

NEWSPAPERS AND ELECTIONS: AN EMPIRICAL STUDY ON THE RELATIONSHIP BETWEEN ELECTORAL INTEREST AND NEWSPAPERS IN BRAZIL (2004-2014)

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ABSTRACT: The media play a key role in democracies, providing elements so that the professional politicians can be inspected and also by providing elements for voters to form their electoral decision. In our study we aim to assess whether in Brazil there is some correlation between the electoral interest and the interest in newspapers. We developed two frequencies of the Beta type on *Google Trends*, one for the topic *newspaper* and another for the topic *election* for a period of 10 years, from 2004 to 2014. Our results show that there is a strong positive correlation between these two tracks of interest ($r=0,213, p < 0,001$), indicating that the voter during election campaigns, searches the newspapers to be informed and make their decision.

KEY WORDS: Democracy; Elections; Newspapers; *Google Trends*.

JORNAIS E ELEIÇÕES: UM ESTUDO EMPÍRICO SOBRE A RELAÇÃO ENTRE CICLOS ELEITORAIS E O INTERESSE POR JORNAIS NO BRASIL (2004-2014)

RESUMO: Os meios de comunicação desempenham um papel chave nas democracias, fornecendo elementos para que os políticos profissionais sejam fiscalizados e também, fornecendo elementos para que o eleitor forme sua decisão eleitoral. Em nosso estudo buscamos aferir se no Brasil há alguma relação entre o interesse eleitoral e o interesse por jornais. Desenvolvemos no *Google Trends* duas frequências do tipo Beta, sendo uma para o tópico *newspaper* e outra na o tópico *election* no período de 10 anos (2004 á 2014). Nossos resultados mostram que existe uma correlação positiva entre estas duas faixas de interesse ($r = 0.213, p = < 0.001$), o que indica que o eleitor, durante campanhas eleitorais, busca os jornais para se informar e balizar sua decisão.

PALAVRAS-CHAVE: Democracia; Eleições; Jornais; *Google Trends*.

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INTRODUCTION

The media are important actors in the political dynamics, to the extent that through them most people get useful information to form their election decision. However, to some extent the media are “officers” of political power, disseminating and making intelligible to the general public their actions, forcing professional politicians to incline towards a more righteous conduct.

Because of the importance that the media plays in politics, many studies have been made in the recent years on the quality of information, especially during election periods.

However, most studies give the media content wide intelligibility, but they do not go in the same direction to explain how the voter seeks information and how often he seeks political information and in what ways.

In this sense, the goal of this study is to identify whether there is any correlation between the electoral clear interest and the interest in newspapers. Our hypothesis is that, with the media being historical actors in spreading political information, it is likely that there is correlation between the popular interest in elections and interest in newspapers. After all, newspapers are means of obtaining information to gauge the electoral decision making. To test our hypothesis, we used the *Google Trends* tool of Beta type to trace their frequency, one for the topic *newspaper* and another for the topic *election*. Our results indicate that there is a strong positive correlation between the interest in these two topics ($r=0,213$, $p < 0,001$), indicating that there is an increased interest in newspapers in periods where the election interest is higher in the general public. In this sense, it is suggested that this result is epiphenomenon of the strategy that voters map to obtain information (the newspaper is one of these means) and form the electoral decision.

2 NEWSPAPER AND DEMOCRACY

The positioning of the press has become in recent decades a major niche for the study of elections (QUADROS; SANTOS, 2013). The main reason is that journalism

historically holds a central role in democracies as they serve as the primary source of news and information for individuals on public issues (PAVLIK, 2011). However, little has been studied about the voter information behavior in elections in this sense little is known about the frequency of interest in political information.

The media are pivots in the political process in which it is them who are “officials of political life” and guarantee to some extent the political integrity by governments. In addition, they influence the formation of public opinion through scheduling the media determine the agendas of public interest (CERVI et al., 2012). However, it is important to consider that even the media being a central tool for the practice of good representation it does not always perform this function. Anyway, there is a strong relationship of dependence between the professional politicians and the media, to the extent that the means of communication² are the main sources of political information from where voters seek to guide their position (CERVI, 2011).

It must be considered in this sense that in complex societies, the public sphere consists mainly of the placement promoted by the means of communication. At this point there is evidence that suggests that during election periods, newspapers tend to give greater intelligibility to topics related to electoral dispute (CERVI et al., 2012; SEMETKO et al., 2013).

In democratic regimes, democracy tends to provide a legal framework to ensure some level of freedom of speech, but that without offering protection to journalistic services that are in most cases financed by the private sector (JOSEPHI, 2013). As the private sector usually has financial interests, the quality of journalism seems to have declined in some parts of the world, either by the entertainment excess implicit in journalism, or by low autonomy that journalists hold for news production on a modus operandi where the news agencies have become hegemonic regarding the production and distribution of news among the means of communication (FRANKLIN, 2011; SALWEN; GARRISON, 2013; MORAES; MAIA, 2013; HARTLEY, 2014).

According to political scientist Robert Dahl, there are at least three steps to consolidate the conditions of polyarchy, the first is the formation of preferences, the

² By claiming a monopoly over to make intelligible to the general public a series of questions the media is exercising power, with the capacity and ability to act or produce desired effects. The symbolic power exercised by the media acts via the complicity of those who are subject to it (QUADROS et al., 2011).

second is to express collectively or individually the preferences, and third is that the preferences are taken into consideration in the government position. Dahl suggests that at least eight guarantees must be met in order to preserve these three conditions, in particular two guarantees keep strong relationship with the media: freedom of speech and the guarantee of having access to various sources of information (DAHL, 1971). In this regard, in order to fulfill the two guarantees mentioned here, the media are the key instruments, so the more diverse and free the press is, the more chances there are to consolidate polyarchy.

Political scientist Giovanni Sartori mentions Karl Deutsch³ in taxonomy on the dissemination and formation of electoral opinion. In his model called Waterfall, the formation of opinion can occur in three ways: 1) the dissemination of information from the elite; 2) the bubbling of opinions via the base; and 3) identification with reference groups.

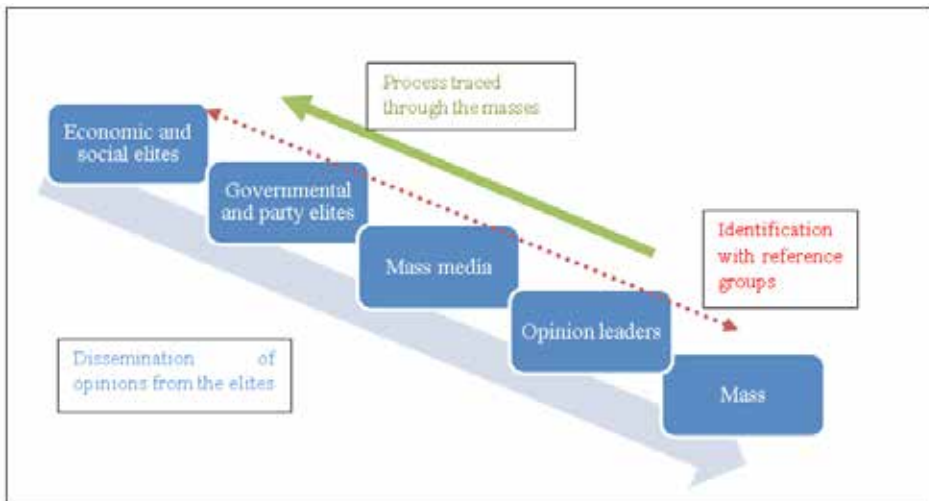


Figure 1. Waterfall model by Sartori &Deutsch
 Source: Preparation of the author based on (SARTORI, 1994).

In the first case, the opinions emerge from the will of economic and social elites, permeate the governmental and party elites, are replicated by the mass media, reach opinion leaders and finally the mass. Sartori (1994) points out this order as the

³ Deutsch, Karl. *Political Community and the North Atlantic Area*, 1957.

most frequent. In the second case, there is a balance to this process traced through the masses, where the opinion of these can generate a tide of opinions, which in turn hit by the mass media and with less impact the government and party elites and economic and social elites. Finally, the third case, which may or may not be a counterweight to the dissemination of opinions from the elites, is the identification with reference groups, where the formation of opinion occurs mainly through contact with others.

These individuals at the base become starters and disseminators of knowledge, going against the concept of communicative democracy, where the mutual exchange of information generates new processes of forming opinions in contemporary democracies. However, although there is the possibility of reversing the processes of influence, the minority interests have hardly met their demands representation, that is, minorities tend to remain marginalized, and this is clearly true in the scenario of contemporary democracies where there are a growing number of groups that demand for representation, but they are not met. (YOUNG, 2001, p. 365-86).

In this regard, it seems valid to quote from Bobbio:

In the advanced capitalist societies, the persistence of strong political inequalities, of access to power and its control, is due largely to the failure / inability of underprivileged groups to engage in effective political communication, through the action of a set of distortion mechanisms (manipulation and blockage). (BOBBIO, 1998, p. 203).

Anyway, as Sartori (1994, p. 133) shows, in the opinion formation, *mister* criteria for elections, the economic elites have a key role to enforce their interests. However, this is not an inexorable process, as he points out there are other ways that can be a counterpoint. Applying the model reviewed by Sartori to Brazil, we can say that the first way may be more efficient than it is in other more developed countries. This happens because, as Pochmann (2003) points out, in Brazil there is a higher income concentration. Thus, fewer actors are influencing government and party elites and media more efficiently.

In any case, the model of Sartori and Deutsch does not provide help to answer how strongly voters seek political information. But it makes it clear that the quality of information may be compromised due to the inference of economic and political elites on the news production process. In this sense, we still need more

studies that aim to identify the quality of political information disseminated by the media, and because of this need there have been studies towards understanding the quality of the information disclosed by the media, especially during election periods (CERVI, 2011; HART, 2011; MCMENAMIN, 2013). The newspaper, in this sense, is just one of many means by which the voter finds his ways to learn (QUADROS; SANTOS, 2013).

It can be defined that within the communication and political studies there are three thematic axes more or less identifiable, they are: 1) studies on the electoral reception which seeks to gauge the direction of the voter to be informed to determine the electoral decision; 2) studies of electoral persuasion which seeks to assess how political actors interfere in the production of messages transmitted by the media; 3) studies on the production and or construction of political news for the newspaper industry that aims to identify which processes influenced the creation and dissemination of news (QUADROS *et al.*, 2011). Our study belongs to the first thematic axis, and in this regard we seek to verify the voter concern of being informed during the election period. We believe that an epiphenomenon of this concern may be the clear interest in newspapers.

3 METHODOLOGY

In this study we used the *Google Trends*^{4,5} tool to measure the interest of the Brazilian public in elections and newspapers. Our data include the period from 2004 to 2014. To delineate that, we used the *Google Trends* Beta frequency for the topics *election and newspaper*.

⁴ Google Trends has been successfully applied to evaluate a number of social studies, such as the dynamics of epidemics (KANG *et al.*, 2013; OLSON *et al.*, 2013; DUGAS *et al.*, 2013), drug use (CAVAZOS-REHG *et al.*, 2014), consumer behavior (GOEL *et al.*, 2010), stocks and financial market (WU; BRYNJOLFSSON, 2013; PREIS; MOAT; STANLEY, 2013; VLASTAKIS; MARKELLOS, 2013) sexual behavior (MARKEY; MARKEY, 2013; JOHNSON; MEHTA, 2014), among many others.

⁵ Google Trends works as a sort of a reverse search engine where typically a user enters search terms and a list of results is displayed. This service has a term or a set of terms and provides data on the variation in searches on these terms (MORAES; SANTOS, 2013; GRUSZCZYNSKI, 2013, p.69). The Google tool also allows the user to compare the volume of searches between two or more terms. Some news connected to the terms searched are related to the chart, with possible reasons for an increase or decrease in volume of searches. Google Trends provides time series on query volumes entered into the Google search engine in a particular geographic region. The total volume of queries for a specific term in a particular geographic region is divided by the total number of queries of this region during the period being examined. The maximum value for each search term is 100 and the lowest value is zero (GOEL *et al.*, 2010; CHOI; VARIAN, 2012). Google Trends allows researchers from almost every country in the world to download all data at no cost (MELLON, 2013).

Google Trends Beta frequency searches for the term as a “subject”, and in this search, the language from each country is taken into consideration and all correlations that may exist in each one of them, even of different algorithms. That is, it does not seek a term, but an average of a series of searched terms that correlates with the topic. That makes this frequency a strong meter of general trends. We look for correlations between the two frequencies in order to assess whether there is any correlation between the electoral interest and the clear interest on Google in newspapers.

4 RESULTS

Charts 1 and 2 show that regarding the popular interest in elections, there is a well-defined seasonality with five peaks of greatest interest being in the years 2004, 2006, 2008, 2010 and 2012, in November, period when elections take place. This pattern of behavior is apparently quite practical, so the voter does not seek election information in non-election periods, instead of that he focus on it only during the election period.

As the frequency of interest in newspapers, it appears that from 2004 to 2014 there was a decrease in the quantity of searches. Perhaps this suggests that the voter is seeking information from other sources, for instance, within the channels of social networks.

This may indicate a type of electoral sophistication, whereas several studies show that the newspapers during the election period provide low quality information (QUADROS et al., 2011; CERVI et al., 2012; QUADROS; SANTOS, 2013).

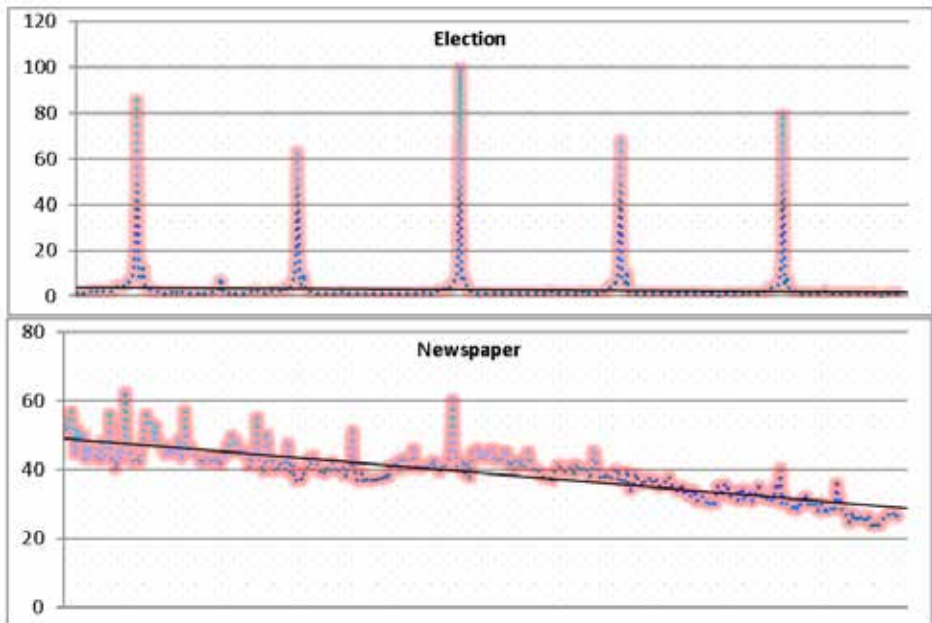


Chart 1. Frequency separated by interest in *election* and *newspaper*
Source: preparation of the author.

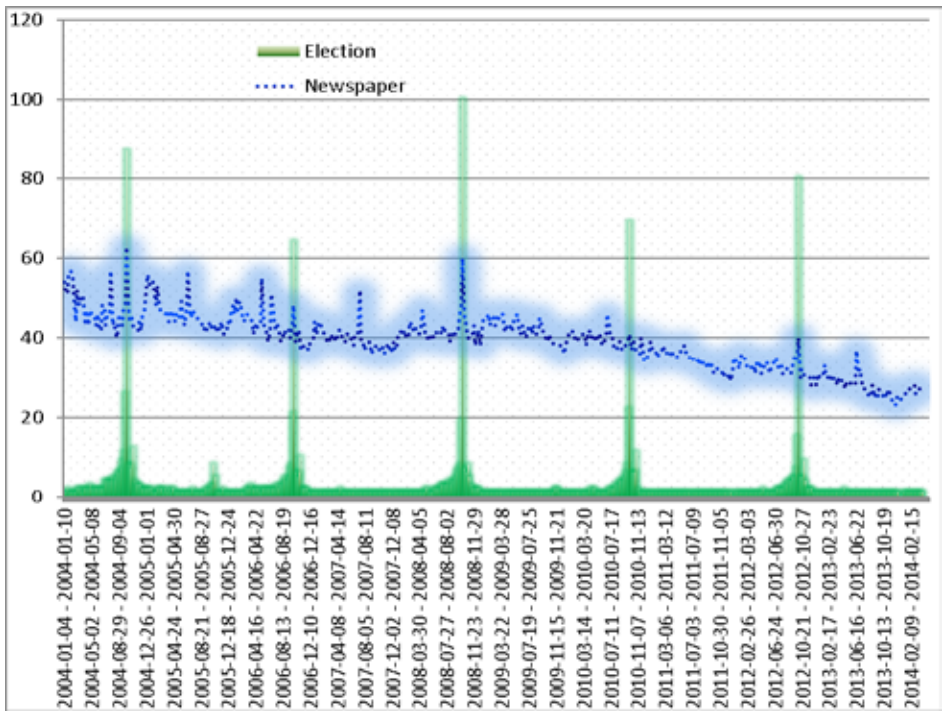


Chart 2. Frequências de interesse por eleições e por jornais comparadas

Source: preparation of the author.

Table 1. Correlations between the topics on Google Trends election and newspaper

Group	Weeks	Average	CI 95%	Standard Deviation	Min	Max
<i>Election</i>	535	2.727	2.048 - 3.406	8.017	0.0	100.0
<i>Newspaper</i>	535	38.985	38.409 39.561	6.797	23.0	63.0
T-Student Test		Pearson				
<i>t</i>	<i>p</i>	<i>r</i>	<i>p</i>			
<i>t</i> = -89.783	<i>p</i> < 0.001	<i>r</i> = 0.213	<i>p</i> < 0.001			

Source: preparation of the author.

Table 1 shows that the interest in newspapers (38,985) is on average much higher than the interest in elections (2,727). The reason for this difference is the seasonal pattern of each topic, as illustrated on Charts 1 and 2, the electoral interest

has five major peaks of interest in the period 2004 to 2014, and during the interval between each (which is the interval between an election and another) the number of interest falls to very low levels while the frequency of interest in newspapers oscillates but within a short variation range remaining a bit higher throughout this period.

The results on Table 1 show that there is a very strong positive correlation between the electoral interest and the interest in newspapers, which means that the elevation of the electoral interest elevates, so to speak, the interest in newspapers. Not to say that everyone who seeks newspapers is seeking political information however, the high correlation between newspapers and elections shows that during the election period, of greater interest in elections, individuals are more interested in newspapers. In this sense, it is suggested that part of this increase of interest in newspapers is part of a strategy of voters to gain political information to form the electoral decision.

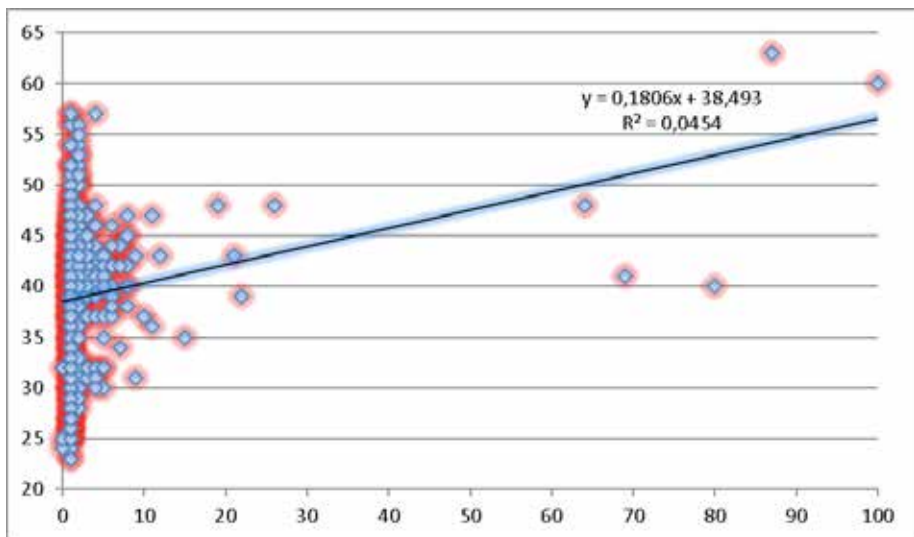


Chart 3. Dispersion between interest in newspapers and electoral interest
Source: preparation of the author.

Chart 3 shows the very strong correlation between electoral interest and the interest in newspapers, the trend line shows that the correlation between the two

follows a positive trend. Chart 4, made based on the result of the T-Student Test ($t = -89,783$, $p < 0,001$) shows that despite they behave similarly, the frequency has a very distinct pattern formation.

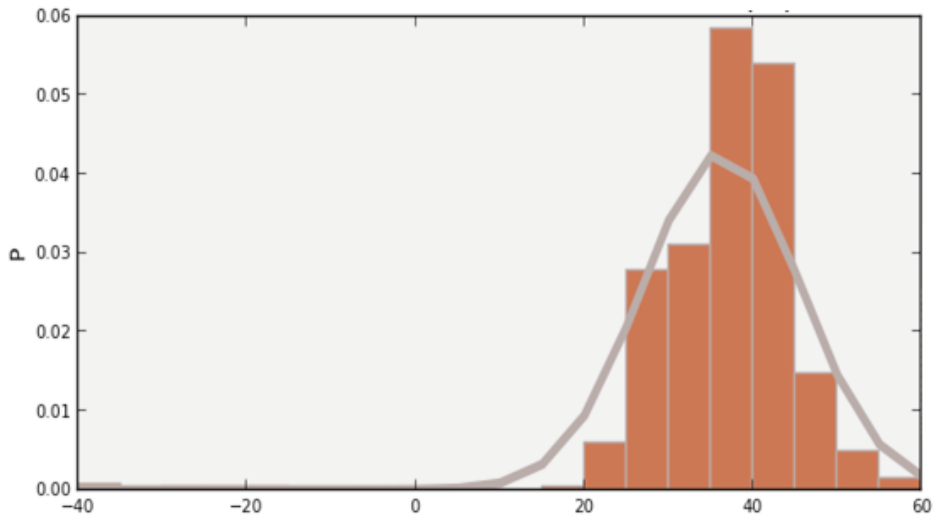


Chart 4. Difference between the frequencies of interest in elections and newspapers
Source: preparation of the author.

5 FINAL THOUGHTS

The media are like the pieces of a chess board that sets the *modus operandi* of the political game. In a scenario where the means of communication are the main way in which individuals are informed to decide their vote. In addition, the media act as “officers” of professional politicians, making public their activities in an intelligible way to the general public, in a dependent relationship where the professional politician (to keep the social and political capital) inclines towards a more righteous conduct.

In our study we tried to identify whether there is correlation between the evident interest in elections and interest in newspapers. In this sense, our results confirmed our hypothesis that there is a strong positive correlation between these

two variables, which indicates that when the electoral interest rises, also raises the interest in newspapers. We suggest that this behavior is strategic and practical, and therefore the voter searches newspapers for information to form their electoral decision. So we believe that is valid to expand the effort within the political science and other social sciences to search the newspapers and their relationship with the political process, after all, at least in electoral periods, the fact is that popular interest in this source of information increases.

However, as it is evident in Charts 1 and 2, the interest in newspapers is decreasing year after year. In this sense, perhaps this fall shows that the voter is informed by other means, such as new media like social networks. More studies are needed to confirm this trend.

In any case it is possible to say that the results point to some level of sophistication of the Brazilian electorate after all there are indications that it seeks elements to form its decision, even in scenarios where newspapers can have their quality compromised because of the economic dynamics involving the production and dissemination of information.

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