keywords

information quality, mass media, newspaper, press, print media

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Communication media play a key role in the creation and institutionalization of realities (Gieber, 1964; Searle, 1997; Watzlawick, 1976: 173), through their portrayal of the public discourse on social discussions, while serving as supervisors and controllers of public behavior, preventing abuses of power. In this sense, they are fundamental for maintaining democracy and the making of decisions by their audiences (Shoemaker, 2006; Shoemaker and Cohen, 2006). Even with the current communication ecosystem, which is marked by the exponential growth of digital information platforms, printed media in Latin America has been diffusing via the Internet to a lesser degree when compared to their American and European counterparts. However, the traditional methods of news production are imitated by this new format, so it is evident that the information production processes of the written press are still relevant, even when the experts have predicted the death of the newspaper if the dynamics of adaptation are not successful (Barnhurst, 2013).

Independently of the format, quality of information is key not only for the reaching of the media's objectives but also for its own subsistence in a scenario where the increase in competition and the trans-nationalization of the culture industry have become more evident. However, defining media quality is not a simple task, as it is itself an imprecise and ambiguous concept. Picard (2004: 54–66) argues that quality of information exists when the content and the number of self-produced information is greater than the information generated by external entities and greater than advertising and leisure content as well. This is taken into consideration that the self-produced information has to follow an information-gathering method such as counting with varied and contrasting sources of information, as well as the organization's technical efficiency, which leads to the products being organized and understandable.

A 3-year study on public opinion by the American Society of Newspaper Editors (ASNE) (1998) concluded that media outlets had lost credibility and had become dissociated from their audiences. This was due to the appearance of factual and grammatical errors in the final product; the audience perceived that the ideological perspective of the reporter greatly influenced the treatment of information, at the same time that there was a tendency for inflating stories that had a sensationalist angle due to its appealing character. These criticisms coincided with those from another study performed by the Pew Research Center (1999), where 40 percent of those polled said that information products were full of factual errors or journalistic malpractice, while 69 percent of the information workers thought that the line between information and opinion had blurred. Other studies along the same lines (Fortunati et al., 2009; Singer, 2003, 2005; Wyss, 2000) also revealed that the media had gradually lost quality.

Journalistic quality (Shultz, 2000) mainly depends on three conditions: availability of adequate resources, a political and legal system that protects and guarantees the exercise of liberty of communication media, and the adhesion to professional standards by the journalist. In addition, other essential aspects are needed, such as the media diversity and the diversity of represented ideologies, as well as objectivity, both of which are clichés that are inherently linked to values found in a democratic society. This is the reason why Shultz (2000) argues that information quality not only obeys internal conditions found in newsrooms or within the medium itself but also conditions from the context where it is found. When legal guarantees or political will do not exist for the exercising of freedom

of the press or basic expression itself, it is impossible to tend to the concept of information quality.

This line of thought is also shared by McQuail (1992: 23–66), who defines quality of information from the perspective of public interest. Therefore, the criteria used for his evaluation come from the Western values of freedom, equality, and order. The previously cited authors could not conceive that high-quality information existed in countries that had a democratic deficit, limitations placed on the exercise of liberties that are associated to expression, information, and access to official sources, as well as in those countries where adequate resources – economic, human, or technological – are not available for journalistic work. Therefore, the following questions arise: ‘What are the dimensions and their indicators that can be used to evaluate the quality of information?’ ‘How can the endogenous world of information production itself be evaluated?’ and ‘Is it possible to find good-quality information in media from countries that have a low indices of freedom of the press?’

### **Evaluation models: The state of the affairs**

One of the main limitations found when establishing evaluation criteria for measuring the quality of information of the media is precisely that the term ‘quality’ encompasses various dimensions where the characteristics of an object – in this case an information product – are related to certain standards which are themselves linked to norms and values (Rosengren et al., 1996). Therefore, quality is an indefinable term from a logical perspective, as it is defined through the subjective perception of, and interpretation by, the user (Leggatt, 1996).

Criteria that are agreed upon by the journalists, academics, and the general audience are very difficult to create, if not impossible (Urban and Schweiger, 2014; Wallisch, 1995). However, from the academic perspective, different structural efforts have been made for cataloguing the regulatory dimensions of informational quality, and this is especially true for research from Germany (Arnold, 2009; Poettker, 2000; Schatz and Schulz, 1992). Urban and Schweiger (2014: 823) have unified these catalogues into six basic dimensions of information quality: (1) diversity – of points of view and sources; (2) relevance – in terms of the usefulness of the information for the making of decisions; (3) accuracy – referred to as the exactness of information with respect to the events; (4) understandability – based on being understandable by the audiences; (5) impartiality – to guarantee a neutral and balanced informational coverage; and (6) ethics – respect for fundamental rights of the people and the maintenance of ethical attitudes.

Other authors such as Rosengren (1979: 31–45) have arrived at the conclusion that the most adequate method for verifying the existence of information quality is to contrast the journalistic discourse with statistical data or independent documents. This method, however, was limited to the understanding of quality in terms of truthfulness or contrast, but did not consider the events that did not come from or mirror document-based sources. Two decades prior, Lang and Lang (1953: 2–12) assured that the formula needed for measuring the truthfulness and objectivity of a journalistic narrative should be created by directly contrasting the published information with direct witnesses of an event, and this method has also been recommended by Halloran et al. (1970) and Meyer (1987). This is

an evaluative process that due to its complexity of execution, its materialization is impossible for representative samples.

A third group of authors, among which we find Martin (2008), Bird (2010), Madianou (2010), and Costera-Meijer (2012), take into consideration the fact that excellence in journalistic activity is currently being pitted against the changing of information consumption habits, a tendency where leisure/entertainment content prevails over any evidence of quality. In this sense, Costera-Meijer (2012) proposed a method for evaluating journalism through the experiences of the user through common patterns such as participation, an interactive component, representation, a semantic component, and presentation, an aesthetic component.

Research by van der Wurff and Schönbach (2011) aimed at cataloguing quantitative dimensions and indicators of information quality as a function of codes of conduct and transparency. Through a Delphi study with 60 experts, they evidenced the following (as a function of its importance on a 5-point scale): carefully checking facts (4.7), separating editorial from commercial content (4.6), full disclosure of sources (4.5), working as a journalist using one's real name (4.4), no manipulation of images or statements (4.4), hearing both sides (4.4), understandable for the audience (4.2), transparency: showing how news coverage is produced (4.1), separating facts from opinions (4.1), objectivity (3.9), protection of privacy (3.8), sorting news in terms of their importance (3.7), separating information from entertainment (3.5), only news with serious news value (3.0), publish quickly (2.9), responding to audience demands (2.4), and entertaining the audience (2.2).

This same study analyzed experts' opinions according to what should be the ethical code in the exercising of journalism as a function of the perception of quality of the media and their information. In this way – also using a 5-point scale – an ideal code makes journalists accountable to their audience (4.0), the promise to observe a code increases a medium's reputation (3.9), and an ideal code makes journalistic practices transparent (3.8).

In 1995 and from then on, a research group from the University of Chile, led by Silvia Pellegrini and Maria Constanza Mujica (2006: 14–15), started to apply a model of evaluation of the journalistic quality of diverse countries in South America, patenting a formula named Valor Agregado Periodístico (Aggregated Journalistic Value, VAP in Spanish). It was based on the implementation of the concepts by Hagen (1995) and Hagen and Beren (1997: 158–178) on equality, exactitude, relevance, and fairness, which were later used in content analysis of information (Alessandri et al., 2001: 114–115; Pellegrini and Mujica, 2006: 14–15). The VAP model is very popular among Latin American academics and has been used to study communication media exclusively through their content, taking into account two stages of the journalistic process: the selection of information and the creation of the information unit. Each of them with their respective indicators such as the urgency of the news, origin of the information, types of sources, possibility of verification, variety of points of view, visual contribution, and among others.

The Spanish researchers De-Pablos and Mateos (2004: 341–365), on the other hand, developed a set of quality tags for printed media, which they believed should be made freely accessible to the audience. This set took into account two aspects of the internal

context of information production (the media as a business and the media as a place of work), as well as the information product (content).

The first aspect was related to the business aspects of the medium, and De-Pablos and Mateos (2004: 359) explained that the shareholder's interests, the state of the media's finances, and the distribution and sales data should be made freely available to the public. These data would allow the reader to understand the economic and political interests and the editorial slant of the medium. The second aspect, in agreement with the work aspect, states that the worker's conditions should be measured as a function of their number, productivity, professional qualifications, degree of specialization in the designated news source, ethical and style guidelines, degree of work conflict, salary, shifts, and types of contract, as well as the workforce's work benefits. Last, the quality tag model, as well as the VAP model (Pellegrini, 2006), reviews the content as a function of the quality of the final product, evaluating aspects such as variety of sources, frequency of use of corporate sources, use of document-based databases, percent of their self-created subject matter, percent of investigative journalism and degree of linguistic corrections.

### **Evaluation of the quality of information: Dimensions constructed**

After the literature review and the analysis of the diverse methods used for the evaluation of information quality found in the above-mentioned research works, a few preliminary questions were asked. These questions were used to create an integrated model that could eclectically combine the most important aspects of the existing formulas and also be adapted to the process of mediamorphosis as well as to the characteristics of the current communication ecosystem. First, can the quality of information be evaluated by only taking into consideration the content of a medium? Undoubtedly, the reader has direct access to the final product, and the quality of the content is associated to the quality of information. However, not taking into account the production process or even the pre-information aspects can result in a partial view of a complex process, as the interests of the media, together with the education, social, and work aspects of the information workers directly affect the result. This is the case even when other aspects such as the importance of the coverage, the origin of the information, the types and varieties of the sources, and even clear explanations are also important for guaranteeing high-quality information.

Second, if content analysis is conducted on a medium as a function of the characteristics mentioned above, another key issue appears: can products that come from a context of democratic deficit or where there are no legal or political conditions or resources for the exercising of the journalistic activity have good-quality information? According to the review on the state of affairs, it is clear that information quality is judged in the context of Western liberties and values (McQuail, 1992: 23–66; Shultz, 2000). It is even judged when the variety of sources and the diversity of points of view (Alessandri et al., 2001: 114–115; Pellegrini and Mujica, 2006: 14–15), as well as the media outlet's composition of shareholder interests (De-Pablos and Mateos, 2004: 359), are considered cliché. These facts give us clues that high-quality information can only exist in democratic regimes where freedom is respected.

Starting from the preceding observations, we can begin to construct a set of integrated dimensions, following the academic contributions cited (Pellegrini, 2006; Wurff & Schönbach) and using the three groups or indices constructed by De-Pablos and Mateos (2004: 359) as a starting point. These are business index, work/labor index, and content index. They will be used for qualitatively and quantitatively evaluating the media's quality of information and will allow us to perform structured comparisons. They will also be useful for the analysis and identification of indicators of compliance.

For each of these indices, a set of related dimensions and indicators were established with the aim of subjecting them to a Delphi study by 8 experts: 4 from the field of academic journalism and the other 4 from the professional world of journalism. The purpose for applying this method was to accept or reject dimensions and indicators found in each of the proposed indices, as well as to score each one of them. To choose the academic experts, we took into account only the heads of university departments of printed journalism, while for the professional journalism experts only newspaper editors having more than 20 years of professional experience were chosen, guaranteeing a panel of experts having wide experience and knowledge in the field of journalism.

Reguant-Álvarez and Torrado-Fonseca (2016) defines the Delphi method as a technical collection of information based on the anonymous advice of experts on a specific area, with the aim of obtaining the most reliable consensus opinion from the group consulted. These experts were individually subjected to a series of questionnaires that were interspersed with feedbacks from conclusions expressed by the group, so that the successive returns represented the group's opinion (Linstone and Turoff, 2002). Although this method could be used to obtain statistically representative results, due to the low number of participants (8), the use of the test in the research study was not destined to produce statistically representative results.

In this sense, the Delphi group size does not depend on statistical power, but rather on group dynamics for arriving at a consensus among experts. Thus, although the literature recommends groups having a maximum of 18 experts for a Delphi panel (Okoli and Pawlowski, 2004: 19), in our case, having experts from a specific professional topic but coming from different social/professional stratifications such as university academics and journalists, the literature recommends a small, 5–10 member panel (Clayton, 2006: 378; Gordon, 1994).

The advantages of applying a methodological strategy are based on this strategy allowing for the construction of a model following consensus from the academic and professional points of view, accepting and discarding dimensions and indicators, granting scores to each of these, and providing their expert opinion on the applicability of a model after three rounds. The main disadvantage of using these type of qualitative methods is that as they are not statistically representative studies, we cannot infer results or verify tendencies of acceptance of all the indices, dimension, or indicators of information quality.

## **Procedure**

Our study was divided into three online pilot phases. The first phase included a poll containing a succinct explanation of the three indices structured. With the aim of validating

the model presented through its empirical-analytical application, a questionnaire was created that was used in the evaluation of the dimensions identified above. The qualitative investigation was performed through an open-ended questionnaire that allowed for delving into opinions to obtain more information of the analyzed phenomenon (Sampieri et al., 1998).

Starting from this, the experts had to weigh the indices' relevance, or on the other hand, propose the integration of some indices or addition of others. In this first phase, the experts agreed that the three indices presented by De-Pablos and Mateos (2004: 359) were ideal for the identification of the internal stages of the productive process.

On the second and third phases of the Delphi method, the areas, dimensions, and indicators were subjected to evaluation by the experts, who did not contribute substantial changes, but instead provided formal specifications of the proposed indicators. The observations provided by the expert evaluators contributed the consistency needed for the instrument's reliability. According to the types of qualitative reliability discussed by Kirk and Miller (1986), this case was defined as having synchronous reliability, as it entailed the 'similarity of the expert's observations within the same period of time. It rarely meant identical observations, but instead entailed the fact that they were consistent with respect to relevant aspects'. Also, the index of agreement was calculated with Cohen's Kappa coefficient. In this case, the 4 experts from academia and their peers from the professional sector contrasted the 19 answers given in the questionnaire, which used a Likert scale.

According to the peer reviews of the experts' observations, the average consensus was 80 percent with respect to the dimensions and indicators of the model. Likewise, the Kappa coefficient showed an acceptable average agreement ( $k=0.3018$ ) with respect to the measurement of the instrument by coincidence, evidencing the existence of inter-rater reliability.

For the quantification of the integral quality of the productive process, the experts opted to grant each index equal scores. These were 33 points for the business and labor indices each, and 34 points for the content index, as they considered that these three areas were equally important in the creation of a framework for information quality evaluation.

Subsequently, in a second round of polling, we proceeded to construct the dimensions that would allow us to classify the specific conditions of each index. The business index was composed of six areas, each with an equal score of 5.5 points. These areas were legal status, the media and board of directors' shareholder ties, transparency of the published information, awards and perks received by the medium or board of directors, and internal regulations and unjustified layoffs/censorship. The labor index was composed of five areas, with an equal value of 6.6 points each. These areas were academic education/training of the staff, payscale and work benefits, work stability, and type of contract. Last, the content index, which evaluates the final product, was created with 11 areas. These areas were assigned with relative values as a function of their importance for the evaluation of quality. These areas were feedback and monitoring (0.80), percent of self-obtained information (4), sources (8.8), type of content (6.4), geographical diversity of the information (2), opinion (3.5), titling (2), quality of presentation (2), use of statistics (2.5), and photographs (2).

Based on the results from the construction of the model, a third round of Delphi was conducted. This last round included a contribution by the experts on the indicators of compliance from each of the areas structured and a total review of the model. A few questions with answers using a Likert scale were given. These questions evaluated the degree of satisfaction with the final model. The results showed that six of the experts consulted 'strongly agreed', one 'agreed', and one 'partially disagreed'.

It is important to highlight that although a score was given to each index, area, dimension, and indicators in this taxonomy of the integrative model, information quality is still based on perception – and therefore it is subjective – just as it was discussed in the theoretical framework section of the present investigation. The experts, although having ideological and pragmatical divergences on the subject, presented their opinions, but the model did not attempt to measure the information quality exactly in any case.

## Testing the model

Two Venezuelan general-interest newspapers, of national coverage and in tabloid format, were used to answer the research questions that were posited as the starting points of this study. The study covered topics pertaining to the evaluation of aspects related to the quality of the information product, such as the media as a business, and the social and labor conditions of media workers. The study also tried to answer how practices such as democratic deficit, the absence of freedoms, and the lack of economic, technical, and human resources affected information quality. The first newspaper was privately owned Private Printed Media (MIPr), and the second was state-owned Public Printed Media (MIPu). These types of ownership were chosen with the purpose of comparing the quality of the information according to type of owners.

The evaluation of the communication media in Venezuela, using tool created, would also allow us to answer if high-quality information elements could exist in countries with democratic deficit as well as a deficit in the liberties needed for the exercising of journalism.

The study was conducted in two ways. The first was related to the evaluation of the business and social-labor indices and was done using a poll what was sent directly to the media source's corporate decision-makers. Their responses were validated by combining them with the average response of the newspaper worker. In both cases (MIPr and MIPu), one representative of the media business was polled, and these answers had a weight of 25 percent from the total, while the percentage weighed for the answers from the reporters had a weight of 75 percent. The variation of the answer's weight was chosen in order to more exactly rate the truthfulness of the answers, taking into consideration that in both of the indices chosen, the information given by both workers and the media representatives should be rated, but not in the same scale. The weight of the responses 25 percent/75 percent come from the  $n$  in relation to the proportionality of the coefficients  $25/50=0.5$  and  $75/50=1.5$ . These weighing factors allowed us to assume that the validity of the answers from the media representative will be  $0.5/2$  as opposed to  $1.5$  that comes from the average calculated from the answers received from the workers polled. These different weights stemmed from the discussion on the data-gathering instrument in the second round of the Delphi poll, where the experts gave their consensus on the use of these weights.



**Table 1.** Sampling units.

	Week	Days
May	First: from the 1st to the 8th	1, 5, 7
June	Second: from the 9th to the 15th	10, 12, 14
July	Third: from the 14th to the 20th	14, 15, 16
August	Fourth: from the 25th to the 31st	29, 30, 31

The first – selection of days was done with respect to the odd days of the first week, the second – by choosing the even days of the second week, the third – taking the first three consecutive days of the week, and for the fourth – the last three editions of the week.

In the second, related to the content index, a selection of a sample of diverse publishing dates was made with the constructed week model by Stempel (1989: 125). This method assures a more efficient sampling as compared to a random sampling in this type of study (Riffe et al., 1993: 133–139). It allows for the selection of a random publishing sample of media without distortions that can come from a reduced informational moment, at the same time conserving the specificities of a cycle that makes up the days of the week. This was done with the understanding that many media outlets change their content depending on their opinion maker's informational agenda and the typology (Romero-Rodríguez, 2014: 216–217).

The sampling units for performing the study of the content index was composed of 12 issues from each medium (MIPr and MIPu), corresponding to the periods between May and August of 2014. Therefore, when these 4 months were used as the basis of journalistic production under the constructed week method, the result was a study of three issues per month, as shown in Table 1.

After copies of the issues chosen through the application of the constructed week model were obtained, each sample unit (issue) was analyzed using the quantification of centimeters (cm × col), as well as the critical reading and analysis of each issue in order to correlate the content with the areas, dimensions, and indicators of the content index.

## The media as a business

After the application of the questionnaires, the privately owned printed medium (MIPr) obtained a total of 14.01 out of 33 points on their business index, after scoring the areas of economic and political interests of the board of directors and non-contested awards and perks with 0 points. The areas of internal regulations and transparency of the medium obtained the low score of 1.65 and 1.36, respectively, from a maximum possible value of 5.5 each. In the case of the legal status of the medium and unjustified layoffs and censorship, MIPr received a maximum score of 5.5 after verifying that it was a communication medium that was not dependent on multimedia conglomerates, and that there were no unjustified layoffs or censorship of its workers.

As for the state-owned (public) printed media (MIPu), its business index scored 6.91 out of the maximum 33 points, receiving 0 points in the areas of economic and political links of the board of directors, non-contested awards and perks and unjustified layoffs and censorship. Meanwhile, the scores of items such as internal regulations (0.55/5.5) or

**Table 2.** Business index applied to MIPr and MIPu.

	MIPr assessment	Score	MIPu assessment	Score
Legal status	Simple, private medium of communication with advertisements	5.5	Communication medium without advertisement	5
Economic and/or political interests	Ties of political interests with the political opposition	0	Direct economic and publishing dependence on the government	0
Transparency	The composition of the shareholders, accounts, or distribution data is not available. The names of the members of the editorial board are available	1.36	The composition of the shareholders, accounts, or distribution data is not available. The names of the members of the editorial board are available	1.36
Non-contested for awards and perks	Non-contested for awards and perks have been accepted	0	Non-contested for awards and perks have been accepted	0
Regulations	A code of ethics or a law for replies or corrections does not exist. There are disciplinary procedures; manuals on organization and function exist, as well as training plans for the workers	1.65	There are no internal norms or operational or function manuals. There are no training plans for the workers	0
Layoffs and censorship	Unjustified layoffs or censorship were not found	5.5	The medium has been accused of layoffs and censorship	0
Total		14.01		6.91

MIPr: Private Printed Media; MIPu: Public Printed Media.

The score comes from the sum of the indicators and the dimensions per area as explained in the study design section. The maximum score for each area was 5.5.

transparency (1.36/5.5) resulted in low scores for not complying with the formulated indicators of information quality. The legal status of the medium obtained 5 points out of a possible 5.5, after concluding that although the medium did not directly depend on multimedia conglomerates or international enterprises, it was integrated into a media platform that directly depended on the Venezuelan government (Table 2).

After evaluating the media and their business characteristics, we can see that the communication media industry in Venezuela is polarized. A neutral communication media do not exist. On the contrary, a communication battle is being fought between the private media, which has close ties to the Venezuelan opposition, and MIPu, which are conglomerated into a multimedia group named Sistema Bolivariano de Informacion y Comunicacion (Bolivarian System of Information and Communication, SIBICI) which wholly depends on the Ministry of Communication and Information. This situation results in the

**Table 3.** Social and labor index applied to MIPr and MIPu.

	MIPr assessment	Score	MIPu assessment	Score
Training	Training weighted average of the staff: Journalism degree or related. About 8 percent of the staff has a post-graduate degree	3.23	Training weighted average of the staff: Journalism degree or related	3.07
Pay scale and benefits	The average salary was two times the minimum. There are no health benefits, training activities or awards for productivity	2.41	The average salary was three times the minimum. There are health benefits, training activities or awards for productivity	4.52
Posts	Interns (35.29%), junior reporters (35.29%), mid-level reporters (5.88%), and senior reporters (23.52%)	2	Interns (17.85%), junior reporters (25%), mid-level reporters (32.14%), and senior reporters (25%)	5.25
Work stability (in years of service)	Journalistic staff (+8), columnists (+3), contributors (+10)	4.90	Journalistic staff (+10), columnists (+10), contributors (+10)	4
Type of contract	Full-time (64%)	3.30	Full-time (100%)	0
Total		15.84		23.44

MIPr: Private Printed Media; MIPu: Public Printed Media.

The score comes from the sum of the indicators and the dimensions per area as explained in the study design section. The maximum score for each area was 6.6.

low scoring of areas such as the economic and political interests of the board of directors, non-contested awards and perks and the transparency of information, while in the case of the MIPu, the areas of unjustified layoffs and censorship obtained the lowest scores.

## The media as employers

The social and labor aspects of the information workers were also considered essential when evaluating the quality of information with this method. Areas such as training/education, pay and work benefits, the type/number of posts (senior, middle, junior, interns), as well as work stability and types of contract were considered. In the case of the MIPr, the sum total after the application of the model was 15.84/33, while the sum total for the MIPu was higher at 23.44/33 (Table 3).

When examining the results, we should mention that the minimum Venezuelan salary was fixed at 4251.78 Bolivars (Bs), equivalent to USD85.41, in the open exchange market (49.98 Bs/USD1), while the basic food basket was placed at 17,572.50 Bs (USD 351.59), 4.13 times the minimum salary. The average MIPr reporter salary, then, was 8530 Bs (USD170.82), almost half the basic food basket. These facts affect the analysis of the 'type of contract' (70.58% interns and junior reporters) with full-time contracts adding up to 64 percent of the payroll.

As for the MIPu results, the average salary was three times the minimum salary (USD256.23), with a deficit of USD95.36 with respect to the basic food basket. Also, the publicly owned media had work benefits that included private healthcare, training activities, and bonuses for productivity, making it a better work option. This situation was decisive in giving the areas of 'posts' and 'types of contract' a higher score.

## **Assessment of the information product**

Just as it was explained in the study design section, a total of 12 issues from each medium analyzed were reviewed. These issues were distributed among 4 months (May–August, 2014), in agreement with the constructed week model (Stempel, 1989: 125), as shown on Table 1. The content analysis evaluated 10 areas and 30 dimensions, each with different indicators and scores. After the application of this model, the total scored by the MIPr was 12.33/34. This low score was due to the few instances of feedback, reader rights and citizen participation, excess use of international news agencies, few self-obtained photographs, few references to primary (direct) sources, insufficient documentation and contrasting of information, lack of a clear identification of corporate sources, information that were centered only on events in the capital, little equilibrated opinions, and mistakes in the statistical information.

The MIPu, on the other hand, obtained a score of 16.85/34, but, as MIPr, there was an absence of feedback processes, excessive use of international news agencies, little contrasting of information, information that was mainly centered on the capital, and little information equilibrium. However, they did use their own photographs; there were a large percentage of primary (direct) sources, a greater amount of documentation, a greater percentage of different types of information per issue, and a better score on the statistical information.

On Table 4, we can see that both media outlets lose product quality due to their excessive use of international news agencies, which lead to the creation of the ventriloquist effect (Arráez, 1998). This means that regardless of the variety of media, international information is reviewed through the single perspective of the international agencies, without the possibility of verification or contrasting of opinions.

On the subject of the sources, MIPu set itself apart from its private counterpart with a score of 3.75 points. Far from being a specific aspect of the medium, the type of sources used had close ties to the medium's legal (public) status, as the private media have restricted or limited access to official sources either in the form documents or live sources. This denotes the existence of a close tie between the pre-communication aspects of the public media and the quality of information as a function of its interrelation with the type of regime and the liberties of the macro-environment. As for the area of content, we could verify that the genre of 'information' prevailed over other types of genre in both types of media. However, an indicator that caught our attention was the almost complete absence of investigative journalism, which is closely linked to the aspect of freedom of exercising journalism.

Another aspect that should be noted was the absence of equilibrated opinion, which is closely related to what was mentioned in the index of freedom of the press from the Reporters Without Borders report (2014), which cited Venezuela as a country where polarization was an important part of the confrontations themselves (Reporters Without

**Table 4.** Evaluation and valuation of the contents.

	MIPr assessment	Score	MIPu assessment	Score
Feedback and monitoring	Comment section on the webpage without intervention from the administrator	0.70	Comment section on the webpage without intervention from the administrator	0.70
Self-obtained information	News agency for national information coverage (<10%), news agency for international information coverage (>80%), own photographs (<29%), corporate sources (<10%)	2.41	News agency for national information coverage (<10%), news agency for international information coverage (>70%), corporate sources (<10%)	3.40
Sources	Direct sources (<39%), sufficient sources (2/5), information contrasting (<10%), identified sources (>80%), not all the photographs or information are credited	2.25	Direct sources (<60%), sufficient sources (2/5), information contrasting (<10%), identified sources (>80%), all the photographs and information are credited	3.75
Content	Informative genre (47.48%), investigative journalism (0.88%), opinion genres (35.27%), educational content (4.29%), leisure content (3.84%), content of social relevance (0.38%), community information (0%), pseudo-information (7.80%)	2	Informative genre (87.43%), investigative journalism (0%), opinion genres (9.68%), educational content (1.92%), leisure content (0.16%), content of social relevance (0%), community information (0%), pseudo-information (0.44%)	3.20
Geographic diversity	Completely focused on the capital	0	Average of news from geographical sub-areas (>10%)	0.20
Opinion	Non-existent ideological equilibrium. The selection process of columnists and contributors depend on the board of directors	0	Non-existent ideological equilibrium. The selection process of columnists and contributors depend on the board of directors	0
Titling	Each reporter titles the information. Front page information is determined by the head of information	0.80	The editor-in-chief titles the information and decides what is placed on the front page	1
Quality of presentation	Presence of the elements in the news (VWh). Average linguistic correction (3/5)	1.50	Presence of the elements in the news (VWh). Good linguistic correction (4/5)	1.75
Statistics	Missing statistical indicators	1.08	The sample error of the mean is not present	1.35
Photography	Coherence of the images with the events. The medium does not publish photographs that do not come from agencies	1.50	Coherence of the images with the events. The medium does not publish photographs that do not come from agencies	1.50
Total		12.33		16.85

MIPr: Private Printed Media; MIPu: Public Printed Media.

The maximum score per area are feedback (0.80), self-obtained information (4), sources (8.8), content (6.4), geographical diversity (2), opinion (3.5), titling (2), quality of presentation (2), statistics (2.5) and photographs (2), with an index total of 34 points.

Borders, 2014). This polarization has had a direct effect on communication media, which have acted as political weapons in this confrontation. Therefore, a variety of ideological allure does not exist, and this is linked to the fact that contributors and columnists, usually representatives of political parties, are not rotated, but maintain their posts for a period of more than 8 years, as can be seen in Table 3.

## **Comparison of the results**

The model of assessment and evaluation of the quality of information of the media, due to its quantitative–qualitative methodological focus, allows for the comparative analysis between diverse printed media, either having a specific or international context. In addition, it allows us to find the averages between two or more media types within the same context, which could give us an idea of the quality of information of the media in a specific space.

After completing the evaluation and analysis of each index, its areas, dimensions, and indicators by using two different data-gathering techniques, the polls, and content analysis, we proceed to total and compare the results of the analysis per item (Table 5).

In the comparison of the results from the business index, we found that the MIPu obtained a score of 6.91/33, which was mainly due to its dependence on a governmental organism (Ministry of Information and Communication), where the boundaries between government and media industry were lost. This was due to the non-existence of the equal participation of diverse political factors, professionals, and intellectuals as part of the editorial council, which would have allowed for a certain autonomy and independence from the official slants. This situation was also linked to the fact that there was censorship and unjustified layoffs of media workers who did not operate within the editorial line, as well as a lack of a set of regulations that should have clearly stated the parameters and deontological definitions of journalistic work. The MIPr, on the other hand, obtained 14.01/33 points, mainly due to the close relationship of its Directors with the opposition's political activities and parties, as well as the acceptance of non-contested awards and perks, which tended to place the medium and its information lines in a situation of moral debt.

As for the social-labor index, MIPu obtained a total score of 23.44/33, 7.60 points above that obtained by the MIPr (15.84/33). This was mainly due to the journalistic personnel who worked in public media being defined as state employees, which meant greater pay benefits and other benefits related to their posts. This affected the type of posts, as it was more attractive for middle and senior reporters as compared to their private counterparts. However, for the MIPr, the financing of its activity came only from advertisers and private institution contributors, which had negative repercussions on the salaries and benefits of its personnel. This situation made logical that in the aspects of training and the types of posts, we found more interns or junior reporters in MIPr than in the MIPu, but this also affected the time of dedication (full-time) to the work, as the salary offered in the MIPr was poor, as previously explained.

The content index showed a difference of 4.52 points between the results gathered for MIPu (16.85/34) and MIPr (12.33/34), with the largest differences found in the areas of self-obtained information and sources. In the case of self-obtained information, we saw

**Table 5.** Total results by index and area.

	MIPr	MIPu	Comparison	Average	Maximum value
<i>Business index</i>					
Legal status	5.5	5	0.5	5.25	5.5
Interests	0	0	–	0	5.5
Transparency	1.36	1.36	–	1.36	5.5
Awards and perks	0	0	–	0	5.5
Regulations	1.65	0.55	1.1	1.1	5.5
Layoffs and censorship	5.5	0	5.5	2.75	5.5
<i>Total</i>	14.01	6.91	7.1	10.46	33
<i>Social and labor index</i>					
Training	3.23	3.07	0.16	3.15	5.5
Pay	2.41	4.52	2.11	3.46	5.5
Posts	2	5.25	3.25	3.62	5.5
Work stability	4.90	4	0.90	4.45	5.5
Type of contract	3.30	6.60	3.30	4.95	5.5
<i>Total</i>	15.84	23.44	7.60	19.64	33
<i>Content index</i>					
Feedback	0.70	0.70	–	0.70	0.80
Self-obtained information	2.50	3.40	0.90	2.95	4
Sources	2.25	3.75	1.50	3	8.8
Content	2	3.20	1.20	3.10	6.4
Geographical diversity	0	0.20	0.20	0.10	2
Opinion	0	0	–	0	3.5
Titling	0.80	1	0.20	0.90	2
Quality of presentation	1.50	1.75	0.25	1.62	2
Statistics	1.08	1.35	0.27	1.21	2.5
Photography	1.50	1.50	–	1.50	2
<i>Total</i>	12.33	16.85	4.52	14.59	34
<b>Total</b>	<b>42.18</b>	<b>47.20</b>	<b>5.02</b>	<b>44.69</b>	<b>100</b>

MIPr: Private Printed Media; MIPu: Public Printed Media.

that MIPr used indirect references to official declarations from individuals in the Venezuelan government, citing public media, and at the same time, they had excessive content from national and international news agencies and press releases. As for the sources, the difficulties in accessing official sources shown by the private media resulted in lower scores in the evaluation, with these difficulties coming from the existing secrecy found in the State's institutions and its representatives.

In this way, the model also contributed to the identification of weaknesses in each area in such a way that conclusions were made that will help to improve the journalistic process and the quality of information. The model also allowed for the evaluation and quantification of a political regimen's degree of impact on political and economic liberties in a specific context with respect to the quality of information from its media outlets.

## Conclusion and discussion

The quality of information found in communication media cannot only be evaluated and/or verified through the final product, as this analysis could be incomplete or be merely subjective. On the contrary, a complete evaluation of the quality of information should not only take into account all the different aspects that intervene in the creation of the information product but should also specify which of these aspects has more relevance in its production process. The purpose of this is to identify particularly fragile areas and to compare different media types under equal terms within the same geographical or international context.

The impact of the political-economic conditions anywhere can be seen in the quality of information given. The proposed model of evaluation has allowed for the establishing of a direct relationship between the macro situation in Venezuela and its effect on communication media. The results show that the discourse of confrontation and polarization in the political ambience of Venezuela are not only depicted in the media content but are also evidenced in aspects such as access to information sources, censorship, omission, and unjustified layoffs.

In a similar way, the current economic situation in Venezuela has had great relevance on the final information products, not only due to the decline of funding sources for financing journalistic activity – advertising agents, institutional contributions, among others – but also on the social-labor aspect of the media analyzed. In this sense, we can see that salary and work benefits were important aspects that were directly proportional to other aspects such as type of contract, training, and the profile of the journalistic corpus (interns, junior, middle, senior reporters). Logically, these aspects affected the quality of the final product, even more so when in both of the media studied, the salary was poor with respect to the basic food basket established by the Venezuelan authorities.

Both of the analyzed spaces answered two of the research questions raised at the beginning of the present work. The first question was related to establishing links between the quality of information products and the political, economic, and social macro-environment of a country, and the second to detecting the possibility of verifying the existence of high-quality information in contexts where a low index of liberties exist. On this note, the sum total of the results, MIPu (47.20) and MIPr (42.18), allow us to establish a national average of quality of information of 44.69/100. These results allow us to conclude that the relationship between the system of freedoms, such as political, economic, and of the press, as well as the State of Law and institutionalism are important factors within pre-information conditions. Therefore, when guarantees for the exercising of the journalistic activities do not exist, and when there are adverse conditions for freedom of the press and the media, the detrimental effects on the final products are evidenced.

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## References

Alessandri F, Edwards C, Pellegrini S, et al. (2001) VAP: Un sistema métrico de la calidad periodística. *Cuadernos de Información* 14: 112–120.



- American Society of Newspaper Editors (ASNE) (1998) *Examining Our Credibility, Why Newspaper Credibility Has Been Dropping?* Columbia, MO: ASNE.
- Arnold K (2009) *Qualitaetsjournalismus: Die Zeitung und ihr Publikum*. Konstanz: UVK.
- Arráz R (1998) La comunicación para el desarrollo. Su aplicación para el medio radio. *Revista Latina de Comunicación Social* 9(1). Available at: <http://goo.gl/GQhWKi>
- Barnhurst KG (2013) Newspaper's experiment online: Story content after a decade on the web. *Journalism* 14(1): 3–21. Available at: <http://doi.org/zq7>
- Bird SE (2010) News practices in everyday life: Beyond audience response. In: Allan S (ed.) *The Routledge Companion to News and Journalism*. London: Routledge, pp. 417–427.
- Clayton M (2006) Delphi: A technique to harness expert opinion for critical decision-making tasks in education. *Educational Psychology: An International Journal of Experimental Educational Psychology* 17(4): 373–386. Available at: <http://doi.org/b42xn6>
- Costera-Meijer I (2012) Valuable journalism: A search for quality from the vantage point of the user. *Journalism* 14(6): 754–760. Available at: <http://doi.org/88j>
- De-Pablos JM and Mateos C (2004) Estrategias informativas para acceder a un periodismo de calidad en prensa y TV: Patologías y tabla de medicación para recuperar la calidad en prensa. *Ámbitos* 11–12: 341–365.
- Fortunati L, Sarrica M, O'Sullivan J, et al. (2009) The influence of the internet on European journalism. *Journal of Computer-Mediated Communication* 14(4): 928–963. Available at: <http://doi.org/bmpc48>
- Gieber W (1964) News is what papermen make it. In: Dexter LA and Manning D (eds) *White, People, Society and Mass Communications*. New York: Free Press, pp. 173–178.
- Gordon TJ (1994) *The Delphi Method*. Washington, DC: American Council for the United Nations University.
- Hagen L (1995) *Informationsqualität von Nachrichten. Meßmethoden und ihre Anwendung auf die Dienste von Nachrichtenagenturen*. Opladen: Westdeutscher.
- Hagen L and Beren H (1997) Relevanz von Nachrichten. Messmethoden für ein zentrales Qualitätskriterium und ihre Anwendung auf Dienste von Nachrichtenagenturen. *Rundfunk und Fernsehen* 43: 158–178.
- Halloran J, Elliot P and Murdock G (1970) *Demonstrations and Communication: A Case of Study*. Harmondsworth: Penguin Books.
- Kirk J and Miller ML (1986) *Reliability and Validity in Qualitative Research*. Beverly Hills, CA: SAGE.
- Lang K and Lang G (1953) The unique perspective of television and its effect: A pilot study. *American Sociological Review* 18: 2–12.
- Leggatt T (1996) Identifying the indefinable: An essay on approaches to assessing quality in the UK. In: Ishikawa S (ed.) *Quality Assessment of Television*. Luton: John Libbey Media, pp. 73–87
- Linstone HA and Turoff M (2002) *The Delphi Method: Techniques and Applications*. Boston, MA: Addison-Wesley.
- McQuail D (1992) *Media Performance: Mass Communication and the Public Interest*. London: SAGE.
- Madianou M (2010) Living with news: Ethnographies of news consumption. In: Allan S (ed.) *The Routledge Companion to News and Journalism*. London: Routledge, pp. 428–438.
- Martin VB (2008) Attending the news: A grounded theory about a daily regimen. *Journalism* 9(1): 76–94. Available at: <http://doi.org/cps2z6>
- Meyer P (1987) *Ethical Journalism*. New York: Longman.
- Okoli C and Pawlowski S (2004) The Delphi Method as a research tool: An example, design considerations and applications. *Information & Management* 42: 15–29. Available at: <http://doi.org/d7zrdc>

- Pellegrini S and Mujica MC (2006) Valor Agregado Periodístico (VAP): La calidad periodística como un factor productivo en un entorno medial complejo. *Palabra Clave* 1: 11–28.
- Pew Research Center (1999) Striking the Balance, Audience Interests, Business Pressures and Journalists' Values. Available at: <http://goo.gl/Uvq6Rs>
- Picard RG (2004) Commercialism and newspaper quality. *Newspaper Research Journal* 25(1): 54–66.
- Poetker H (2000) Kompensation von Komplexität: Journalismustheorie als Begründung journalistischer Qualitätsmaßstäbe. In: Loeffelholz M (ed.) *Theorien des Journalismus*. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 375–390.
- Reguant-Álvarez M and Torrado-Fonseca M (2016) El método Delphi. *REIRE, Revista d'Innovació i Recerca en Educació* 9(1): 87–102. Available at: <http://doi.org/bcvx>
- Reporters Without Borders (2014) World Press Freedom Index 2014. Available at: <https://goo.gl/dkiXmH>
- Riffe D, Aust CH and Lacy R (1993) Effectiveness of random, consecutive day and constructed week in newspaper content analysis. *Journalism Quarterly* 70(1): 133–139. Available at: <http://doi.org/c3cfdg>
- Romero-Rodríguez LM (2014) *Pragmática de la desinformación: Estrategias e incidencia de la calidad informativa de los medios*. Huelva: Repositorio Institucional Arias Montano. Available at: <http://goo.gl/1yD100>
- Rosengren KE (1979) Bias in news: Methods and concepts. *Studies of Broadcasting* 15: 31–45.
- Rosengren KE, Carlsson M and Tagerud Y (1996) Quality in programming: Views from north. In: Ishikawa S (ed.) *Quality Assessment of Television*. Luton: John Libbey Media, pp. 3–48.
- Sampieri RH, Collado CF, Lucio PB, et al. (1998) *Metodología de la investigación*. México, DF: McGraw-Hill.
- Schatz H and Schulz W (1992) Qualität von Fernsehprogrammen: Kriterien und Methoden zur Beurteilung von Programmqualität im dualen Fernsehsystem. *Media Perspektiven* 11: 690–712.
- Searle JR (1997) *The Construction of Social Reality*. New York: The Free Press.
- Shoemaker PJ (2006) News and newsworthiness: A commentary. *Communications* 31: 105–111. Available at: <http://doi.org/cs8ddf>
- Shoemaker PJ and Cohen AA (2006) *News around the World: Practitioners, Content and the Public*. Oxford: Routledge.
- Shultz W (2000) Preconditions of journalistic quality in an open society. In: *Proceedings of international conference news media and politics: Independent journalism*, Budapest, 6–7 October 2000.
- Singer JB (2003) Who are these Guys? The Online Challenge to the Notion of Journalistic Professionalism. *Journalism* 4(2): 139–163. Available at: <http://doi.org/cqrtf3>
- Singer JB (2005) The political j-blogger: 'Normalizing' a new media form to fit old norms and practices. *Journalism* 6(2): 173–198. Available at: <http://doi.org/dhn8jd>
- Stempel GH (1989) Content analysis. In: Stempel GH and Westley BH (eds) *Research Methods in Mass Communication*. Englewood Cliffs, NJ: Prentice Hall, pp. 375–387.
- Urban J and Schweiger W (2014) News quality from the recipients' perspective. *Journalism Studies* 15(6): 821–840. Available at: <http://doi.org/88h>
- van der Wurf R and Schönbach K (2011) Between profession and audience: codes of conduct and transparency as quality instruments for off- and online journalism. *Journalism Studies* 12(4): 407–402. Available at: <http://doi.org/cc3mvk>
- Wallisch G (1995) *Journalistische Qualität: Definitionen – Modelle – Kritik*. Konstanz: UVK.
- Watzlawick P (1976) *How Real Is Real*. New York: Random House.

Wyss V (2000) Online-Journalismus in Europa: das Beispiel Schweiz. In: Altmeyden K-D, Bucher H-J and Löffelholz M (eds) *Online-Journalismus: Perspektiven für Wissenschaft und Praxis*. Wiesbaden: Westdeutscher Verlag, pp. 335–346.

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