Article

Sourcing Local Information in News Deserts

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Abstract: (1) Background: News deserts are communities without a local news outlet, or communities where residents face significantly reduced access to the news of the local public sphere. The demise of a local news outlet can have negative effects on community engagement and on the discussion of solutions to community problems. In Portugal, for example, 25% of municipalities do not have their own media outlets. When there are no journalists reporting on reality, studies show that much of the local information in these territories is obtained through social media, such as Facebook pages and groups, which can be a source of disinformation and manipulation that communities become vulnerable to. (2) Methods: Through focus groups in the municipality of Manteigas, we researched perspectives and behaviours, as well as the factors that influence people's choices in the consumption of information. (3) Results: We found that citizens used a wide range of informational sources, with a strong dependence on social media and institutional channels to access local information. (4) Conclusions: Proximity relationships are the basis of fact-checking processes, and citizens showed less concern about disinformation and more trust in the information they accessed through official institutions' pages and through word-of-mouth in their communities.

Keywords: news deserts; local journalism; information sources; disinformation; focus groups

1. Introduction

The 2022 report on Portugal's news deserts showed that 54 municipalities in the country had no own media outlets at all, while another 24 have only one media outlet which does not serve its community on a regular basis (Jerónimo et al. 2022). Among these news deserts is the municipality of Manteigas. Located in the middle of the Serra da Estrela mountain range, Manteigas was one of the municipalities worst hit by the fires that ravaged Europe in the summer of 2022, causing millions in damages and putting thousands of lives at risk (Expresso 2022).

With no media outlets of their own, the community of Manteigas had to rely on newspapers and radio stations from other municipalities, as well as alternative sources of information, to find out about the progress of the fires. Months after the incidents, the mayor of Manteigas, Flávio Massano, was one of those invited to take part in a roundtable discussion on the lack of local journalism, during the launch of the report on Portugal's news deserts, at the University of Beira Interior (Torre 2022).

Massano bemoaned the absence of a local media outlet in the municipality and emphasised his own personal role, through social media, in the task of informing the population about the situation of the fires, replacing the work that would ideally be done by local journalists. He did not use the council's official Facebook page, but his own personal account on the same social network.

The case of the Manteigas fires was the initial question for the research that resulted in this article. How does a population find out about news events in a municipality that is in a news desert? Is the mayor's personal Facebook page, which he mentioned at the event on news deserts, seen as a source of information for this community? Does the community

worry about disinformation? How do they build trust with the information they get about what happens in their municipality?

The aim of this article is to seek answers to these questions and understand the dynamics of local information in a municipality classified as a news desert. Communities have a need to know what is happening around them, even without the presence of a local newspaper or radio station. We chose the municipality of Manteigas to carry out this study in view of what happened in 2022, using focus groups, which allow us to understand everyday practices and processes of reality construction by social groups (Gatti 2005). The answers are useful not only for the case studied, but also for broadening the debate on information sources, disinformation and news deserts.

This article is divided into three parts. The first part reviews the literature and contextualises this research in the crisis in local journalism and the emergence of the news deserts phenomenon. It then discusses issues related to disinformation and trust in news in these same contexts. The second section lays out the chosen methodology and describes all the procedures adopted for selecting participants and conducting focus groups. Finally, the results and discussion are presented, interweaving our findings with the existing literature and reflecting on future avenues of research on the subject of news deserts.

2. Theoretical Framework

2.1. Crisis in Journalism

Connecting the words 'crisis' and 'journalism' has become commonplace in the 21st century, as a result of mass layoffs in newsrooms, newspaper closures and sharp drops in television news ratings. The loss of revenue for newspapers, radio stations and TV news networks has only increased with the popularisation of the internet, but it should not be considered the only crisis in the media sector. For Christofoletti (2019), the crisis in journalism is multiple in nature, at once financial, political, of credibility and of governance.

This is because, at the same time as the media have lost financial resources, the 21st century has also seen a growth in disinformation that has affected the credibility of the media. This disinformation is directly associated with the presence of new actors in the information ecosystem, which has overturned the centrality of the role of journalism in the hierarchisation and dissemination of information in the public sphere. These changes have taken place while a technological revolution changed the internal management of each media company (Christofoletti 2019; Nerone 2015).

In terms of management, Anderson et al. (2012) and Costa (2014) emphasised that the business model of journalism was directly affected by the revolution in Information and Communication Technologies (ICTs), which began at the end of the 20th century but accelerated in the 21st century. In the digital transition that ensued, newspapers have struggled to adapt, to earn sufficient funds and to reach their audiences.

According to Costa (2014), the business model for newspapers in the 20th century consisted of earning 80 percent of their income from advertising and 20 percent from subscriptions. Internet advertising, however, is now mostly controlled by intermediary platforms such as Google and Facebook, which concentrated 73 percent of US digital advertising six years ago (Hindman 2018). Digital subscriptions, on the other hand, have never had sufficient appeal. According to the Digital News Report 2023, among the 20 richest countries the report focused on, the average number of digital consumers interested in paying for access to news was 17 percent, and this figure was even lower in Portugal, at 12 percent (Cardoso et al. 2023).

In addition to their funding crisis, traditional media outlets have seen a sharp drop in readership in this century. In Portugal, the country's largest newspapers put together recorded a 47 percent drop in sales (both subscription and individual sales) between 2008 and 2017 (Quintanilha 2018).

The drop in circulation of printed newspapers is not new. According to Meyer (2009), it has been happening in the United States since the second half of the 20th century, but the problem had been largely ignored because advertising revenue was increasing. Nelson

(2019) pointed out that newspapers paid little attention to their audiences in recent decades around the world, having greater concern for official sources and big advertisers.

The consequence was a drop in sales from the 21st century onwards, when the public began to have alternative information sources, with the pulverisation of information providers on blogs, social networks and other internet pages (Ramos 2023). In addition, newspapers were slow to adapt to digital formats, especially mobile-based news consumption (Canavilhas 2021; Christofoletti 2019).

2.2. Local Journalism and Media

The flight of advertisers to digital platforms, the disinterest of new generations in print journalism, the successive economic crises experienced around the world since 2008 and the lack of digital infrastructure have contributed to the emergence of news deserts (Abernathy and Franklin 2022).

In the United States, newspapers had traditionally been the main and sometimes sole source of local news and information for people living in small urban and rural communities located far from big metropolises. When a newspaper disappears, it is rarely replaced by a digital news outlet, leaving communities without any alternative local information (Abernathy and Franklin 2022).

Research into news deserts has grown over the last decade, with more systematic studies initially taking place in the United States and Brazil (Ferrier et al. 2016; Abernathy 2018; Atlas da Notícia 2021) and new research questions and concepts related to this topic being developed more recently (Gulyas et al. 2023). In Europe, for example, such research has only recently begun to emerge (Negreira-Rey et al. 2020; Gulyas 2021; Ramos 2021; Jerónimo et al. 2022; Silva 2022).

In 2022, a consortium formed after a call from the European Commission, led by the European Federation of Journalists, resulted in the first comprehensive mapping of the continent and in a theoretical basis for understanding the phenomenon of news deserts considering the particularities of the European context (Blagojev et al. 2023; Verza et al. 2024). In this approach, a news desert is defined as "a geographic or administrative area, or a social community, where it is difficult or impossible to access sufficient, reliable, diverse information from independent local, regional and community media" (Verza et al. 2024, p. 5), considering the diversity and heterogeneity of European countries.

News deserts are often found in territories located far from large cities, where there is low economic dynamism and where the population tends to be smaller, less educated and older than the country's average (Abernathy and Franklin 2022; Furlanetto and Baccin 2020). In these places, cities, towns and villages experience a contradiction: they have access to reliable journalistic information about events in other states and countries, but they do not have a credible journalistic source of information about their own community—and this does not mean that nothing happens there (Ramos 2021; Furlanetto and Baccin 2020).

These characteristics encompass the scope of local journalism. Historically, local media outlets have served as mediators of political, economic, and social forces in local public spheres (Camponez 2002; Correia 2012). At the same time, they are integrated into the communications market and are influenced by interests associated with other fields (Peruzzo 2005). However, in an environment now dominated by social media platforms (Poell et al. 2020), local journalism faces serious disadvantages and is slow to adapt to the digital model and its business models (Jerónimo 2015). Among the difficulties, we highlight the lack of personnel and resources to manage digital versions and the reduced scale of engagements and interactions, since media outlets with low relevance on social media are overlooked by large media groups because they generate low commercial returns (Toff and Mathews 2021; Heinderyckx and Vos 2016).

A study of local newspapers in France identified a reduction in the number of journalists and the number of articles in newspapers in the country and related this to a reduction in political participation (Cagé 2020). In the face of the crisis in Wales, Williams (2013)

advocated public funding for local newspapers if we want to have a functional democracy, with informed citizens and scrutinised politicians.

Another characteristic pointed out in the literature on news deserts is their relationship with depopulation. In this case, it is not just that they are municipalities with a smaller population, but that they have recently been losing inhabitants. The phenomenon of depopulation is particularly stark in inland regions in countries such as Spain and Portugal (Negreira-Rey et al. 2023; Saiz-Echezarreta et al. 2023; Jerónimo et al. 2022). In Portugal, a report (Jerónimo et al. 2022) showed that over half of the country's 50 least populous municipalities are news deserts or semi-deserts, encompassing 1.4 million people.

2.3. News Deserts

The lack of local news coverage and the concentration of media outlets in urban and densely populated areas deepens inequalities and unbalances democratic processes, with an impact on community representation (Bisiani and Heravi 2023). The lack of news coverage can also result in reduced scrutiny of local institutions, increased vulnerability to disinformation on social media, hate speech or populism, and a growing sense of mistrust and confusion (Ardia et al. 2020; Barclay et al. 2022; Torre and Jerónimo 2023).

One of the first mappings carried out in Europe, the report (Jerónimo et al. 2022, see Figure 1) reveals that 25.3 percent of Portugal's municipalities have no local media organisations of their own. Of these 78 municipalities, 17.5 percent are in total desert, i.e., they host no local media outlets at all, and around 8 percent are in semi-desert, i.e., they only have infrequent news coverage (Jerónimo et al. 2022).
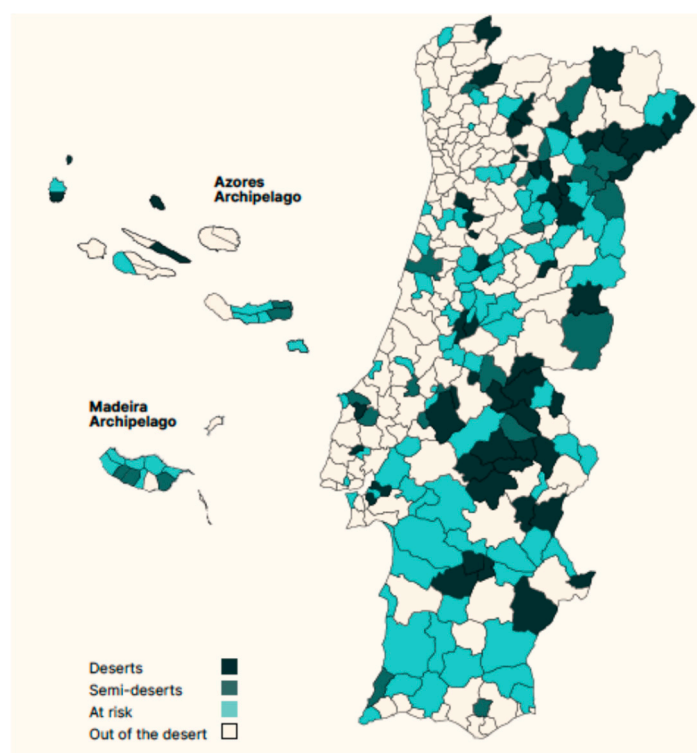

Figure 1. News deserts in Portugal. Retrieved from Jerónimo et al. (2022).

In this study, around half of Portugal's municipalities are shown to be at some degree of risk in terms of their local news coverage, ranging from the lowest (threatened) to the highest (desert), passing through intermediate situations (semi-desert). This means that more than half (53.9 percent, or 166) of Portugal's 308 municipalities are on the verge of becoming news deserts, or are already in that state.

Research into news deserts raises a fundamental question: how do citizens living in these territories find out about their local reality? In the absence of formal media

outlets, information finds other ways to circulate (Deolindo 2013). As observed in studies conducted in the USA, the UK and Brazil, when there are no journalists to report on the local reality, much of the local information in these areas is disseminated through social media platforms, such as Facebook pages and groups (Collier and Graham 2022; Furlanetto and Baccin 2020; Javorski and Bargas 2020; Smethers et al. 2021), but also, in some specific communities, through alternative solutions such as community and student initiatives (Ferrucci and Alaimo 2020; Finneman et al. 2023; Javorski and Bargas 2020).

In this way, some residents claim that it is possible to know what is happening locally from their experience on these platforms, but others realise that the information they receive is only representative of a small part of the local reality (Collier and Graham 2022). Often, the content that circulates among citizens on these networks is not original and does not offer a local approach. In this sense, information of questionable quality ends up fulfilling the role of journalism in a scenario in which individuals read the headlines on social media but do not click the links for the full stories, receiving information on a superficial level, without contextualisation, according to the logic of their existing social relationships (Javorski and Bargas 2020). The fragmentation of news sources across different audiences, many of which are based on social media platforms, can also end up promoting community fragmentation (Smethers et al. 2021).

2.4. Disinformation and Trust in Media

The fragmentation of news sources and the circulation of unverified information on social media platforms can result in greater disinformation and manipulation (Javorski and Bargas 2020; Ardia et al. 2020; Smethers et al. 2021). Furthermore, the use of social media can exacerbate social division and polarisation, and "Facebook rumours" can heighten this dysfunction. Information that is filtered through social media algorithms can cause fear, anxiety or anger in those who consume it, which is aggravated by the fact that, in news deserts, there are no professional journalists investigating, checking the facts and confirming or refuting them (Barclay et al. 2022). In these cases, the public debate would be more balanced if the public sphere was shared between this type of social media information and journalistic information (Abernathy and Franklin 2022; Torre and Jerónimo 2023).

This raises other questions. In order for informal information to be understood and given the status of news, given its status as the only source of local information, citizens must themselves have the skills and tools to identify its veracity (Javorski and Bargas 2020). Citizens' use of such platforms depends on their technical skills and their previous usage of these sites in order to be able to correctly navigate the information ecosystems and to fill the gap left by the local information void in news deserts (Smethers et al. 2021).

Disinformation has a high potential to undermine democracy, and this is especially true at a local level. This makes the role of regional media in combating disinformation in local contexts especially central, including fact-checking routines and in-depth reporting; but the answers to this issue can also emerge from the local public sphere itself, namely through collaborative relationships between journalists and other active members of the community (Jerónimo and Esparza 2022; Torre and Jerónimo 2023).

3. Materials and Methods

This study is based on the mapping carried out by Jerónimo et al. (2022), which identifies municipalities that are considered to be news deserts. In it, the municipality of Manteigas, located in the Centre region of Portugal (NUTS II), is identified as a territory in which there are no local media organisations working out of the municipality. Located in the district of Guarda, it is a small municipality (around 122 km^2) with a population of 2900 inhabitants and an average population degrowth rate of -1.4% per year between 2011 and 2022. Its elderly population is higher than the average for the region (38.6% vs. 27.4%), and its total dependency ratio (between the economically dependent population and the economically active population) is higher than what has been verified in the rest

of the region, at 87% in Manteigas compared to 64.6% in the Centre region (Gabinete de Estratégia e Estudos 2022).

In 2022, the municipality faced a major forest fire without any media outlets to provide local news coverage. The last local newspaper in operation, *Notícias de Manteigas*, was a monthly print publication that ran between 1977 and 2020, owned by the Cooperativa Jornalística de Manteigas, and it had shut its doors during the COVID-19 pandemic. Although the journalistic co-op itself has not been closed down, its activities have been suspended. During the fires, one of the main sources of information about this event was the Facebook page of the mayor, Flávio Massano, which serves to highlight the information gap that results from the lack of local media outlets[1].

Neighbouring municipalities such as Guarda, Gouveia, Covilhã and Seia have local newspapers that are also distributed in Manteigas. This is the case of the *Notícias de Gouveia* and *Notícias da Covilhã*, centennial, print newspapers—the first, tri-monthly and the latter, weekly. While *Notícias de Gouveia* has no online edition, *Notícias da Covilhã* remained laid off during the COVID-19 pandemic, returning their activities in 2023 as a free distribution newspaper and a news website. In Covilhã, there is also the *weekly Jornal Fórum Covilhã*, which also has an online website.

Other print and online news outlets that serve the area are located in Guarda, which are the *Jornal O Interior* and the newspaper *A Guarda*, both having weekly print editions and online news websites. Considering online news websites, there are also Beiras.pt, in Guarda, and Seia Digital, in the municipality of Seia. Other newspapers in the region are monthly print newspapers. The region also has some important radio stations: Rádio Clube Covilhã (RCC), in Covilhã; Rádio Altitude and Rádio F, in Guarda; Rádio Antena Livre de Gouveia, In Gouveia, and RCS—Rádio Cultura de Seia, in Seia.

In order to understand different perspectives, ideas, feelings, representations, values and behaviours, as well as the factors that influence citizens' choices and positions in their consumption of information when they cannot go to the local press to find out what is going on where they live, focus groups were used as a research methodology, according to Gatti (2005). The focus group technique was also chosen because it makes it possible to understand processes of reality construction by certain social groups and to understand everyday practices, behaviours and attitudes (Gatti 2005), which are some of the objectives of this study.

This research brought together 14 participants in three groups segmented by age: young people aged between 15 and 25 (FG3), adults aged between 26 and 48 (FG1) and adults + seniors, aged between 48 and 69 (FG2) (see Table 1). The focus groups were held in two stages. In the first, on 15 November 2023, two face-to-face focus groups were held (adults and adults + seniors), attended by 5 and 4 participants, respectively. In the second stage, on 13 May 2024, an online focus group was held, attended by 5 young people. The groups lasted between 80 and 100 min. Participants were recruited through contacts with civil society associations and institutions (e.g., schools), face-to-face invitations in the town of Manteigas and the snowball method based on referrals from participants who had already been recruited.

The latter method, which is suitable for exploratory purposes, as is the case with this study, was used since the aim of the research is not related to statistical probability, and the population being investigated is relatively difficult to access since it is small and spread over a large geographical area (Vinuto 2014). Between 10 and 13 people were invited to each group. Participants selected had lived in the municipality of Manteigas for at least a year and therefore had experience of the subject under investigation (Gatti 2005). Segmenting by age allows us to compare results between citizens from different backgrounds, which is also something we are interested in understanding in this study.

Although the people invited to the groups agreed to take part, there was a surprisingly high number of people who did not turn up on the day scheduled for the groups, both in person and online, which prevented a larger sample of focus groups and a wider range of ages, particularly between 18 and 35. Despite this limitation, which resulted in an over-

representation of students, we were still able to gather valuable insights on how people living in news deserts obtain and verify local information.

Table 1. Study participants.

ID	Group	Gender	Age	Occupation
P1	FG1	Female	38	Commercial Director
P2	FG1	Female	36	Business owner
P3	FG1	Male	45	Public servant
P4	FG1	Male	43	Teacher
P5	FG1	Female	29	Journalist
P6	FG2	Male	61	Librarian
P7	FG2	Male	69	Retired
P8	FG2	Female	49	Lawyer
P9	FG2	Female	68	Retired
P10	FG3	Male	17	Student
P11	FG3	Male	18	Student
P12	FG3	Female	15	Student
P13	FG3	Female	18	Student
P14	FG3	Male	15	Student

Source: own work.

The aim of this study was to understand which sources of information are used by the inhabitants of the municipality, how concerned they are about misinformation and how they build a relationship of trust with the information sources they rely on.

The script for these groups was structured around three axes: (a) News Consumption; (b) Disinformation and Information Verification; and (c) Trust. The first axis, News Consumption, had eight questions, divided into three segments: Sources of information (4 questions); Perception of the level of information (3 questions); Relationship with journalism (1 question). The second axis, Disinformation and Information Verification, was divided into two segments: Concern about disinformation (3 questions); and Verification of information (2 questions). The third axis, Trust, included two segments: Trust in the information and sources you consume (2 questions) and Trust in the media (2 questions).

This research aims to find answers to the following research questions:

RQ1. How do individuals living in a news desert find out information about their local reality?
RQ2. At what level do the inhabitants of a news desert worry about and deal with disinformation?
RQ3. What are the factors that lead individuals living in a news desert to trust or distrust information?

4. Results

The coding of the focus groups generated a group of coded segments, divided between the topics discussed. For the purposes of this article, we did not count the segments by code or sub-code, as some topics had more questions than others and/or the coded statements referred to the same topics in different ways. Therefore, the analysis centres on highlighting the practices and perceptions of the participants, regardless of how many times a given term or subject was brought up.

4.1. News Consumption

Starting with the central question of our investigation, we observed that in the absence of local media, the residents of Manteigas mostly turned to social media for information

about what was happening in the municipality. Word-of-mouth, informal information from networks of friends or family, appeared to be the second way of accessing information, followed by news published in neighbouring municipalities' outlets and by national-scope outlets.

> In terms of information channels, social media are the most favoured. I speak from experience, because I was away from Portugal, and during that time the only information I received was from people's personal and institutional profiles. The City Council's website at the time didn't have content as varied and extensive as it does today. It didn't exist, but in a very incisive way, we could say, people made information available. In other words, people are aware, they communicate, they publish, and then there's the discussion, the comments, the sharing. (P4)

> We don't have a media organisation here, not print, radio, television or anything else. The information we get is through social media, or word of mouth, which needs a lot of confirmation. And today we're going to go to the social media platforms, Facebook and Instagram, which are the ones I've used and which very few people use, fortunately, here in Manteigas, I have to say. Basically, that's where we get the information or publicity. (...) It's information, what we get is more publicity than opinion, or much less editorial. (P6)

In the group of seniors, one participant said she did not use any social networks, and three other participants said they attended Manteigas Town Council meetings sporadically in person. Among the young people and adults, it was mentioned that they accessed recorded or live town hall sessions on YouTube and found these videos shared on LinkedIn, obtaining information through these two platforms.

Facebook is the most used social media platform among the participants. Other platforms for accessing news include messaging apps such as Messenger and WhatsApp (both owned by the holding company Meta, which also controls Facebook) and YouTube. Participants say they get their information not only from posts on institutional pages and from friends and acquaintances, but also from comments on posts, which can add new layers of information. "Someone always ends up explaining what happened... and puts it into context." (P5)

In Manteigas, we should highlight the fact that the mayor uses his personal Facebook profile to post official information that is important to the daily lives of the inhabitants. The profile was cited as one of the main sources of information about what happens in the municipality in all the focus groups.

> For my part, I think that the information comes from the pages that I tend to look at most closely and from where I get the most information, I would say the Manteigas Vale por Natureza page, also the one belonging to the Town Hall and also the Mayor's Facebook page, where he also posts, as well as some more personal things, but also a lot of information about the municipality and everything that goes on in the municipality. (P11)

The council's Facebook pages and its website were considered important sources of information, having a central role in the dissemination of information, as one participant reported: "I feel that I am [well-informed] because of working where I work, in the Town Hall. Because it's the information centre in Manteigas, to put it like this" (P5). However, some of the participants reiterated that the political activity and interests of the Town Hall as the owner of the site leave citizens wondering whether some of the information posted is biased, especially political information. This perception of a lack of contradiction in the information provided by the Town Hall was clearly manifested only in the group of young people. "I don't think [I feel well-informed], because although it's a small environment, there's still a lot that gets left behind and isn't said. (...) [About] the council's debts, for example." (P14).

Regarding the type of profile pages they preferred to access for information and/or news on social media, official and institutional profiles were the most mentioned in every

focus group. Participants cited the pages of organisations such as the fire brigade, sports and community associations and, above all, those linked to the municipal executive as their main sources of information. This result is similar to research carried out in other countries like the US and the UK, indicating that in locations considered to be news deserts it becomes important to the citizens to access and search for information on the profiles of official institutions on digital platforms (Barclay et al. 2022; Collier and Graham 2022; Smethers et al. 2021).

One participant also claimed to use Google alerts to receive news items flagged with the term "Manteigas" by email.

> I've been activating that Google alert. And then practically every day... there you go. But it also ends up being a lot of news about butter[2]. So it isn't every day that it's exactly about Manteigas, the town. But there's always some information and sometimes that's how I find out about things that the social media haven't yet publicised. (P2)

Notícias de Manteigas, the monthly newspaper that stopped circulating in 2021, was also mentioned by the participants. Among the older group, the newspaper was mentioned as an old source of information seen with a lot of mistrust, while among the adults, the low frequency was emphasised.

> I don't know if it's good to have newspapers or not. When there are newspapers, they don't inform. And this doesn't just apply to Notícias de Manteigas (...). It applies to everyone's media. So the aim, most of the time, is not to inform. Most of it is for opinion. (P7)

> We can't say that we were dependent on Notícias for information either. Notícias de Manteigas was a monthly newspaper and most of the information didn't come from there. (P3)

As for the young people, some of them felt that it would be positive for the municipality to have a printed newspaper, even though they did not have the habit of reading printed news. Young people believed that a paper newspaper would be important for reaching older audiences.

> I think that yes, a newspaper would also help a lot with the physical part, for the older age group, but I also think that if this written component on paper was complemented by a digital component, whether through a website, or also with the help of social media pages, such as Facebook, Instagram, YouTube, etc., that could also help the other part, it could facilitate communication and the transmission of information to the younger age groups. (P17)

4.2. Disinformation and Fact-Checking

In the adult and youth groups, most of the participants understood that there are differences between disinformation and fake news, but the definition and differences between the concepts were not so clear to them.

> Moderator—Do you think fake news and disinformation are the same thing? Is it different?

> P2—It can be one form of disinformation.

> P3—Not only, but it is. Disinformation often is not created by fake news, it can be created by half-news stories that lead to a misunderstanding of things.

> P5—And even what we were talking about, the comments [made on social media posts]. You make an assumption about it and it has nothing to do with what happened.

The older participants, on the other hand, were unable to express any differences between the two concepts. "In my mind, disinformation can be a manipulation of the facts,

and fake news is something more specific, more direct, but I don't know if that's it." (P8) "For me, information is information, everything else is a fallacy." (P9)

According to most of the participants in the focus groups, disinformation was understood to be information that does not fully correspond to reality, and fake news is news that is distorted and/or totally falsified on purpose and put into circulation to achieve mostly political objectives.

> For me, fake news is information that is distorted from reality and is given to people, I think, on purpose. And, in a way, I think it ends up being related to disinformation, since, in turn, disinformation is also, I would say, false information, so it has nothing to do with reality, a rumour. And that, in turn, ends up leading to a certain ignorance on the part of the person, if they have access to that medium. (P13)

All the groups understood that social media were the most favourable environments for circulating disinformation, but that the problem could also occur in other ways they used to access information.

In general, the participants believed that disinformation was a phenomenon present in the local public sphere, but not to the extent that it has become a significant problem for discussions and deliberations on issues of public interest. The justification was the small size of the municipality, which would make it easier for falsehoods to be quickly rectified. "It turns out to be so small... In a short span of time, you can counteract what was false or what was only half-true or half-news (...) in a small community, you can remedy that." (P3) "There's no disinformation here (...) If they want to know something, they [your neighbours] knock on your door... [and ask] 'Do you know about this, is it true?'" (P1).

Regarding verification routines, the participants stated, faced with disinformation, they had different strategies. Generally speaking, they tended to only seek to confirm information that was important to them and about which they already had some suspicions. Young people were more willing to formalise complaints directly to platforms when they came across fake news on social media. However, all groups were unaware of the official channels for reporting fake news.

> When it's online, I think it's important to report it, even though I've never done so. And maybe it would also be important to somehow know how to report fake news because, as [participant] said and I also agree, (...) we say that we should report it. But maybe we don't know how to do it, what the procedures should be. And I think this should also be a point to take into account, not just in education either, because maybe we're facing more and more fake news and we should know how to deal with it. (P11)

The younger focus group also showed more knowledge about media education, or media literacy. Of the five participants in the group, three had more complete concepts of disinformation and media literacy. When asked about the origin of their knowledge, they reported having had lessons on the subject in two curricular units in secondary school: one related to technology and the other to citizenship.

4.3. Trust

Traditional media, especially national media, continue to be trustworthy in the perception of the participants, be it in print, TV, radio or online. However, they reiterated that the commercial interests and political affinities of journalists and media owners can influence news content.

> Now, in terms of online or newspaper news, I would say that, perhaps, from where I read the news, I look for sources like Expresso, Público, because I know or think I know that they are probably the best sources at national level and I think that's the only source I can rely on. (P11)

Three things. Provenance, the interest of the person spreading the news on that particular issue, and finally the form of the news. I'm very sensitive to the way it's written, because I think it reveals that intention sufficiently. (P8)

The participants were asked what elements made them trust or distrust information. At this stage, most of the young people demonstrated the use of habitual reading procedures to identify misinformation in the news. They mentioned descriptives such as "sensationalist", "flashy", "misleading" headlines or appealing "to emotions" served to indicate that the news may contain disinformation and/or be clickbait, a level of media literacy that was not observed in the other groups. With regard to the source of the news, in general, they noted that the reputation of the medium and the journalists was fundamental to generating trust in the content.

Specifically in relation to journalists, they stated that familiarity with the subject of the news was also a factor in generating trust, which also would seem to explain the fact that the participants, in general, stated that they had more trust in regional journalists than national ones. The origin of the journalist or media outlet was a concern highlighted in all the groups regarding trust in the reliability of the news. According to the participants, the local journalist had more knowledge about the municipality allowing them to narrate events more accurately than colleagues from other regions.

P5—It's different with the regional ones, there's more proximity and even if there is misinformation, we can easily reach them and say, look, this isn't true.

P4—And they live here, don't they? They're from the area.

P5—Exactly!

P2—They have the availability to investigate all this because they're more restricted.

P5—And it's more difficult to combat [misinformation by] national [journalists] because we can't get to them.

Another point is that although they said they trusted news produced by journalists more, they cited examples of people from the community who had become a reference point for passing on information on topics they know a lot about. Adults, for example, cited a meteorologist as a reference for information about the weather in the region, including to confirm the veracity of information that reaches his followers on Facebook. "We know that what he writes there really is true (...) Because we've been reading him for many years, we know him and we know that he's reliable, for example." (P5)

5. Discussion and Conclusions

The focus groups carried out in this research show that the community of Manteigas keeps informed about things happening in the town even without an established local media outlet. The town's own newspaper, which ceased to publish, did not fulfil the inhabitants' need for information, and in the process of adapting to the lack of a medium that covers the local reality, the residents turned to various types of sources to find and verify information. In this scenario, official sources, such as public authorities' spaces on the internet (official websites and pages on social media) and other organised civil society entities, appear to be the most important sources of information. It is interesting to note that, although the groups had participants of very different ages, the main ways of finding out about local events—through the use of social media and word of mouth—did not differ between the groups.

Another important point is that, of these institutions' online spaces, only the Manteigas City Council has a professional for the sector. In the others, there is no organised institutional communication. However, the activity of the president of the Council during the fires opens a discussion about the role of institutional communication in places with little or no production of local journalism. By publishing updates on his official, personal account, the president of the Council acted as an active official source sharing helpful

information at a critical period, which made his page a relevant local information source even after the fires.

Interactions in public spaces such as cafés and squares were mentioned by the older groups, who also attended sessions of the Chamber of Councillors, the municipal executive branch, and the Municipal Assembly, the legislative branch, in person. Among younger people, there was a greater digital presence. Other sources of information were the personal social networks of friends and renowned personalities from the municipality. Thus, in response to *RQ1*, it is possible to realise that in territories where there is no press coverage, individuals resort to several different strategies to obtain local information, but they do not always manage to be as informed as they would like to be, given that they express a need for a local news outlet or some other disinterested form of information dissemination. It is relevant, however, to consider the "group effect" of focus groups, previously described in the literature. Although focus group participants may talk about an issue, how much their words reflect their actions is not clear, and they might create a preferred impression on others if that information is more central to their identities within the group (Powell and Single 1996; Wooten and Reed 2000). That is, it is not obvious that if the participants had a local news outlet, they would consume it.

Although the participants in the focus groups did not consider disinformation to be relevant in the case of Manteigas, in answering *RQ2*, it is possible to see that the inhabitants were concerned about disinformation in general and showed varying degrees of understanding about the phenomenon. Although there are no objective and widely shared definitions of these concepts, two commonly used definitions are those developed by Wardle and Derakhshan (2017), that defines disinformation as "an information that is false and deliberately created to harm a person, social group, organisation or country" and misinformation as "information that is false, but not created with the intention of causing harm" (p. 12); and by Tandoc et al. (2018), that understands fake news as "an instance of misinformation" (p. 141), false information that "appropriates the look and feel of real news" (p. 147). We observed that the younger group seemed to come closest to the definition adopted in the literature, while the older did not differentiate the concepts as well as the younger group did.

The groups also showed different levels of media literacy, which was more present among the younger people and needed improvement among the older participants. It is therefore essential that public policies for digital, media and news literacy education take into account regional and age asymmetries when it comes to the media, so that citizens in news deserts also have satisfactory strategies to deal with disinformation and fake news.

It is important to note that although the majority of the participants received their information from social media, there was a lot of distrust around the content that was found there, especially among the youngest and oldest participants. This raises the question of how they form bonds of trust with the information they consume. As found in another study (Javorski and Bargas 2020), this need to find reliable information is partially met by looking to institutional information as references. In response to *RQ3*, however, conversing with neighbours, friends and relatives to verify facts, whether face-to-face, via social networks or messaging groups, brings risks to information reliability. As previous studies have shown, these practices expose communities to an increased risk of manipulation and misinformation (Barclay et al. 2022; Ardia et al. 2020). However, citizens did not appear to be very concerned about this risk, since they relied on relationships of proximity to verify information and trust in the circulation of information within the community itself, pointing out its small geographical and demographic size.

Importantly, given that these focus groups showed that the most basic information of public interest seems to reach the population, we can conclude that the absence of media is not always synonymous with a lack of basic information. The big issue is the type of information that citizens can access: it is not critical of local power, nor does it present diverse points of view, because it is mainly published by institutions with a vested interest in maintaining their image. This does not mean that the information is of worse quality or

untrue, but it can certainly be biassed or partisan, as in the case of the information from the City Council, and cannot be considered news.

In this sense, there may be news in a news desert, but not the news that feeds democracy at a local level (Usher 2023). This also makes us reflect that the idea of news deserts may not merely be defined by the lack of (access to) news outlets, because it is important to highlight that "local journalism that serves many communities has long been insufficient and, at times, even harmful to democratic life", as pointed out by Usher (2023, p. 3). The existence of a newspaper is no guarantee of editorial independence, and plurality of information is less common in rural and sparsely populated regions, as studies in Portugal, Brazil and England, among others, have pointed out. However, in the case of Manteigas, the lack of a local media outlet makes it difficult to provide critical and independent news, which may only occur if a newspaper in another nearby city decides to do so.

In addition, finding such basic information of public interest requires proactivity on the part of the user and certain skills such as digital and media literacy, limitations that should be studied in depth.

However, we do see a population that is very critical of the newspaper that has previously existed in the municipality, which did not seem to meet citizens' information needs or make them feel well informed when it was active. This observation is relevant because it makes us question the role of regional journalism as the main source of credible information in such communities.

It is true that, in the absence of a local media outlet, public debate is left without a mediator in the community. This becomes more evident in the adult and older groups, especially the latter, which registered more divergent opinions about political debate in the community and a slight conflict of ideas. Among younger people, the lack of political debate was more heavily criticised.

The idea of local journalism playing a mediator role in the municipal public sphere is evidenced by the opinions recorded in the three focus groups, which maligned the lack of mediated political debate and the lack of counter to the official information that the public authorities publish on the internet. There was consensus among the participants that a local media outlet based in the municipality could be important for the community. However, the younger participants had little information about the old newspaper, and the older citizens had serious criticisms to make about the journalism practised by this outlet.

It should not be forgotten, however, that the media fulfil other functions than just informing a community, such as promoting social cohesion, citizen participation, local culture and preserving the community's memory (Mathews 2022; Shaker 2014; Smethers et al. 2021). This is perhaps the most relevant role that a local outlet could play in these communities, since useful information is already accessed by the population through other channels.

As leads for future research, the case of Manteigas reveals that the fight against news deserts should be discussed beyond the issue of media funding in more rural regions. It is essential to discuss proximity and trust in these small communities.

The focus groups indicated that trust was greater when there was greater proximity. The association between proximity and trust cannot be taken as a rule from the focus groups, but they point to the need to discuss the importance of proximity further. It was concluded that the business models of local journalism, in addition to the issue of revenue sources, must consider the connection between the media and their respective audiences. It is necessary to understand how proximity impacts the functioning of journalism and whether the transformations of journalism in the 21st century have affected this relationship.

The debate on proximity in journalism would benefit from further investigation of alternative media business models, such as community journalism projects (Ferrucci and Alaimo 2020) and public media services. These could prove valuable in future discussions on how to address the issue of news deserts.

Notes

[1] See https://www.facebook.com/flaviomassano.manteigas (accessed on 17 May 2024).

[2] In Portuguese, "manteiga" means butter, so the name of the municipality can be mixed up with the plural for the word "butter".

References

Abernathy, Penelope M. 2018. *The Expanding News Desert*. Chapel Hill: University of North Carolina: Center for Innovation and Sustainability in Local Media, vol. 18.

Abernathy, Penelope M., and Tim Franklin. 2022. *The State of Local News: The 2022 Report*. Evanston: Northwestern Medill School Local News Initiative.

Anderson, C. W., Emily Bell, and Clay Shirky. 2012. *Post-Industrial Journalism: Adapting to the Present: A Report*. New York: Columbia Journalism School.

Ardia, David, Evan Ringel, Victoria S. Ekstrand, and Ashley Fox. 2020. *Addressing the Decline of Local News, Rise of Platforms, and Spread of Mis-and Disinformation Online*. Chapel Hill: UNC Center for Media Law and Policy.

Atlas da Notícia. 2021. *Atlas da Notícia*. Available online: https://www.atlas.jor.br (accessed on 16 May 2024).

Barclay, Steven, Steve Barnett, Martin Moore, and Judith Townend. 2022. Local News Deserts in the UK: What Effect Is the Decline in Provision of Local News and Information Having on Communities? Available online: https://cjproject.org/wp-content/uploads/2022/06/local-news-deserts-in-the-uk.pdf (accessed on 10 May 2024).

Bisiani, Simona, and Bahareh Heravi. 2023. Uncovering the State of Local News Databases in the UK: Limitations and Impacts on Research. *Journalism and Media* 4: 1211–31. [CrossRef]

Blagojev, Tijana, Danielle Borges, Elda Brogi, Jan Kermer, Matteo Trevisan, and Sofia Verza. 2023. *News Deserts in Europe: Assessing Risks for Local and Community Media in the 27 EU Member States Preliminary Report-Literature Review and Methodology*. Florence: Centre for Media Pluralism and Media Freedom.

Cagé, Julia. 2020. Media competition, information provision and political participation: Evidence from French local newspapers and elections, 1944–2014. *Journal of Public Economics* 185: 104077. [CrossRef]

Camponez, Carlos. 2002. *Jornalismo de Proximidade. Rituais de Comunicação na Imprensa Regional*. Coimbra: Edições Minerva.

Canavilhas, João. 2021. Epistemology of mobile journalism. A review. *Profesional de La Información* 30: 1–20. [CrossRef]

Cardoso, Gustavo, Miguel Paisana, and Ana Pinto-Martinho. 2023. *Digital News Report 2023*. Lisbon: OberCom.

Christofoletti, Rogério. 2019. *A Crise no Jornalismo Tem Solução?* Barueri: Estação das Letras e Cores.

Collier, Jessica R., and Emily Graham. 2022. *Even in "News Deserts" People still Get News.* Austin: Center for Media Engagement. Available online: https://Mediaengagement.Org/Research/People-still-get-news-in-news-deserts (accessed on 1 May 2024).

Correia, João C. 2012. As Múltiplas Faces da Imprensa Regional Portuguesa: O Jornalismo Regional no Contexto da Comunicação Comunitária. *Redes. Revista do Desenvolvimento Regional* 17: 5–18.

Costa, Caio T. 2014. Um modelo de negócio para o jornalismo digital. *Columbia Journalism Review, a Revista de Jornalismo ESPM* 9: 51.

Deolindo, Jacqueline. 2013. Fronteiras jornalísticas: Do silêncio à alteridade. In *XXXVI Congresso Brasileiro de Ciências Da Comunicação*. Manaus: Intercom, pp. 1–12.

Expresso. 2022. Incêndios: Manteigas aponta para 2,5 milhões de euros de danos em infraestruturas municipais. Expresso. Available online: https://expresso.pt/sociedade/2022-09-13-Incendios-Manteigas-aponta-para-25-milhoes-de-euros-de-danos-em-infraestruturas-municipais-517358a9 (accessed on 14 May 2024).

Ferrier, Michelle, Gaurav Sinha, and Michael Outrich. 2016. Media deserts: Monitoring the changing media ecosystem. In *The Communication Crisis in America, and How to Fix It*. Edited by M. Lloyd and L. A. Friedland. New York: Palgrave Macmillan, pp. 215–32. [CrossRef]

Ferrucci, Patrick, and Kathleen I. Alaimo. 2020. Escaping the news desert: Nonprofit news and open-system journalism organizations. *Journalism* 21: 489–506. [CrossRef]

Finneman, Terry, Patrick Ferrucci, and Nick Mathews. 2023. Revenue & readership: Rescuing & reviving rural journalism. *Journalism Practice*, 1–19.

Furlanetto, Anna Carolina, and Alciane Baccin. 2020. A produção noticiosa nos desertos de notícias: Uma análise de duas cidades interioranas do RS. In *10o Encontro Nacional de Jovens Pesquisadores Em Jornalismo (JPJOR)*. SBPJor. Available online: https://proceedings.science/jpjor-2020/trabalhos/a-producao-noticiosa-nos-desertos-de-noticias-uma-analise-de-duas-cidades-interi?lang=pt-br (accessed on 22 February 2024).

Gabinete de Estratégia e Estudos. 2022. *Concelho/Municipality: Manteigas*. Available online: https://www.gee.gov.pt/pt/docs/doc-o-gee-2/estatisticas-regionais/distritos-concelhos/guarda/manteigas/3139-manteigas/file (accessed on 21 May 2024).

Gatti, Bernadete A. 2005. *Grupo Focal na Pesquisa em Ciências Sociais e Humanas*. Brasília: Líber Livro.

Gulyas, Agnes. 2021. Local news deserts. In *Reappraising Local and Community News in the UK*. Edited by D. Harte and R. Matthews. London: Routledge, pp. 16–28.

Gulyas, Agnes, Joy Jenkins, and Annika Bergström. 2023. Places and Spaces Without News: The Contested Phenomenon of News Deserts. *Media and Communication* 11: 285–89. [CrossRef]

Heinderyckx, François, and Tim Vos. 2016. Reformed Gatekeeping. *CM: Communication and Media* 11: 29–46. [CrossRef]

Hindman, Matthew. 2018. *The Internet Trap: How the Digital Economy Builds Monopolies and Undermines Democracy*. Princeton: Princeton University Press.

Javorski, Elaine, and Janine Bargas. 2020. A informação sobre a Covid-19 nos desertos de notícias: A relevância do jornalismo interior do Pará. *Liinc Em Revista* 16: e5339. [CrossRef]

Jerónimo, Pedro. 2015. *Ciberjornalismo de proximidade*. Covilhã: Labcom.IFP.

Jerónimo, Pedro, and Marta S. Esparza. 2022. Disinformation at a Local Level: An Emerging Discussion. *Publications* 10: 15. [CrossRef]

Jerónimo, Pedro, Giovanni Ramos, and Luísa Torre. 2022. *Desertos de Notícias Europa 2022: Relatório de Portugal*. Available online: https://labcomca.ubi.pt/wp-content/uploads/2023/02/desertos_noticias_europa_2022_.pdf (accessed on 2 May 2024).

Mathews, Nick. 2022. Life in a news desert: The perceived impact of a newspaper closure on community members. *Journalism* 23: 1250–65. [CrossRef]

Meyer, Philip. 2009. *The Vanishing Newspaper: Saving Journalism in the Information Age*. Columbia: University of Missouri Press.

Negreira-Rey, María C., Xosé López-García, and Jorge Vázquez-Herrero. 2020. Map and characteristics of local and hyperlocal digital media in Spain. *Revista de Comunicacion* 19: 193–214. [CrossRef]

Negreira-Rey, María-Cruz, Jorge Vázquez-Herrero, and Xosé López-García. 2023. No People, No News: News Deserts and Areas at Risk in Spain. *Media and Communication* 11: 293–303. [CrossRef]

Nelson, Jacob L. 2019. The next media regime: The pursuit of 'audience engagement' in journalism. *Journalism* 22: 1–18. [CrossRef]

Nerone, John. 2015. Journalism's crisis of hegemony. *Javnost* 22: 313–27. [CrossRef]

Peruzzo, Cicilia M. K. 2005. Mídia regional e local: Aspectos conceituais e tendências. *Comunicação & Sociedade* 26: 67–84.

Poell, Thomas, David Nieborg, and José van Dijck. 2020. Plataformização. *Fronteiras—Estudos Midiáticos* 22: 2–10. [CrossRef]

Powell, Richard A., and Helen M. Single. 1996. Focus Groups. *International Journal for Quality in Health Care* 8: 499–504. [CrossRef]

Quintanilha, Tiago L. 2018. 2029—The end of print newspapers in Portugal? A longitudinal study on the main performance indicators in Portugal's traditional print-newspaper industry. *Observatorio* 12: 138–55. [CrossRef]

Ramos, Giovanni. 2021. Deserto de Notícias: Panorama da crise do jornalismo regional em Portugal. *Estudos de Jornalismo* 13: 30–51.

Ramos, Giovanni R. 2023. Jornalismo de proximidade em rede: Proposta para criação de modelos de negócios. Doctoral dissertation, Universidade da Beira Interior, Covilhã, Portugal. UBibliorum. Available online: https://ubibliorum.ubi.pt/handle/10400.6/13827 (accessed on 21 July 2024).

Saiz-Echezarreta, Vanesa, Belén Galletero-Campos, and Daniela Arias Molinares. 2023. From news deserts to news resilience: Analysis of media in depopulated areas. *Journalism*, 1–20. [CrossRef]

Shaker, Lee. 2014. Dead Newspapers and Citizens' Civic Engagement. *Political Communication* 31: 131–48. [CrossRef]

Silva, Carlos J. S. da. 2022. Desertos de Notícias em Portugal e no Brasil: Notas Contra a Subnotificação de Locais sem Jornalismo Próprio. In *Jornalismo, Cidadanias e Democracias Sustentáveis nos Países de Língua Portuguesa*. Edited by C. Camponez, M. Oliveira, F. Proença and A. F. Oliveira. Coimbra: ACEP/CEiS20/CECS, pp. 20–31.

Smethers, J. Steven, Sam C. Mwangi, and Bonnie Bressers. 2021. Signal interruption in Baldwin City: Filling a communication vacuum in a small town "news desert". *Newspaper Research Journal* 42: 379–96. [CrossRef]

Tandoc, Edson C., Zheng W. Lim, and Richard Ling. 2018. Defining "Fake News": A typology of scholarly definitions. *Digital Journalism* 6: 137–53. [CrossRef]

Toff, Benjamin, and Nick Mathews. 2021. Is Social Media Killing Local News? An Examination of Engagement and Ownership Patterns in U.S. Community News on Facebook. *Digital Journalism*, 1–20. [CrossRef]

Torre, Luísa. 2022. Inovar nos media regionais é "crítico e sensível" para o desenvolvimento local. *MediaTrust.Lab*. Available online: https://mediatrust.ubi.pt/inovar-nos-media-regionais-e-critico-e-sensivel-para-o-desenvolvimento-local/ (accessed on 14 July 2024).

Torre, Luísa, and Pedro Jerónimo. 2023. Esfera pública e desinformação em contexto local. *Texto Livre* 16: e41881. [CrossRef]

Usher, Nikki. 2023. The Real Problems with the Problem of News Deserts: Toward Rooting Place, Precision, and Positionality in Scholarship on Local News and Democracy. *Political Communication* 40: 1–16. [CrossRef]

Verza, Sofia, Tijana Blagojev, Danielle Borges, Jan E. Kermer, Matteo Trevisan, and Urbano Reviglio. 2024. *Uncovering News Deserts in Europe: Risks and Opportunities for Local and Community Media in the EU*. Florence: Centre for Media Pluralism and Media Freedom.

Vinuto, Juliana. 2014. A amostragem em bola de neve na pesquisa qualitativa: Um debate em aberto. *Temáticas* 22: 203–20. [CrossRef]

Wardle, Claire, and Hossein Derakhshan. 2017. *Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making*. Strasbourg: Council of Europe.

Williams, Andy. 2013. Stop press? The crisis in the Welsh media and what to do about it. *Cyfrwng: Media Wales Journal* 10: 71–80.

Wooten, David B., and Americus Reed. 2000. A conceptual overview of the self-presentational concerns and response tendencies of focus group participants. *Journal of Consumer Psychology* 9: 141–53. [CrossRef]