

Misinformation in the classroom: perceptions of journalism students

Desinformação em sala: percepções de estudantes de Jornalismo

Desinformacion en aula: percepciones de estudiantes de periodismo

[Luiz Henrique Zart](#)^{id} [Rita de Cássia Romeiro Paulino](#)^{id}

Highlights

Professors and students should revisit concepts and procedures to train Brazilian journalists.

Universities must invest in curricula for theoretical-methodological and epistemological-reflective, not just practical, student training.

College students develop particular perceptions about the phenomenon of misinformation based on their local context.

Abstract

This article studied the perceptions of journalism undergraduate students from a university in the Serra Catarinense region (Brazil) regarding disinformation. The research is descriptive and exploratory. Data was collected through an online form with 24 questions from April 16th to 23rd, 2021. For convenience, the sample is non-probabilistic, with 77 respondents among the 88 enrolled in the first semester of 2021. The results indicate that fake news is the term chosen to define the phenomenon, and information is sought on cell phones with Internet access, social networks, and messaging apps. It is worth noting that politics and health are the topics most affected by politically radicalized adults on the right wing in journalistic currents or mimicking journalistic content. In conclusion, it is necessary to stimulate critical capacity, raising issues such as media criticism and the fight against disinformation, in universities, in the training of future journalists – with curricula that invest in theoretical, methodological, and epistemological-reflective, not just practical, student training.

[Resumo](#) | [Resumen](#)

Keywords

Journalism. Undergraduate degree. Misinformation.

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| Introduction

There are reasons for disinformation to be treated as a problem. It has been the object of study, especially in recent years, because of its impacts on the most diverse collective and individual spheres – from political decisions to the climate of permanent uncertainty and tension in everyday situations (Delmazo & Valente, 2018). It is known that disseminating these contents is not new: societies worldwide have faced falsehoods and their harmful effects (Posetti & Matthews, 2018). The contemporary context offers highly favorable conditions for information propagation in unprecedented volume and speed. In a dynamic of symbolic production marked by (dis)informational overload, the scenario of “informational disorder” (Wardle & Derakhshan, 2017) exhausts us. Therefore, it makes us influenceable, fragile, and vulnerable (Mendiguren et al., 2020; Prazeres & Ratier, 2020). The short- and long-term effects influence “not only individuals and organizations but also societies and cultures” (Tandoc Jr., 2019, p. 6, our translation). Among them are young people who, in acts of involvement within a participatory culture, are consumers and producers – the *producers* – in a mediatized world (Pereira, 2021).

The constant connection to the Internet, the exaggerated consumption of information, and the accelerated distribution of messages and distorted content generate hyperinformation and “infoxification” (Tejedor et al., 2021), sustained mainly by the inadvertent sharing of users and the expansion of the reach of these contents (Bennett & Livingston, 2021). The worsening of the problem has forced combat actions (Empoli, 2019): governments bring legislation to light, and independent organizations launch fact-checking initiatives. From another perspective, the *big techs*, although cynically, have removed a few accounts that disseminate disinformation (Wardle & Derakhshan, 2017), at the same time that journalistic organizations have invested in joint action, emphasizing that it is fundamental for society to fund and finance the incentive to develop skills in media literacy (Lopes et al., 2015) and professional journalism (Christofolletti, 2019).

Even with collectives such as Intervozes (2019), Brazil is a typical case: the 2019 edition of the “TIC Domicílios” survey, carried out by the Centro Regional de Estudos para o Desenvolvimento da Sociedade da Informação (Cetic.br), linked to the Comitê Gestor da Internet no Brasil (CGI.br), pointed out that there are 134 million Internet users in the country (74% of the population aged 10 and above). In addition, 99% of connected people use mobile devices for instant messaging (92%) and social networks (76%) (Cetic.br, 2020).

In this information war, the first victim is the truth. As Kakutani (2018, p. 12, our translation) argues, from the 2016 US presidential elections and the Brexit vote, which sacraments the United Kingdom's exit from the European Union, among other examples in Brazil, Poland, Italy, and Hungary, conservative, (techno)populists, and fundamentalists waves took advantage of the alleged accessibility of Internet information to make people “resort more to fear and anger than to sensible debate, eroding democratic institutions and crowds.”

With demagogue and authoritarian *outsiders* entering the political sphere, the “more gradual and silent” destabilization and corrosion of institutions began from within (Kakutani, 2018; Levitsky & Ziblatt, 2018) in a resignification that recalls the haunting of the Orwellian dystopia *1984*: the construction of a parallel, non-factual reality, taken for contradiction and confusion as communication strategies, especially in times of crises, conflicts, anxiety, and uncertainty, when cognitive capacity can be “disarmed” more easily (Waisbord, 2018). An example is hatred channeled with political objectives to maintain power projects in direct contact and communication with the public, without any mediation, such as that exercised by professional journalism (Delmazo & Valente, 2018; Empoli, 2019).

On the other hand, dependence on traditional media in this environment has made it vulnerable. If the news anchored in ethical and responsible practices “independent, reliable, accurate, and understandable” is based on what Kovach and Rosenstiel (2004) understand as a fundamental need to know what happens, disinformation appropriates this characteristic and resignifies it. Marwick and Lewis (2017) diagnose that internet subcultures have taken advantage of the media ecosystem through participatory dynamics to manipulate news frameworks and propagate their ideas. In the age of the attention economy, conservative, reactionary, and far-right groups have developed techniques; thus, they capture the affections of audiences and increase the reach of conspiracy theories and radicalized and hate speech; they encourage doubt and fear. In addition, they strategically use robots, memes, social networks, and their echo chambers to explore the gray area into which Journalism hardly penetrates. This fragmentation blurs the boundaries between truth and lies, fact and fiction, and scientific and non-scientific knowledge. In summary, when relying on reality becomes a matter of personal conviction, space opens up for merchants of doubt (Waisbord, 2018).

Another piece of this puzzle is the ongoing crisis – financial, technological, credibility, and authority – of journalism as an expert system, often with difficulty understanding the different functioning of the media ecosystem (Catalina-García et al., 2019; Christofolletti, 2019). At this moment, the role of Journalism has changed both as a public service and as a form of knowledge that constructs reality, culturally and historically conditioned, with specific purposes to be fulfilled (Meditch, 1997; Reginato, 2019). Waisbord (2018, p. 3) points out that even journalism is a “fragmented, complex, and open” institution, in an unordered process, but *disruptive* between news, journalists, and audiences.

The primary challenge is understanding the transformation “guided by the digital proliferation of opportunities for public expression and communities of identities with different epistemologies and engagement with news and information” (Waisbord, 2018, p. 4, our translation). At the same time, public perceptions and behaviors assume a leading role in a time of loss of a certain primacy of truth as a structuring principle of society (Correia, 2019; Varão, 2020).

For Waisbord (2018, p. 7, our translation), truth is “always unstable, disputed, challenged” and “makes sense in context, as part of discursive conditions that determine the correspondence between news and reality”. However, the

relationships between journalism and truth exceed the universe of the press since the latter is “the result of how audiences interpret reality as they constantly examine, navigate, avoid, and understand information” (Waisbord, 2018, p. 8, our translation). At the same time, there is widespread discredit of journalists (Glisson, 2019), and the “collapse of the liberal technocratic dream” from a weakening of the social position legitimized by *experts*, partisan division of credit to facts, the politicization of science, and the decline of politics (Waisbord, 2018, p. 5).

Ramonet (2012) argued that mass media has become a mass medium in contemporary times. The phenomenon indicates the difference between the periods, with the opening of possibilities for information consumption due to the devices or the change in the formats of these contents. Thus, there was a supposed democratization of knowledge. On the other hand, space has also opened up for a kind of viralization of users – in a paradox with the accelerated circulation of (dis)information – who, when affected by it, undergo “zombification”: they act moved “by an impulse or an appetite concerning which they cannot position themselves rationally or autonomously”, without criticality or analysis (Leite & Matos, 2017, p. 2337, our translation).

In a scenario that Santos-D’Amorim and Miranda (2021) classified as “disinfodemic”, young people have mainly been exposed to a constant flow of these contents. As Posetti and Bontcheva (2020, p.2, our translation) explain, the term refers to the “falsehoods that fuel the pandemic and its impacts” due to a “huge ‘viral load’ of potentially deadly disinformation”. In addition, this definition, a neologism, has gained strength in the wake of conspiracy theories, especially during the scenario caused by COVID-19 (Santos-D’Amorim & Miranda, 2021).

The impacts, after all, reach the classrooms, as perceived by a series of studies that set out to understand the consumption of news and the perception of students – in countries such as Brazil, Portugal, and Spain. One of the considerable findings highlighted by Catalina-García et al. (2019) was the abandonment of traditional means to seek information, giving preference to social networks through mobile devices. In the Basque country, Mendiguren et al. (2020) admit the existence of a state of alert when observing the variety of themes affected considerably by disinformation.

Studies also pay attention to the evaluation of university students on the credibility of news on the Internet when they are prone to share content with which they agree, disrupting notions of information credibility since the content often has the appearance of news (Herrero-Diz et al., 2019) and adolescents are motivated to spread *fake news* on WhatsApp (Herrero-Diz et al., 2020). The informational diet of university students has also been researched, including how they access and engage with the news (Head et al., 2018). Specifically, we have sought to understand information interpretation and consumption, as well as the confession of journalism students that they have already fallen into the traps of disinformation (Tejedor et al., 2021), and how the media literacy skills of individuals are evaluated (Lopes et al., 2015) in student training.

From this perspective, this research aims to understand how undergraduate students at a university in the Serra Catarinense region define the phenomenon, how they consume information, and how they perceive and interpret the relationship between journalism and disinformation. It is possible to contextually analyze how they inform themselves, what the info/disinformation diet is, and how this can be reflected in the academic training of future journalists who, immersed in digital dynamics, are faced with distorted, misleading, lying, or disinformation content (Albuquerque, 2021).

| Theoretical framework

The discussion regarding the definition and circulation of disinformation, like itself, is complex and confusing. There is no consensus on the origin, indicating that it arose with the first writing systems in Ancient Rome in sixteenth-century pasquins (Delmazo & Valente, 2018). Benjamin Franklin's purpose in 1782 – printing a fake newspaper in Boston – was to claim that the British Army had hired natives to kill and scalp American soldiers, women, and children in the struggle for independence (Tandoc Jr., 2021). Subsequently, there are reports from 1938 regarding the million Americans panicking after hearing the adaptation of “War of the Worlds” by H. G. Wells – about an alien invasion narrated in a radio news format, with actors pretending to be reporters, scientists, and members of the government (Tandoc Jr., 2021). There are records of disinformation during World War II in Nazi Germany and the Soviet Union (Tejedor et al., 2021). What changes are “speed, scale, and massive proliferation and consumption of false information in a context of the destabilization of traditional media [...]”(Weaver et al., 2021, p. 339, our translation).

The purpose of disinformation certainly follows a typology that considers intentionality to deceive public opinion, motivations for creating it, and forms of dissemination as guiding precepts (Santos-D'Amorim & Miranda, 2021), in one of the usual conceptualizations, which takes the phenomenon as political-economic – not journalistic – in the 2016 US elections, the term *fake news* is used to qualify “intentionally and verifiably false news, which may mislead readers” (Allcott & Gentzkow 2017, p. 213) consistent with Tandoc Jr. et al. (2017) regarding motivation: by ideology or money, or, for Marwick and Lewis (2017), by *status*, attention, and radicalization, with the intention of confusing. Generically, to Tejedor et al. (2021), *fake news* would be fake stories spread by social media.

The review of Tandoc Jr. et al. (2017) came up with six definitions for *fake news*: news satire (humorous intention posing as real news); news parody (when there is imitation or noise in communication, and the receiver cannot identify the use of humor, considering it factual – when there is not what Catalina-García et al. (2019, p. 99) calls “tacit prior reading pact between sender and receiver”); fabrication (stories without a basis in facts published in the style of journalistic text); manipulation (use of real images in photography or video to create false narratives); disguised advertising; and political propaganda (designed to boost sales, access to websites, or influence the public/political debate by highlighting a favorable framework), having as a fundamental element a “co-construction” of content by the

public "since its fallacy highly depends on knowing if the public perceives the false as real" (Tandoc Jr. et al., 2017, p. 12, our translation). A paradox emerges: those who drive the phenomenon are the victims themselves.

However, the term's use is disputed, having lost meaning when becoming *buzzword* (Tandoc Jr. et al., 2017). Distorted and appropriated by political figures who notably encourage disinformation, it has come to be used to attack critical journalistic professionals and organizations and impose a biased ideological agenda (Santos-D'Amorim & Miranda, 2021; Tandoc Jr., 2021; Waisbord, 2018) or even influence electoral processes (Bennett & Livingston, 2021; Empoli, 2019).

On the other hand, the concept of "fake news" mischaracterizes its informative function and the inherent verification and accuracy processes with a reductionist and imprecise meaning (Mendiguren et al., 2020). Despite this, Tandoc Jr. (2019) indicates that these contents are also characterized by a "mimicry" of the news structure – visual imitation, with typical elements of journalistic editing – and a "varnish" that copies legitimate websites and composes a simulacrum of credibility, in addition to an effect of "omnipresence" capable of distorting the public's perception of the content's relevance – even if it cannot absorb the organizational process.

Fake news becomes a problematic term, but it is a specific type of disinformation that: "is false, aims to mislead people, and does so by trying to look like real news" (Tandoc Jr., 2019, p. 2, our translation). It integrates what Wardle and Derakhshan (2017) treat as the "phenomenon of disinformation", a structural problem of the media ecosystem that includes "bias, decontextualization, sensationalism, false controversy, conspiracy theories, journalistic error, rumor, satire, parody, and opinion articles mistakenly understood as information" (Prazeres & Ratier, 2020, p. 90, our translation).

Disinformation goes beyond the term *fake news* and includes a variety of "false, inaccurate, or misleading information produced, presented, and promoted to cause public harm intentionally or to obtain profit" (European Commission, 2018, our translation). Brisola and Bezerra (2018, p. 3319, our translation) consider that it involves "[...] information decontextualized, fragmented, manipulated, removed from its historicity, biased, that erases reality, distorts, subtracts, labels, or confuses. Disinformation is not necessarily false; it is often distortions or parts of the truth."

In addition to the level of facticity and the intention to deceive, it is necessary to consider the cognitive processes of disinformation (Tandoc Jr., 2019, p. 1) – confirmation bias, selective exposure, or lack of analytical thinking – before even confrontation by eventual verification can have little effect. The first two are a consequence of the third since the structure of social media favors that users remain in their "bubbles" and receive only content that confirms their convictions and interests through very few transparent algorithms (Santos-D'Amorim & Miranda, 2021; Tandoc Jr., 2019). There is also the possibility of judging individuals regarding the credibility of a story from not only who disseminated it but also by the number of interactions, comments, and shares (Tandoc Jr., 2021).

Santos-D'Amorim and Miranda (2021, p. 16) distinguish 16 arrangements between incorrect/inaccurate information (misinformation), disinformation, and bad information (malinformation), also based on intentionality, which is:

Bias, propaganda, articles portrayed, conspiracy theories, misleading representation on maps, charts, and graphs, fake news, clickbait, hoaxes, satire or parody, fraudulent websites, fake comments, phishing (use of personal or confidential information), political use of confidential information, misuse of personal/confidential information, bubble filters (based on algorithms, are "capable of amplifying and at the same time isolating perspectives and narratives spreading disinformation"), and echo chambers (caused by emotional/non-rational with the information (Santos-D'Amorim & Miranda, 2021, p. 14, our translation).

The first is "misinformation, open to multiple understandings and uses, the prefix being mis-, an indication of an error or something wrong", which, however, does not seek to cause harm; the second, "deliberately misleading information, with intent to deceive", agreeing with the interpretation of Wardle et al. (2018, p. 43); and the third, "malinformation is sensitive information strategically used to generate advantage, whether personal or institutional".

Amid so many definitions and discussions, Mendiguren et al. (2020, p. 172) point out that this problem affects "citizenship in general and young people in particular" since they most use social networks to stay informed. Precisely in the channels where disinformation spreads the most (Wardle & Derakhshan, 2017); at the same time that they abandon traditional media based on practically uninterrupted access to connected mobile devices, young people have another way of evaluating the news, also because they grew up immersed in this situation (Head et al., 2018).

Thus, there is doubt: even knowing that online dynamics facilitate the production of disinformation, young people are also the most vulnerable to this type of language that encourages "acting before thinking", even believing that, because they are young, they perform several tasks simultaneously and have knowledge of network functioning, they will know for sure what they will find there. Therefore, it is essential to understand how the university students participating in this study understand the phenomenon of disinformation.

| Methodology

The research is descriptive and exploratory – in the first case, it aims to describe characteristics of specific populations or phenomena, and in the second, it seeks greater familiarity with the issue by making it explicit through literature review, interviews, or other strategies (Gil, 1987). This proposal takes place through a survey so that perceptions can be seen as subjective elements, useful for the "study of opinions and attitudes" (Gil, 1987, p. 78). The data, collected through a digital form similar to a structured interview, are based on a non-probabilistic sample selected intentionally for convenience, focusing on a program from a specific institution: a universe composed of students enrolled in the first semester of 2021 in the undergraduate program in Journalism at a university in Serra

Catarinense region (Lopes, 2005). Entitled "Pesquisa sobre Jornalismo e Desinformação", the form had a pre-test and was then sent by institutional email, messenger app, and, in some classes, applied during class.

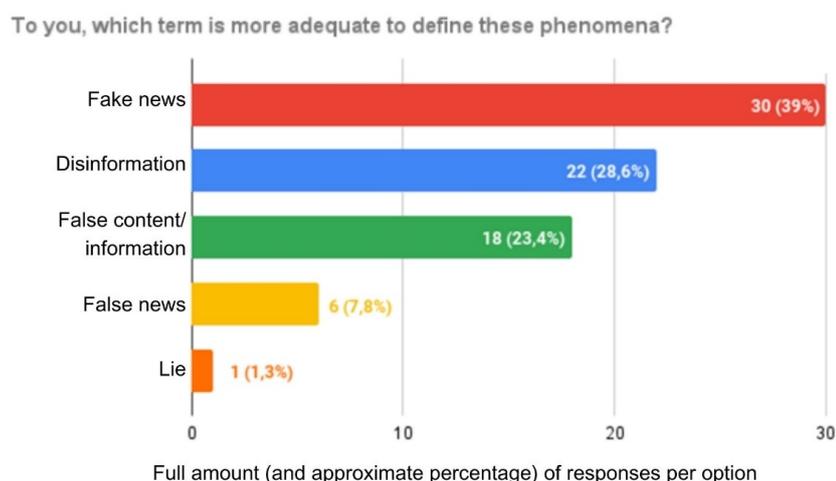
Formed by 24 multiple-choice questions in three stages – identification with personal information, definitions of the phenomenon and consumption, and perceptions about disinformation –the form was open from April 16th to 23rd, 2021. The intentional choice of the universe was due to the possibility of verifying the situation of journalists in training based on the hypothesis that this specific segment has a more accurate degree of knowledge on the subject. Notably, all students were informed about the study and gave consent to participate when they answered the questions, with the guarantee of anonymization of the information.

Results and discussion

Of the 88 students enrolled in the undergraduate degree in Journalism at the chosen university, 77 (87.5%) responded to the survey, a relatively representative number for this study¹. In all, there were 38 men (49.4%) and 39 women (50.6%), with varying ages: four people (5.2%) up to 18 years old, eight (10.4%) between 25 and 29 years old and between 50 and 59 years old; and nine others (11.7%) between 30 and 39 years old and between 40 and 49. The most representative portion of the interviewees, 39 (50.6%), belongs to the age group of 18 to 24 years, which testifies to a mixed profile predominantly composed of young people. It is worth mentioning that the students are in different stages of training: 15 respondents (19.5%) are in the first phase, 13 (16.9%) in the third, 16 (20.8%) in the fifth, 27 (35.1%) in the seventh; two (2.6%) in the eighth semester; and four (5.2%) are not in a specific phase.

Graph 1

Term most used by students to define the disinformation phenomenon.



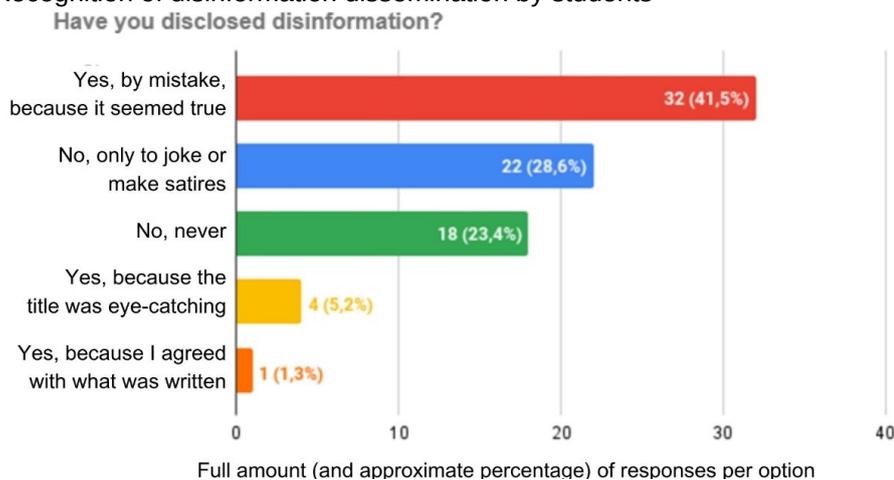
Source: prepared by the authors.

¹ The form is no longer accepting responses. However, the table with the raw data can be accessed through DOI: <https://doi.org/10.5281/zenodo.13770150>

The section following the participants' identification sought to understand how they defined the issue of disinformation, and their information consumption habits (Graph 1). The responses indicate a nuanced perspective. Just over one-third of 30 respondents (39%) understand that fake news is the ideal term, while disinformation and false content come soon after, with 22 (28.6%) and 18 (23.4%), respectively. Students classify information as fake news or lies less frequently because the other terms are usually more used and are fixed in everyday discussions, as much as they appear in content discussed in class.

Graph 2

Recognition of disinformation dissemination by students



Source: prepared by the authors.

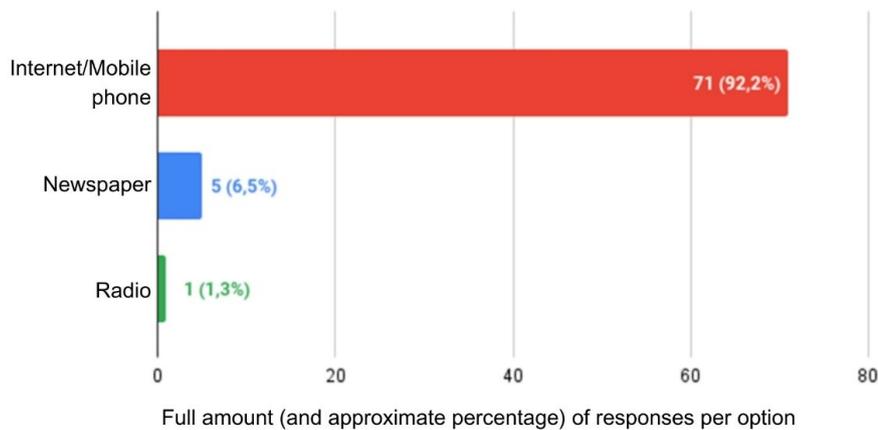
Of the 77 respondents, 32 admit to having already disseminated disinformation because it appeared to be true content (Graph 2). The other most relevant portion was divided between those who said they had never spread disinformation (18) and those who only disseminated it to satirize or make jokes about a specific event (22). To a lesser extent, four responded to being motivated to disseminate disinformation based on a flashy headline, and only one because they agreed with what was published there.

Regarding the support most used by students when seeking information (Graph 3), the data indicate the predominance of mobile phones, with the use of the internet as a resource in 71 cases (totaling 92.2%). Then, but far behind, appear the newspaper, with five mentions (6.5%), and the radio, with one (1.3%). Of the available options, it is worth noting that TV, radio, magazines, or other media were not even mentioned. The following question addressed the participants' preferred sources of information: there was a more fragmented perspective. Online newspaper websites stood out, with 41 responses (53.2%), followed by social networks (18 responses; 23.4%) and radio and TV (9 responses; 11.7%). To a lesser extent, other sources of information and printed newspapers and magazines appeared with four nominations (5.2%) each, while one (1.3%) presents messaging applications as a preference.

Graph 3

Device or support most often used by students to search for information

What device or support do you usually use more frequently to seek information?



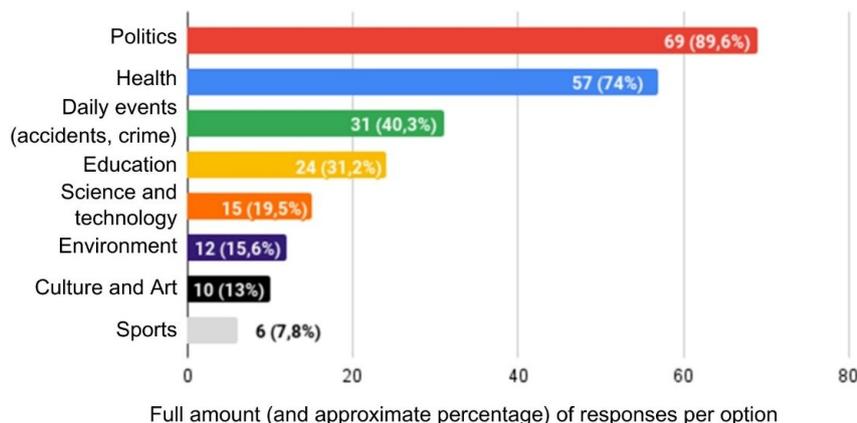
Source: prepared by the authors.

As for the social networks and messaging apps most used to search for information, the multiplicity of options was remembered, dividing the respondents considerably. Twitter and WhatsApp lead with 19 responses (representing 24.7% each), followed closely by Instagram with 18 (23.4%). Subsequently, Facebook and other options appear tied (with six responses, 7.8% each), followed by YouTube (four responses, 5.2%) and five respondents (6.5%), who said they were not used to using social media and apps.

Graph 4

The three primary themes affected by disinformation, according to the students

In your opinion, which are the three primary themes affected by disinformation?



Source: prepared by the authors.

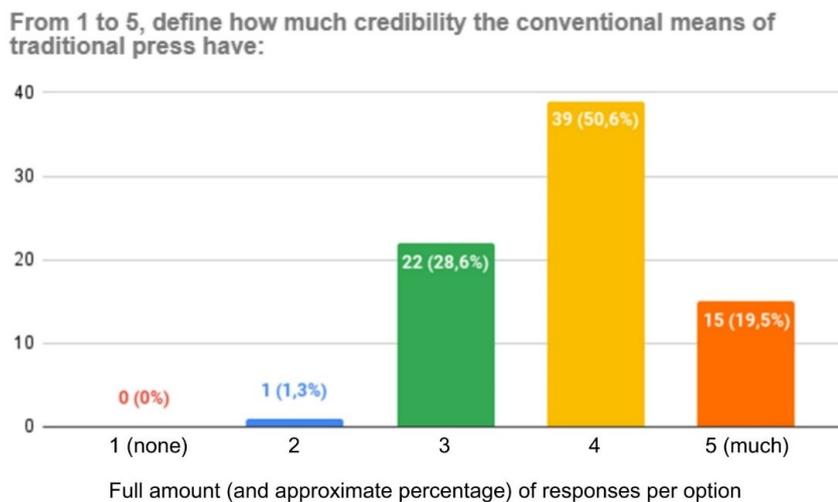
For respondents, the three primary themes most affected by disinformation (Graph 4) are those related to politics (89.6% of respondents), followed by health (74%),

and everyday events such as accidents, assaults, and murders (40.3%). The following subjects appear with less representation in the results, in decreasing order: education (31.2%), science and technology (19.5%), environment (15.6%), culture and art (13%), and sports (7.8%). The hypothesis outlined in the theoretical framework is evident in the students' perception, especially in a moment of uncertainty amid a health and political crisis.

When asked about verification, 40 (51.9%) said they always verify the information they receive. Another 19 (24.7%) verified often, 17 (22.1%) did so sometimes, and only one (1.3%) rarely verified the information. When asked if one should be more suspicious of the information currently received, the trend weighed to one side: 40 (51.9%) argue that it is necessary to distrust most information, while 35 (45.5%) indicated that this should be done with everything. There was only one response (1.3%) to the options that neither more nor less should be distrusted, or that information should not be distrusted in most cases.

Graph 5

Definition, from 1 to 5, of how much credibility the conventional means of the traditional press have

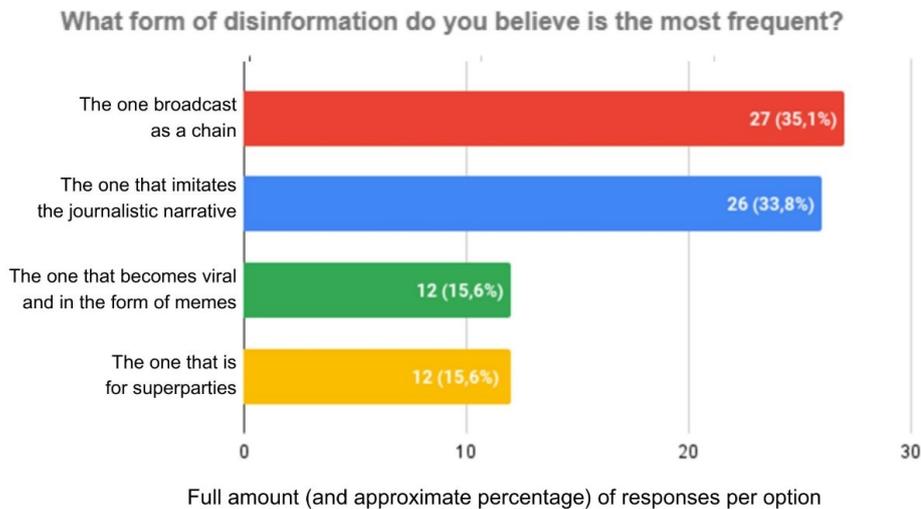


Source: prepared by the authors.

In the following section, which is interested in perceptions concerning disinformation, the first question concerns the credibility offered by the traditional press (Graph 5). On a scale of 1 (no credibility) to 5 (much credibility), most respondents oscillated between the middle (28.6%) and positive positions, between 4 and 5 (which together represent 70.1%).

Graph 6

Disinformation formats that students believe are the most frequent



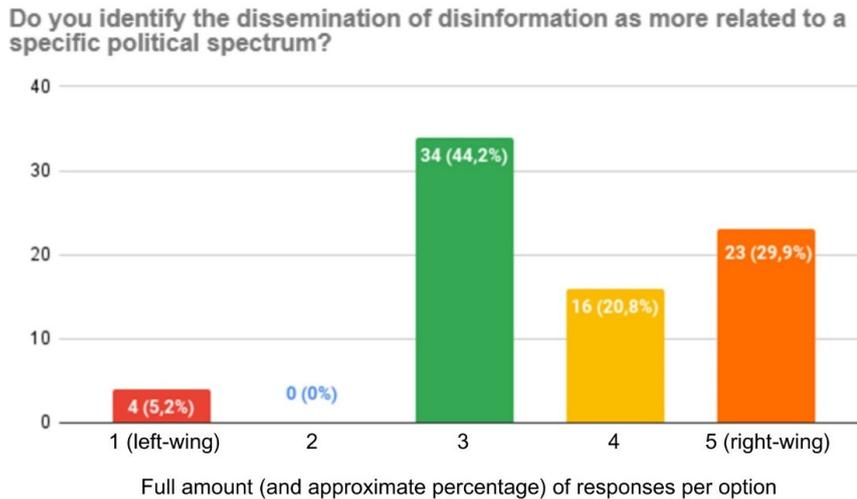
Source: prepared by the authors.

When the most frequent format of disinformation circulation was brought to the agenda, the options most often presented were the one arranged in the form of a “chain” (27 responses; 35.1%) and the one that mimics the journalistic report (26 responses; 33.8%). Those superpartisan contents, or those that spread as a meme (15.6%, totaling 12 responses each), were tied next. In turn, when the question concerns the most relevant aspect to consider true information, the most marked options, in order of appearance, were: Follow the parameters of writing and journalistic investigation, among others (28 responses; 36.4%); be in more than three different sources (25; 32.5%); be in the traditional press (11; 14.3%); be in more than two sources (7; 9.1%), and many people are commenting (on social networks or outside them) (6; 7.8%).

Most (44 respondents, 57.1%) agree that adults between 31 and 64 are primarily responsible for disseminating disinformation. This is followed by older adults aged 65 years and over (17 responses; 22.1%), young people aged 18 to 30 years (12; 15.6%), and adolescents aged 15 to 17 years (4; 5.2%). Subsequently, participants were asked to weigh in on the extent to which the environment of political radicalization contributes to disinformation spreading more easily. The answers were distributed on a scale of 1 (does not contribute) to 5 (contributes a lot) in 55.8% of the cases (43 answers), to contribute a lot; 27.3% (21 people) to contribute partially; another 14.3% (11 students) at the intermediate point; in addition to 2.6% (two people) who say that, partially, there is little contribution.

Graph 7

Identification of the dissemination of disinformation related to some specific political spectrum



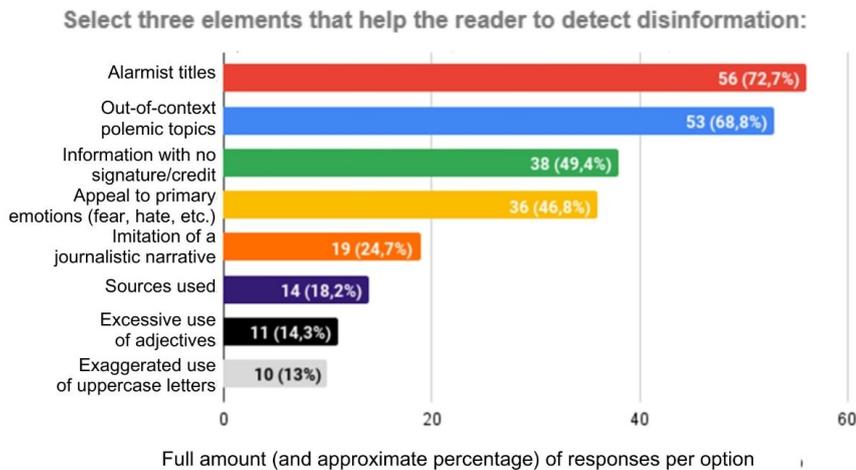
Source: prepared by the authors.

When asked which/who is the primary source of disinformation, 71.4 % (55 people) indicate that the users of social networks are the main ones responsible, once again confirming aspects mentioned in the theorization. Subsequently, they cited Politicians (9 cases, 11.7%), Superparty Websites (8 scores; 10.4%), Robots (4 mentions; 5.2%), and, in one case (1.3%), the traditional press, considering radio, TV, print, and the internet. In this sense, since users and politicians make up most of the disseminators of disinformation, the next question sought to know if, in the opinion of the interviewees, they identified a specific political spectrum with the spread of these contents (Graph 7). In the indicated position, the bars correspond ideologically from 1 to 5 from left to right. Most believe that both spectra share disinformation, but the presence of the right predominates in the accentuated hues.

The next question asked for indications on which social network or messaging app most collaborates with the spread of disinformation. Fifty responses (64.9%) linked WhatsApp to this process, and another 24 (31.2%) linked Facebook; another three were distributed between Instagram, Twitter, and YouTube (1.3% each). Thus, knowing about the motivators, it was the turn to ask if the respondents could identify the differences between true and false content. With 55 students, a relevant percentage (71.4%) indicated that yes, most of the time, while another 15 (19.5%) indicated that yes, they can always do it. To a lesser extent, five (6.5%) claim not to be able to distinguish most of the time, in addition to one (1.3%) who said they could not fully identify and another who did not know how to answer.

Graph 8

Selection of three elements that help the reader detect disinformation

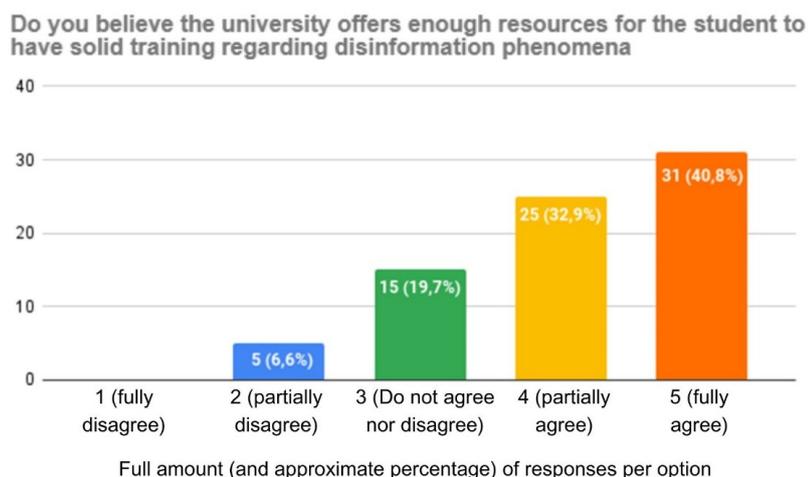


Source: prepared by the authors.

As pertinent as knowing *if* one knows how to notice the disinformation discourse is understanding what elements can help the public identify these contents (Graph 8). Participants were asked to choose three options. Those that stood out were, respectively, alarmist titles (72.7%), controversial topics out of context (68.8%), and information without subscription/credit (49.4%), with honorable mentions to the appeal to primary feelings such as fear, hatred, anger, and disgust, among others (46.8%).

Graph 9

Affirmation of students that the university offers sufficient resources for solid training regarding the disinformation phenomenon



Source: prepared by the authors.

Finally, the last three questions relate university education to the issue of disinformation. The first specifically, said: "as a journalist in training, what level of relevance in the fight against disinformation do you believe this role has?". Again,

on a scale of 1 to 5 between little and very important, almost all participants (96.1%) marked “very important”. The rest (3.9%) placed themselves in the fourth point, further to the right, also in agreement.

In turn, on a scale of 1 to 5, given the statement that university education contributes to being more attentive to the environment where disinformation circulates, 73.7% (56 marks) fully agree; 22.4% (17) partially agree; another 2.6% neither agree nor disagree; and 1.3% (one respondent) partially disagrees. The last question concerns the university's attributions, again from the scale model to distribute the interviewees' perceptions (Graph 9). It was identified that the evaluation oscillates positively, but with variations in degree – between those who fully agree (40.8%), partially agree (32.9%), neither agree nor disagree (19.7%) and those who partially disagree (6.6%).

| Final remarks

The research involved mostly undergraduates from 18 to 24 years old in classes of five different semesters, indicating a preference for the term *fake news* to define the disinformation phenomenon and that most have already spread disinformation by mistake. Internet consultations via mobile phone are the most used resource for obtaining information, preferably through online newspapers. When the focus was directed to online social networks, Twitter and WhatsApp were more representative of social networks and messaging applications. The topics vary, but the ones most affected by disinformation are politics and health. In this sense, respondents said they often or always verify the information they receive and consume, stressing the need to distrust, if not all, at least most of the information, in the sense of verification.

As for perceptions, respondents generally believe that the conventional means of the traditional press have credibility. It was possible to identify that the form disinformation circulates varies, especially as chains or imitating the traditional journalistic narrative, and that the most relevant aspects to assess whether the information is true are those that follow the standards of journalistic production and the information present and duly substantiated in more than three sources. For students, adults are primarily responsible for the circulation of disinformation, which is projected by the environment of political radicalization in which we live.

While most point to the spread of disinformation across both political spectrums, the data indicates a more right-wing shift in the balance, with social media users as motivators – WhatsApp and Facebook being the messaging apps and social networks contributing the most to further driving disinformation. Some students often or always distinguish between true and false content. Alarmist titles and out-of-context controversial topics are the elements that most help differentiate one. Regarding the role of university education, they maintain that professional journalists are fundamental in the fight against disinformation and agree that studying journalism makes them more attentive to the content. They also partially or wholly agreed that the university offers sufficient resources for solid training on disinformation.

It was possible to draw an overview of student habits and perceptions. As far as considerations can be made, reaching conclusions on the subject is complex, and any solution pointed out must seem insufficient. It is worth stating that the results cannot be generalized but can be appropriated by other researchers to help reflect on university spaces from contexts and regions far from large centers, with specific characteristics of the composition of the classes and, consequently, their understanding of the area of training. This condition signals the types of journalists trained and who will go on to perform their duties in different professional areas. It is necessary to recognize the limitations imposed by the research clippings, both from a geographical perspective and because it is only one educational institution in a particular context. The questions, formulated to avoid extending too much and to be accessible to the target audience, were reduced or redirected. It is also essential to understand that other questions can broaden the research horizon that addresses disinformation in university environments, specifically in the Brazilian context.

It is necessary to indicate that the complexity of the phenomenon from higher education students is much greater than it was possible to address here. The universe of students is small but can, for this very reason, shed light where discussions of this genre are not so common – and perhaps this is a possible contribution, reaching spaces to some extent isolated from the centers of debate on the subject, especially in European countries. It is one of the opportunities for future research. It can also explore, for example, the conditions brought by the pandemic and the post-COVID-19 and reconfiguration of the consumption and circulation of (dis)information in this new panorama.

It is essential to revisit fundamental concepts of journalism, such as credibility and truth in journalism, as well as procedures such as verification and narrative composition of news, repositioning them in the contemporary context of radicalization, especially in digital environments. These suggestions are based on respondents' position on trust in the press and how they choose to consume content. In a way, their reflection on this scenario, as undergraduate students, can awaken an articulated and critical thinking concerning journalistic production and information consumption and the parameters of verification and interpretation used by them as professionals and, at the same time, by the public.

In the training process, keeping them alert to the need to verify information, consult reliable and confront misleading sources, analyze, contextualize, and distrust information can be an assignment reinforced by professors. Media criticism and literacy; the debate regarding the work developed by fact-checking agencies and other initiatives; the habit of questioning when someone shares this type of content; the actions to be taken by governments, companies, and other institutions to pressure the technology giants in the face of lack of transparency; and the promotion of scientific thought so that it continues to develop research on the subject, without necessarily disconnecting from reality come into account. However, universities and professors who teach journalists must adapt to changes in the profession if society builds a new information ecosystem, even if they are not prepared. It may not be that all the answers come from there, but at least some go through training.

References

- Albuquerque, A. (2021). As fake news e o Ministério da Verdade Corporativa. *Revista Eptic*, 23(1), 124-141. <https://periodicos.ufs.br/epitic/article/view/14670/11591>
- Allcott, H., & Gentzkow, M. (2017). Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives*, 31(2), 211-36. <https://doi.org/10.1257/jep.31.2.211>
- Bennett, W. L., & Livingston, S. (2021). *The disinformation age: politics, technology, and disruptive communication in the United States*. Cambridge University Press. <https://doi.org/10.1017/9781108914628>
- Brisola, A., & Bezerra, A. (2018). Desinformação e Circulação de “Fake News”: distinções, diagnóstico e reação. *XIX Encontro Nacional de Pesquisa em Ciência da Informação*, ENANCIB, Londrina, Paraná, Brasil. <https://brapci.inf.br/index.php/res/download/124659>
- Catalina-García, B., Sousa, J. P., & Sousa, L. S. C. S. (2019). Consumo de notícias y percepción de fake news entre estudiantes de Comunicación de Brasil, España y Portugal. *Revista de comunicación*, 18(2), 93-115. <https://doi.org/10.26441/RC18.2>
- Centro Regional de Estudos para o Desenvolvimento da Sociedade da Informação (Cetic.br). (2020). Três em cada quarto brasileiros já utilizam a internet, aponta pesquisa TIC Domicílios 2019. *Cetic.br*. <https://cetic.br/pt/noticia/tres-em-cada-quatro-brasileiros-ja-utilizam-a-internet-aponta-pesquisa-tic-domicilios-2019/>
- Christofoletti, R. (2019). *A crise do Jornalismo tem solução?* Estação das Letras e Cores.
- Correia, J. C. (2019). O novo ecossistema mediático e a desinformação como estratégia política dos populismos. *Estudos em Jornalismo e Mídia*, 16(2), 23-32. <https://periodicos.ufsc.br/index.php/Jornalismo/article/view/1984-6924.2019v16n2p23/41933>
- Delmazo, C., & Valente, J. C. L. (2018). Fake News nas redes sociais online: propagação e reações à desinformação em busca de cliques. *Media&Jornalismo*, 18(32), 155-169. https://doi.org/10.14195/2183-5462_32_11
- Empoli, G. (2019). *Os engenheiros do caos: como as fake news, as teorias da conspiração e os algoritmos estão sendo utilizados para disseminar ódio, medo e influenciar eleições* (Tradução Arnaldo Bloch. 1 ed.). Vestígio.
- European Commission. (2018). *A multi-dimensional approach to disinformation: Report of the independent High level Group on fake News and online disinformation*. Publications Office of the European Union. <https://op.europa.eu/en/publication-detail/-/publication/6ef4df8b-4cea-11e8-be1d-01aa75ed71a1/language-en>
- Gil, A. C. (1987). *Métodos e técnicas de pesquisa social*. Atlas.
- Glisson, L. (2019). Breaking the Spin Cycle: Teaching Complexity in the Age of Fake News. *Libraries and the Academy*, 19(3), 461–484. <https://muse.jhu.edu/article/729198>
- Head, A. J., Wihbey, J., Metaxas, P. T., MacMillan, M., & Cohen, D. (2018). *How Students Engage with News: Five Takeaways for Educators, Journalists, and Librarians*. Project Information Literacy Research Institute. <http://www.projectinfolit.org/uploads/2/7/5/4/27541717/newsreport.pdf>
- Herrero-Diz, P., Conde-Jiménez, J., & Cózar, S. R. (2020). Teens’ Motivations to Spread Fake News on WhatsApp. *Social Media + Society*, 6(3). <https://doi.org/10.1177/2056305120942879>

- Herrero-Diz, P., Conde-Jiménez, J., Tapia-Frade, A., & Varona-Aramburu, D. (2019). The credibility of online news: an evaluation of the information by university students/La credibilidad de las noticias en Internet: una evaluación de la información por estudiantes universitarios. *Cultura y Educación*, 31(2), 407-435. <https://doi.org/10.1080/11356405.2019.1601937>
- Intervezes. (2019). *Desinformação: ameaça ao direito à comunicação muito além das fake news*. São Paulo. <https://app.rios.org.br/index.php/s/p9HoCNpPoPYQJc5>
- Kakutani, M. (2018). *A morte da verdade: notas sobre a mentira na era Trump* (Tradução de André Czarnobai e Marcela Duarte, 1 ed.). Intrínseca.
- Kovach, B., & Rosenstiel, T. (2004). *Os elementos do Jornalismo* (Tradução de Waldir Dupont). Geração Editorial.
- Leite, L. R. T., & Matos, J. C. M. (2017). Zumbificação da informação: a desinformação e o caos informacional. *Revista Brasileira de Biblioteconomia e Documentação*, 13(n. esp.), 2334-2349. <https://rbbd.febab.org.br/rbbd/article/view/918/941>
- Levitsky, S., & Ziblatt, D. (2018). *Como as democracias morrem*. Editora Schwarcz-Companhia das Letras.
- Lopes, M. I. V. (2005). *Pesquisa em comunicação*. Loyola.
- Lopes, P., Pereira, S., Moura, P., & Carvalho, A. (2015). Avaliação de competências de literacia mediática: o caso português. *Revista Observatório*, 1(2), 42-61. [10.20873/uft.2447-4266.2015v1n2p42](https://doi.org/10.20873/uft.2447-4266.2015v1n2p42)
- Marwick, A., & Lewis, R. (2017). *Media Manipulation and Disinformation Online*. Data&Society.
- Meditsch, E. (1997). O Jornalismo é uma forma de conhecimento? *Biblioteca Online de Ciências da Comunicação*. <http://www.bocc.ubi.pt/pag/meditsch-eduardo-Jornalismo-conhecimento.pdf>
- Mendiguren, T., Pérez Dasilva, J., & Meso Ayerdi. (2020). Actitud ante las fake news: Estudio del caso de los estudiantes de la Universidad Del País Vasco. *Revista de Comunicación*, 19(1), 171–184. <https://doi.org/10.26441/RC19.1-2020-A10>
- Pereira, S. (2021). *Crianças, Jovens e Media na Era Digital: Consumidores e Produtores?* UMinho Editora. <https://ebooks.uminho.pt/index.php/uminho/catalog/view/45/80/891>
- Posetti, J., & Matthews, A. (2018). *A short guide to the history of 'fake news' and disinformation*. International Centre for Journalists. https://www.icfj.org/sites/default/files/2018-07/A%20Short%20Guide%20to%20History%20of%20Fake%20News%20and%20Disinformation_ICFJ%20Final.pdf
- Posetti, J.; & Bontcheva, K. (2020). *Disinfodemic: Dissecting responses to COVID-19 disinformation*. UNESCO. https://en.unesco.org/sites/default/files/disinfodemic_dissecting_responses_covid19_disinformation.pdf
- Prazeres, M., & Ratier, R. (2020). O fake é fast? Velocidade, desinformação, qualidade do Jornalismo e media literacy. *Estudos em Jornalismo e Mídia*, 17(1). <http://doi.org/10.5007/1984-6924.2020v17n1p86>
- Ramonet, I. (2012). *A explosão do Jornalismo: da mídia de massas à massa de mídias*. Publisher Brasil.
- Reginato, G. (2019). *As finalidades do Jornalismo*. Insular.
- Santos-D'Amorim, K., & Miranda, M. K. F. O. (2021). Misinformation, disinformation, and malinformation: clarifying the definitions and examples in disinfodemic times. *Encontros Bibli*, 26. <https://periodicos.ufsc.br/index.php/eb/article/view/76900/45818>

- Tandoc Jr., E. C., Lim, Z. W., & Ling, R. (2017). Defining 'fake news': A typology of scholarly definitions. *Digital Journalism*, 6(2), 137–153. <https://doi.org/10.1080/21670811.2017.1360143>
- Tandoc Jr., E. C. (2019). The facts of fake news: a research review. *Sociology Compass*, 13(9). <https://doi.org/10.1111/soc4.12724>
- Tandoc Jr., E. C. (2021). Tools of Disinformation: How Fake News Gets to Deceive. Em B. Ang et al. *Disinformation and Fake News*. Palgrave MacMillan. https://link.springer.com/chapter/10.1007/978-981-15-5876-4_3
- Tejedor, S., Portalés-Oliva, M., Carniel-Bugs, R., & Cervi, I. (2021). Journalism Students and Information Consumption in the Era of Fake News. *Media and Communication*, 9(1), 338-350. <https://www.cogitatiopress.com/mediaandcommunication/article/download/3516/3516>
- Varão, R. (2020). A dimensão ética do conceito de verdade e suas relações com o Jornalismo: antes e durante a pandemia. *18º Encontro Nacional de Pesquisadores em Jornalismo*, Brasil. <https://sbpjour.org.br/congresso/index.php/sbpjour/sbpjour2020/paper/viewFile/2761/1379>
- Waisbord, S. (2018). Truth is what happens to news. *Journalism Studies*, 19(13), 1866–1878. <https://doi.org/10.1080/1461670X.2018.1492881>
- Wardle, C., & Derakhshan, H. (2017). *Information disorder: Toward an interdisciplinary framework for research and policymaking*. Council of Europe. <https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-research/168076277c>
- Wardle, C., Greason, G., Kerwin, K., & Dias, N. (2018). *Information disorder: The essential glossary*. Harvard, MA, USA: Shorenstein Center on Media, Politics, and Public Policy, Harvard Kennedy School. https://firstdraftnews.org/wp-content/uploads/2018/07/infoDisorder_glossary.pdf

About the authors

Luiz Henrique Zart

Universidade Federal de Santa Catarina, Florianópolis, Brazil

 <https://orcid.org/0000-0001-9219-8197>

PhD student and Master's degree in Journalism from the Postgraduate Program in Journalism at the Federal University of Santa Catarina (PPGJOR/UFSC, 2024). Graduated in Journalism from the Planalto Catarinense University (Uniplac, 2016). Coordinator of the Contemporary Media Narratives Research Network (Renami) and Member of the Transverse Research Group: Studies in Journalism, Public Interest and Criticism. Email: luizhenriquezart@hotmail.com

Rita de Cássia Romeiro Paulino

Universidade Federal de Santa Catarina, Florianópolis, Brazil

 <https://orcid.org/0000-0002-3020-7091>

PhD in Engineering and Knowledge Management, in the area of Media and Knowledge, from the Federal University of Santa Catarina (2011). Professor in the Postgraduate Program in Journalism at the Federal University of Santa Catarina. She's part of the Applied Research Network Journalism and Digital Technologies (JORTEC) and participates in the Center for Studies and Production in Hypermedia

applied to Journalism of the Hypermedia and Language Research Group. Email: rcpauli@gmail.com

Participation in the preparation of the manuscript – First author: proposal and execution of the study, application of questionnaires, data analysis, writing of the text and formatting. Second author: review of the text and adjustment of the writing.

| **Resumo**

Este artigo estudou percepções de estudantes de graduação em Jornalismo de uma universidade da serra catarinense (Brasil) sobre desinformação. A pesquisa é descritiva, exploratória, e a coleta é feita por formulário on-line, com 24 perguntas, de 16 a 23 de abril de 2021. A amostra é não-probabilística, por conveniência, com 77 respondentes, entre os 88 matriculados no primeiro semestre de 2021. Os resultados indicam: *fake news* é o termo escolhido para definir o fenômeno; busca-se informação em celulares com internet, em redes sociais e aplicativos de mensagem. Destaca-se: política e saúde são os temas mais afetados, em correntes ou mimetizando conteúdo jornalístico, por adultos radicalizados politicamente à direita. Conclui-se que é preciso desenvolver capacidade crítica, levantando questões como a crítica midiática e o combate à desinformação, a serem estimulados nas universidades, na formação de futuros jornalistas – com currículos que invistam na formação teórico-metodológica e epistemológico-reflexiva, não apenas prática, dos discentes.

Palavras-chave: Jornalismo. Graduação. Desinformação.

| **Resumen**

Este artículo estudió las percepciones de estudiantes de Periodismo de una universidad de la sierra de Santa Catarina (Brasil) sobre la desinformación. La investigación es descriptiva, exploratoria y la recolección se realiza mediante formulario en línea, con 24 preguntas, del 16 al 23 de abril de 2021. La muestra es no probabilística, por conveniencia, con 77 encuestados entre los 88 matriculados en el primer semestre de 2021. Los resultados indican: *fake news* es el término elegido para definir el fenómeno; se busca información en celulares con internet, en redes sociales y aplicaciones de mensajería. Destaca: la política y la salud son los temas más afectados, en corrientes o mimetizando contenidos periodísticos, por los adultos políticamente radicalizados hacia la derecha. Se concluye que es necesario desarrollar la capacidad crítica, planteando temas como la crítica mediática y la lucha contra la desinformación, para ser incentivada en las universidades, en la formación de los futuros periodistas – con planes de estudio que inviertan en la formación teórico-metodológica y epistemológico-reflexiva, no sólo la práctica de los estudiantes.

Palabras clave: Periodismo. Graduação. Desinformação.

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