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# Moroccan Journalists During the Covid-19 Pandemic: A Comparative Analysis of Public and Private Media

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#### Abstract

During the COVID-19 pandemic, journalists all over the world were tasked with the mission of disseminating information and providing answers to the public opinion. This paper aims at exploring the challenges that have influenced Moroccan journalists using a comparative study. Through a thematic analysis of N=30 interviews with journalists from public and private media, this study aims to study the differences in the challenges during the coverage of the Covid-19 pandemic. The results of this study identified five main themes. Challenges related to (1) the information overload and (2) organizational issues were commonly shared across the two groups. Nevertheless, (3) limitations on press freedom, (4) psychological and emotional stress, and (5) difficulties in accessing to governmental informations were expressed more by private media journalists. These results emphasize on the need for structural changes in the Moroccan media landscape by highlighting disparities between public and private media that influence the quality of the media coverage in times of crisis.

Keywords: Covid-19, challenges, public media, private media, moroccan journalists

# 1. Introduction

In times of crisis, journalists play a pivotal role as mediators between international organizations, local authorities and response teams. Crises like the COVID-19 pandemic revealed themselves to be among the most influential in our era. Easily transmitted, the COVID-19 virus was characterized by high infection and mortality rates. It affected individual lives and lifestyles. This phenomenon increased people's need for information—whether about the origins of the crisis, vaccine progress, or government decisions—leading them to rely on different types of media channels. For some, it was the traditional media narratives, while for others it was online platforms.

This heightened demand for information posed numerous challenges to journalists worldwide, these included disruptions to traditional journalism practices. (Ramos & Suizo, 2024), including working off-site, travel limitations and events cancellation (Miranda et al., 2021). The increasing need for information, combined with social isolation, social pressure, and an amplified workload, intensified feelings of stress, anxiety, and fear of exposure to the virus (Backholm & Idås, 2024). Additionally, A lack of fact-checking skills when handling information online caused some mainstream media outlets to broadcast misleading information paired with fear-based narratives (Oladokun et al., 2024).

In the Moroccan case, studies have shown that the Moroccan public had moderate to high levels of knowledge and engagement with the safety measures enforced by the authorities (Berni et al., 2021; Zahra, 2021). However, increasing negative assessments and declining trust have been highlighted, especially among young people (Aboulghazi, 2022). The media coverage is also found to be inefficient in addressing certain aspects of the crisis, such as the appropriateness of communicating scientific complexities (Zag & Mifdal, 2024) and failing to debunk fake news and misinformation circulating on both traditional and social media (Aboulghazi, 2021).

Despite the existing literature about Moroccan public perception of the crisis, papers addressing the challenges faced by Moroccan journalists appear to be limited. This gap is significant, as understanding the challenges can provide broader insights for journalism in times of crisis. To do so, this paper seeks to identify the main differences in journalist's perceptions between public and private media, and further explore the interconnections between these

challenges by addressing the following research questions: What are the challenges that Moroccan journalists faced during the coverage of Covid-19 pandemic? Are there differences in the challenges faced by journalists affiliated with public versus private media?

## 1.1 Crisis Communication a Conceptual Framework

Crisis communication research has a rich theoretical framework that examines how media outlets adapt their communication strategies depending on the type of crisis that they face. However, from a theoretical standpoint, It is crucial to assess and contextualize the theoretical frameworks relevant to our topic. Indeed, a large body of theoretical literature may apply to crisis communication, but it is important in our case to contextualize the theories that may address the challenges that journalists face in times of crisis. In this case, the Situational Crisis Communication Theory (SCCT) by Coombs (2007) explores the strategies and messages that are most effective in times of crisis depending on its phase (Coombs, 1995). It also analyzes the role of media dissemination, including social media from the first phases of the crisis to more advanced instances until the recovery phase (Jin et al., 2014). Furthermore, the SCCT has been applied in research about the impact of these strategies in enhancing public resilience (Zhao et al., 2020).

While SCCT provides insights into communication strategies, framing theory explores how the structuring of news stories shapes public perceptions of risk, enforcing compliance and attitudes towards governments decisions (Williams & Noyes, 2007). In this case, the framing theory would allow to compare how the two studied groups applied framing strategies in their coverage of the pandemic.

From another perspective, both recent and past studies highlight the impact of psychological factors, such as stress, on journalists during crises (Arcalas et al., 2024; Kramp & Weichert, 2014). The Stress Coping Theory examines how stress, coping mechanisms, and support systems influence the quality of journalists' work during crises (Arcalas et al., 2024).

By utilizing this conceptual framework, this study aims to address how Moroccan media outlets adapted to the context of the Covid-19 pandemic, especially when research has shown that the use of social media to communicate during crises, is becoming more and more popular replacing the traditional communication channels (Lucinda Austin & Jin, 2012; Olteanu et al., 2015). In times of crisis, public authorities can use social media platforms to communicate messages more quickly and widely than they might do through traditional media (Graham, 2014). Additionally, People increasingly turn to social media for official information, especially during crises, due to its immediacy and accessibility (London & Matthews, 2022). This shows the emergence of social media as tool for crisis communication and public engagement, however the need for professional and ethical journalism has shown its necessity during the COVID-19 pandemic which we will discuss in the next section of this paper.

## 1.2 Role of Journalism in Times of Crises

The role of media and journalism in disseminating information, analyzing events, and maintaining public trust during times of crises is undeniable. Crises, by definition, are periods of great risk and uncertainty, especially in rapidly evolving situations such as natural disasters, health emergencies, or social and political conflicts (Rojas-Calderón, 2024) identifies the functions of journalism in democratic societies, such as contextualization, promotion of public interest, dialogue, and motivation, as fundamental to constructive journalism in times of crises. His findings emphasize the public interest role of journalism and its contribution to empowering individual opinions. The role of public mobilizers and risk classifiers is also associated with a shift in the relationship between journalists and official authorities (Klemm et al., 2019).

The role of journalists as gatekeepers has also been discussed in the literature. (Bruns, 2011; Shoemaker et al., 2008). However, more recent papers show that this effect is heightened in times of crises; (van der Meer et al., 2017) shows that during crises, the characteristics of sources (credibility, knowledge, willingness, timeliness) determine whether or not news is included.

One of the characteristics of crises is the growth of the need in credible information by the population (van Zoonen & van der Meer, 2015), underlining the importance of understanding the mechanisms that affect journalists' practices during times of crises. From another perspective, research on the topic also emphasizes other roles of journalists during crises (Riegert & Olsson, 2007) delves into the importance of ritual in crisis journalism, in her research, journalists play the role of psychologists, comforters, and co-mourners showing that strategies like immediacy and competition also participate in affirming community and organizational needs.

The COVID-19 pandemic plays a significant role in testing the commitment of people around the world, as it has affected all sectors, including journalism. While relying on social media for updates is not new, the recent surge of misinformation across platforms introduced unique challenges. Moroccan government was struggling to face fake

news and misinformation by using different strategies. It launched a crackdown aimed at internet users disseminating false information and fake news. Another strict strategy employed by the Moroccan government to counter COVID-19 misinformation involved arresting twelve Moroccans, many of whom were social media influencers (Aboulghazi, 2021).

In Morocco, journalists faced many challenges to deliver the accurate information because they found themselves on the front lines of that unprecedented pandemic, and were tasked with keeping the public informed. They had to adopt new ways of approaching the situation while addressing society's anxiety and uncertainty. Reynolds and Seeger (2005) confirm that the media has a critical role in times of risks and crises, where journalists act as mediators between the public and health authorities, communicating the accurate information that can help in mitigating the spread of the pandemic (REYNOLDS & W. SEEGER, 2005). Moreover, the role of journalism was to fight the infodemic; misinformation around COVID-19, as highlighted by Zarocostas (2020). As a result, the task of journalists became more demanding and challenging to report the right information and fight the wrong ones (Zarocostas, 2020).

The perspectives of journalists were significantly impacted by the digitalization of media and its transitioning into web-based platforms. Social media is a modern information source, particularly in times of crisis when it is challenging to communicate with public in person. Morocco has been at the forefront of adopting digital health and telemedicine. The COVID-19 pandemic has accelerated the progress of digitization, boosting Morocco's health system by enabling access to digital health across the nation and inside the national health system. Technological and socioeconomic divides between large cities, rural areas, and regions hinder equitable access to telemedicine for patients and physicians (Ziani et al., 2021).

# 2. Methodology

# 2.1 Sampling and Composition:

This research adopted a qualitative methodology, employing a thematic analysis of semi-structured interviews conducted with Moroccan journalists. A purposive sampling technique was used to target journalists that participated in one-to-one interviews. This sampling ensured representation of Moroccan media by including both public and private affiliations, as well as a range of organizational formats such as television, radio, newspapers, and digital media.

# 2.2 Data collection: Interview Method and Guide

The interviews provide in-depth insights into journalists' experiences and challenges during the pandemic. The data was collected through one-to-one interviews that were conducted in person or via meetings online depending on journalists' availability. he discussion included pre-designed questions aimed at enriching the conversation while ensuring it remained aligned with the research objectives..

Informed consent was obtained from all participants, who were also informed of the study's purpose and their right to withdraw at any time. Anonymity and confidentiality were maintained for both the journalists' identities and the media outlets they represented by replacing names with pseudonyms such as 'Alpha,' 'Beta,' 'Gamma,' and 'Lambda. Due to language barriers, the interviews were conducted in English, French, Arabic, and Spanish; however, the coding of the transcripts was completed in English by the authors.

# Data analysis

Each interview was imported into the qualitative research tool MaxQDA and classified according to the journalists' affiliations (public or private). A preliminary round of coding was conducted, after which the codes were refined and grouped into broader thematic categories. This process allowed us to identify recurring themes, which will be discussed in the results section. The coding scheme was thoroughly revised by the coders individually, and the internal validity of the codebook was addressed through inter-coder reliability checks by the co-authors, resulting in its refinement.

# 2.3 Sample Description

We conducted a total of 30 interviews with journalists from both public and private Moroccan media outlets. Table 1 presents the breakdown of each journalist's affiliation by media type, including television, radio, newspapers, digital media, and press agency journalists from both sectors.

Table 1. Sample description of the conducted interviews

	Sector	Media type	Number of interviews
		Television	4
Public media		Radio	3
		Press agency	3
		Television	5
Private Media		Radio	4
		Digital media	6
		News papers	5
	Total		30

As shown in Table 1, interviews were conducted with 4 television journalists from the public sector and 5 from the private sector. Regarding radio, we interviewed 3 presenters from public radio stations and 4 from private ones. Additionally, we conducted 3 interviews with journalists from the Moroccan Press Agency and 5 with reporters from private print media. Finally, we included 6 interviews with journalists working in digital media outlets.

This sample was designed to include a diverse group of journalists based on their media affiliation and the type of media they represent. The inclusion of both public and private media ensures the representativeness of different media types, which may differ in terms of governance, organizational structures, and economic constraints. This diversity provides a robust foundation for the comparative analysis.

## 2.3.1 Theoretical Saturation

In this subsection, we will explain the decision to limit data collection to 30 interviews. As described in the previous section, our sample consists of 30 interviews. Figure 1 below illustrates the distribution of the analyzed transcripts (J1, J2... J30) by similarity and the frequency of occurrence of the main themes.

It is important to note that the transcripts have been renamed chronologically. In this context, J1 represents the first journalist interviewed, while J30 corresponds to the last journalist.

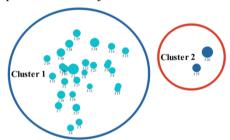


Figure 1. Documents map

Based on the insights explained above and the spatial distribution of the transcripts shown in Figure 1, we can clearly identify two clusters. The composition of Cluster 1 reveals high similarities between the analyzed documents, suggesting a consistent frequency of occurrence of the main themes. In contrast, the journalists in Cluster 2 (J25 and J26) display differences in opinions compared to those in Cluster 1. This indicated the need to continue conducting interviews, as theoretical saturation had not yet been reached at that point.

However, starting from J27 to J30, we observed that these transcripts aligned with Cluster 1, demonstrating higher similarities with the journalists in this group. This suggests that the likelihood of gaining new insights from additional interviews is lower. Based on these findings, we confirmed the achievement of theoretical saturation, thereby justifying the decision to limit the number of interviews to 30 journalists.

## 2.3.2 Intercoder Reliability Test

To validate our codebook, we conducted an intercoder reliability test. This test involved randomly selecting a subset of transcripts from our dataset and comparing the coding schemes applied by two coders using the same codebook. In this case, Coder 1 is the first author of this paper, and Coder 2 is the second author who contributed to this paper.

Table 2. Level of agreement and disagreement inter-coders

	Coder 1				
		Agreement	Disagreement		
Coder 2	Agreement	a = 166	b = 16	182	
	Disagreement	c = 0	0	0	
	_	166	16	182	

Table 2 summarizes the level of agreement between Coder 1 and Coder 2. The coders agreed on the coding scheme a = 166 times and disagreed b = 16 times. These insights allow us to calculate the observed probability P (observed) and the chance probability P (chance) both of which are necessary to calculate Cohen's Kappa using the following formula:

P(observed)=Po=a/(a+b+c)

P(chance)=Pc=1/Number of codes = 1 / 42 = 0.02

Kappa = (Po - Pc) / (1 - Pc)

Table 3. inter-coder reliability measurement between coder 1 and coder 2

Observed probability	Chance probability	Cohen's Kappa
0.91	0.02	0.91

The results of the intercoder reliability test indicate a high observed probability of 91% (Po=0.91) and a Cohen's Kappa value of 0.91, along with a low chance probability of 2% (Pc=0.02). These findings suggest a high level of agreement between the coders in applying the coding scheme. The low chance probability also indicates that the coders are unlikely to agree by chance, further demonstrating the consistency and robustness of the coding scheme.

In terms of Cohen's Kappa, the value of 0.91 reflects a very high degree of agreement between the coders, emphasizing the strong concordance in the thematic analysis.

Based on these findings, the authors confirmed the validity and internal consistency of the codebook used in the thematic analysis, thereby minimizing the risk of coding biases and misinterpretations.

#### 3. Results

# Exploratory analysis of the main themes

Table 4. Main themes identified through the thematic analysis

Challenges faced by journalists in times of crisis	Public	Private	SUM
Theme 1 Freedom of press	4.0	10.0	7.06
Theme 2 Volume of information	32.0	30.0	30.59
Theme 3 Organizational and logistical issues	36.0	32.5	30.59
Theme 4 Psychological and emotional challenges	3.0	27.5	7.06
Theme 5 Access to governmental information	28.0	25.0	24.71

Table 4 indicates the main themes identified through the thematic analysis. The results show that journalists faced a number of challenges during the coverage of the Covid-19 pandemic. As a matter of fact, 7.06% of the documents included items that referred to challenges related to freedom of press. Additionally, 30.59% of the interviewees expressed concerns about the overwhelming volume of information they had to manage. The same percentage was observed regarding organizational and logistical issues, which were largely imposed by the specific characteristics of the Covid-19 crisis. A smaller subset of journalists (7.06%) suggested that they faced psychological and emotional challenges that impacted their ability to adapt to the crisis situation. Access to governmental information was another recurrent theme, expressed by 24.71% of the journalists interviewed.

From a comparative perspective, the results highlight disparities in the distribution of these themes across the two groups (public and private media). For instance, concerning Theme 1, freedom of press, the percentage of reoccurrence of items related to this theme is higher for journalists from the private sector (10%) compared to those in the public sector (4%). Regarding Theme 2, volume of information, the data indicates a resemblance in distribution between the two groups: 32% for public media and 30% for private media. This suggests that journalists from both sectors experienced challenges related to the volume of information about the Covid-19 pandemic on a similar scale. Similarly, Theme 3, organizational and logistical issues, shows comparable results, with 36% for public media and 32.5% for private media journalists.

Interestingly, psychological and emotional challenges (Theme 4) were primarily expressed by journalists from the private sector (27.5%), while very few, if any, journalists from the public sector reported facing such challenges. Finally, Theme 5, access to governmental information, shows similar distribution between the two groups, with public media journalists (28%) reporting slightly more challenges compared to private media journalists (25%).

Based on the findings above, the comparison of the frequency of theme recurrence highlights similarities across public and private sector journalists in terms of the volume of information and access to governmental information. However, disparities were observed regarding challenges related to freedom of press, organizational and logistical issues, and psychological concerns. To further analyze these convergences and divergences in the challenges faced by Moroccan journalists, it is crucial to identify the interconnections between themes and explore the potential

mechanisms of influence. To achieve this, Figure 2 below enables us to identify the main themes that co-occur with each other.

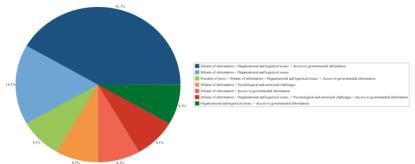


Figure 2. Co-occurrence of themes in the studied data-set

In fact, out of a total of 30 interviews, 47.1% of the time, issues related to the volume of information co-occur with organizational and logistical issues as well as access to governmental information. The high percentage of co-occurrence of these themes within the transcripts suggests a strong interconnection between these challenges. Additionally, 8.3% of the time, when these themes are mentioned by journalists, challenges related to freedom of press are also emphasized.

Similarly, psychological and emotional challenges co-occur 8.3% of the time with the themes of volume of information, organizational and logistical issues, and access to governmental information. This highlights the significant impact these challenges have on the emotional and psychological state of journalists during their coverage of the Covid-19 crisis.

At this stage, it is essential to assess the level of interconnection by analyzing the relationship between the codes associated with each theme and the rest of the codes in our dataset. Figure 3 below illustrates the code map and the identified clusters, providing a foundation for an in-depth analysis of the interconnections between the codes related to each theme.

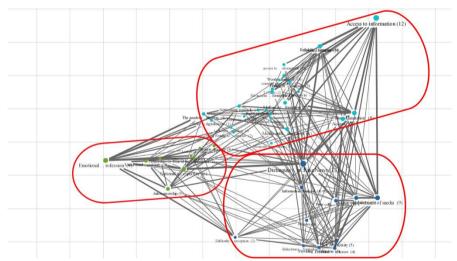


Figure 3. Code map and identified clusters

Each node in Figure 3 represents a specific code, with the size of the node indicating its frequency in the dataset. The lines linking the nodes represent relationships between the codes, with the thickness of the lines corresponding to the frequency of their co-occurrence. The spatial arrangement of the codes and the distance between them further illustrate these relationships—codes that are closer to each other are more frequently connected. Based on these insights, Figure 3 clearly highlights the emergence of three clusters.

The first cluster identifies access to information as a central code, strongly connected to other codes within the same cluster as well as to codes in the other two clusters. Specifically, this code is closely linked to issues such as organizational and logistical challenges, including access to scientific information and travel limitations imposed during the lockdown. It is also connected to challenges related to digital transformation and collaboration with authorities. This cluster suggests significant interconnections between the perceptions of Moroccan journalists—both

in public and private media—regarding the challenges they faced during the Covid-19 pandemic in finding accurate sources of both scientific and governmental information. These interconnections further explain the co-occurrences presented earlier in Figure 2.

Similarly, the second cluster reflects the co-occurrences identified in Figure 2 between the themes volume of information and psychological and emotional challenges. It highlights the code emotional pressure of the profession as the main code in this cluster, with strong connections to other codes within the same cluster, such as a high degree of uncertainty and fear of contamination. Moreover, it links to codes in the other clusters, such as distinguishing real from fake news, collaborating with national and international experts, and confusion caused by disagreements among scientists.

The third cluster that emerged from the dataset primarily consists of codes related to the theme access to governmental information, emphasizing the importance of this issue. The central code in this cluster is distinguishing real from fake news, which is strongly associated with codes such as poor collaboration with authorities, occasional delays in press releases, and a lack of responsiveness from authorities. Additionally, this central code is closely connected to codes from the first cluster, including the press agency as a reliable source and the importance of public feedback. This suggests that, when confronting fake news, Moroccan journalists tend to rely more heavily on the national press agency while considering public concerns.

Overall, the findings presented in Figures 2 and 3 highlight the interconnection between the main themes. They underscore the dominance of the themes volume of information, organizational and logistical issues, and access to governmental information in terms of co-occurrence and their connection to perceptions of freedom of press and psychological and emotional challenges faced by Moroccan journalists during their reporting of Covid-19 events.

Thus far, the exploratory analysis of the corpus has clearly identified the main themes through thematic analysis. The next phase in addressing the research question involves performing a comparative analysis between public and private media to identify the key differences in the perceptions of these challenges.

## Comparative analysis of codes intersections: public vs private media

The comparative analysis between public and private media, as illustrated in Figure 4 below, highlights the interconnections between the codes for both types of media. A clear distinction is evident in terms of the number of codes, the size of the nodes, and the thickness of the links. However, for both public and private media, three clusters have been identified.

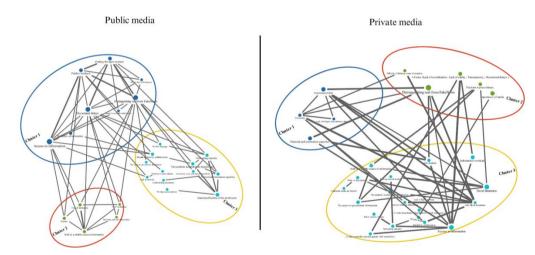


Figure 4. Codes intersections public vs private media

In the case of public media, specifically in Cluster 1, intersections between codes related to the themes of **organizational and logistical challenges**, **access to information**, and **volume of information** are identified. These insights further confirm that, for public media journalists, the increased volume of fake news circulating during the pandemic, combined with challenges in accessing timely and reliable information, represented a significant issue. Similarly, in Cluster 2 for private media, Figure 4 shows the same codes, but in this case, the connections between the codes within the cluster are less frequent. Nevertheless, these codes exhibit stronger connections with themes in other clusters.

In fact, for both types of media, the most frequent code is **distinguishing real from fake news**. However, for private media journalists, this code is strictly linked to issues such as the **circulation of fake documents**, **public feedback**,

and access to information. On the other hand, for public media journalists, the same challenge is more commonly associated with collaboration with authorities, the acceleration of digitalization, and reliance on the press agency as a reliable source of information to overcome these challenges. These findings highlight a clear contrast between public and private media in addressing issues related to fake news.

As previously mentioned, when comparing challenges related to access to governmental information, the results show that public media journalists perceive this issue as less significant compared to private media journalists, who express more frequent concerns in this area. This finding is further confirmed when comparing the code maps, where the code access to information in Cluster 3 for private media displays more connections to other codes across clusters. Specifically, it is linked to information overload, lack of clarity, transparency, coordination, and occasional delays, reflecting more heterogeneous views. In contrast, public media journalists tend to perceive this challenge as being more closely related to travel limitations, reliability of information, and public feedback. These results emphasize the variations between public and private media in terms of challenges and perceptions, which may ultimately affect journalists' ability to report effectively during times of crisis.

Moreover, when considering the interconnection of the codes related to freedom of press, the analysis shows almost no occurrences within public media journalists compared to their counterparts in private media which exhibit concerns in terms of censorship, auto censorship and lack of governmental oversight. As show in cluster 1, these codes are strongly linked with the reliability of the informations and also explained by expressing difficulties in debating a state of exception characterized a high degree of uncertainty. These challenges conveyed uncover significant disparities between journalists which also may influence the quality of the reporting.

For psychological and emotional challenges, the analysis reveals that even though the frequency analysis shows that private media express more opinions that relate to this theme, no interconnections in terms of co-occurrence with other themes seem to show in the clusters. On the contrary, for public media journalists, the emotional burden of the profession is strongly linked with other codes in the same cluster (2) especially when it comes to networking remotely, worries about the digitalization of traditional media and nuanced perceptions about authorities working with known journalists. For private media journalists, the emotional and psychological challenges are more isolated experiences. However, for public media, journalists these challenges are more interconnected to the professional context.

Now that we have addressed the main connections between themes within each type of media, we will proceed to a comparative frequency analysis of each theme

## Frequency analysis between public and private media for each theme

Table 5. Categories and items for the theme Volume of information

Theme 2: Volume of information	Public	Private	SUM
Category 1: Overabundance and Information Management			
Difficulty in Providing Real-time Information	3.33%	6.67%	10%
Information Overload	0.00%	13.33%	13.33%
Differentiating Real from Fake News	10.00%	16.67%	26.67%
Category 2: Reliability and Accuracy			
Circulation of Fake Official Documents	0.00%	3.33%	3.33 %
Information Reliability	3.33%	6.67%	10%
MAP Exclusivity	3.33%	3.33%	6.66%
MAP as a Reliable Information Source	6.67%	6.67%	13.34%

The results in Table 5 highlight three main categories identified under the theme "Volume of Information." **Category 1: Overabundance and Information Management** shows that difficulty in providing real-time information (10%), information overload (13.33%), and differentiating real from fake news (26.67%) were key challenges journalists faced during their coverage of the pandemic. However, the distribution across public and private media indicates that journalists from private media were more significantly affected. Specifically, 6.67%, 13.33%, and 16.67% of private media journalists reported experiencing challenges in this category, compared to their counterparts in public media.

Similar patterns emerge in Category 2: Reliability and Accuracy, though at lower frequencies. Journalists from private media expressed higher rates of challenges related to the circulation of fake documents (3.33%) and the reliability of information about the pandemic (6.67%). Divergent opinions were also noted regarding the role of the Moroccan Press Agency (MAP). While 6.66% of journalists argued that MAP's exclusivity in information gathering during the pandemic had a negative impact on media coverage, a larger proportion of journalists (13.34%) viewed

MAP as a reliable source of information. As one journalist explained: "Crisis or not, there is always collaboration with the press agency called La MAP, which feeds us official information. Moreover, regardless of the department—be it the Ministry of the Interior, Foreign Affairs—everything goes through La MAP as the most reliable source of information" (Journalist 12).

Table 6. Categories and items for the theme organizational and logistical challenges

Theme: Organizational and logistical issues	Public	Private	SUM
Lack of Training and Digitalization			
Importance of Digitalization and training	0.00%	6.66%	6.66%
Digitalization Delay in Morocco	0.00%	3.33%	633%
Traditional Media are Limited	0.00%	3.33%	1.72%
The Pandemic has Accelerated the Digitalization of the Press	6.67%	3.33%	10%
Access to Information			
Suspension of Work	0.00%	9.99%	9.99%
Limitation of Movement	6.67%	20.00%	26.67%
Scarcity of Press Releases	0.00%	6.67%	6.67%
Imposition of Vaccination Pass on Journalists	0.00%	3.33%	3.33%
Compliance with Imposed Rules	0.00%	6.67%	6.67%
Access to Scientific Information	23.33%	16.67.%	40%
Work and Collaboration			_
Difficulty Finding the Right Contacts	13.33%	6.67%	30%
Scientists Have Their Own Agenda	0.00%	3.33%	3.33%
Scientists Disagree With Each Other	3.33%	6.67%	10%
Calling on National and International Experts	0.00%	6.67%	6.67%
Importance of Public Feedback	10.00%	3.33%	13.33%
Importance of Media-Authorities Collaboration	3.33%	6.67%	10%

Table 6 summarizes the main categories relating to the theme **Organizational and Logistical Challenges**. The results show a diverse range of items, ranging from lack of training and digitalization, problems accessing information, to work and collaboration challenges.

The comparative analysis between the groups shows that 6.66% of the interviewed journalists from private media acknowledge the importance of digitalization and training in digital tools to cover facts related to Covid-19. The journalists report a delay in digitalization in Morocco, which was emphasized by the challenges in adapting to the crisis. These views surfaced mainly from journalists from the private sector, who also argue that the Covid-19 pandemic highlighted the limits of traditional media (3.33%): "What was quite surprising during the Covid crisis, I remember very well, and you may have also noticed, is that traditional media, failing to convey certain messages to a broader audience..." (Journalist 20). From a similar perspective, 10% of the journalists agree that the pandemic influenced these media by imposing the digitalization of their formats, especially journalists affiliated with Moroccan print media.

The second category, **Access to Information**, shows a wider set of disparities in terms of the distribution of the different items. In fact, 20% of the journalists from the private sector report having faced issues of movement and suspension of work (9.99%) due to laws and regulations imposed by the authorities. Nevertheless, these numbers are relatively lower amongst journalists from the public sector (6.67%). Laws and regulations limiting access to press conferences without the vaccination pass were discussed by 3.33% of the journalists from the private sector: "Our work was complicated by the lockdown and the vaccination pass; the officials and the administrations no longer responded to press conferences, there were a lot of issues related to that." (Journalist 24).

Moreover, a higher frequency of interviewees (6.67%) from the same sector deemed that these press releases and conferences were deficient as the information lacked precision. An interesting aspect shared amongst the journalists is also a deficiency in accessing scientific information. Forty percent of the participants reported having faced these issues, with relatively higher rates from journalists in the public sector (23.33%) compared to 16.67% in the private media.

The difficulty of finding the right contact seems to be agreed upon by all journalists, independently of the sector they are affiliated with. In fact, a total of 30% of the interviewees view that, due to the complexity of the crisis, it was difficult for journalists to assess the competence and reliability of the specialists they had to collaborate with. In this context, 3.33% of the journalists from the private sector identified issues related to the scientific discourse, expressing concerns about scientists disagreeing with each other (6.67%) and having their own agenda (3.33%): "We realized that we, who are completely novice in these matters, in reality we had in front of us personalities, scholars, scientists who were authoritative, but at the same time, we would invite person A who said one thing and then invite

person B the next day, who has exactly the same status and the same legitimacy in the field, and they could defend a completely opposite thesis." (Journalist 7).

Regardless of these challenges, calling upon national and international experts 6.67%, collaborating with authorities 10% and taking into account the public's feedbacks 13.33 % is believed as the optimal strategy to ensure the coverage of Covid-19 related issues. To further analyze the dynamics of collaboration between Moroccan journalists and the governmental authorities during the Covid-19 pandemic, table 5 below summarizes the categories and codes that relate to the theme access to governmental information.

Table 7. Categories related to the theme access to governmental information

Access to Governmental Information	Public	Private	SUM
Lack of Transparency and Precision			
Lack of Clarity	0.00%	3.33%	3.33%
Lack of Responsiveness from Authorities	3.33%	13.33%	16.66%
Lack of Precision in Press Releases	3.33%	10.00%	13.33%
Lack of Transparency	0.00%	3.33%	3.33%
Lack of Coordination and Collaboration			
Authorities Work with Known Journalists	0.00%	3.33%	3.33%
Reluctance in Sharing Sensitive Information	0.00%	6.67%	6.67%
Poor Collaboration with the authorities	0.00%	13.33%	13.33%
Lack of Coordination	0.00%	3.33%	3.33%
Difficulty Accessing Information	6.67%	16.67%	23.34%
Bureaucracy Delays Communication	3.33%	0.00%	3.33%
No Access to Governmental Information	0.00%	10.00%	10%
Occasional Delays	16.67%	3.33%	20.00%

As shown in Table 7, inequalities in the distribution between private media and public media can be observed within this theme. Specifically, the percentages of all codes identified in this theme are higher among private media journalists compared to their counterparts in public media. The results indicate that journalists from private media faced unique challenges, such as a perceived lack of clarity (3.33%), responsiveness from authorities (13.33%), transparency (3.33%), and precision in press releases (10%) compared to their colleagues in the public sector.

These findings are confirmed by the high rates of expressed deficiencies in terms of coordination and collaboration with authorities. Indeed, journalists from the private sector show higher frequencies in issues like authorities reluctance in sharing sensitive information 6.67%, poor coordination 3.33% and collaboration 13.33%. In fact, 16.67% of theses journalists report difficulties in accessing governmental news while other 10% specify having no access at all to this type of information.

Based on these results and the patterns shown previously in the cluster analysis, issues related to freedom of press have emerged.

Table 8. Categories for the theme freedom of press

Theme: Freedom of press	Public	Private	SUM
Evasive Language	3.33%	3.33%	6.66%
Difficulty Debating a State of Exception	0.00%	3.33%	6.66%
Censorship	0.00%	3.33%	3.33%
Self-Censorship	0.00%	6.67%	6.67%

Table 8 above shows the proportion of different categories related to Theme 1: Freedom of Press. In fact, 6.66% of the journalists reported that the use of evasive language influenced their ability to adequately cover information related to Covid-19; this challenge was reported equally by journalists from both the public sector (3.33%) and the private sector (3.33%). A similar percentage (6.66%) is shown for the category difficulty of debating a state of exception. However, in this case, the challenge was identified only among private media journalists (3.33%).

A lower proportion of journalists reported facing censorship issues. In fact, only 3.33% of journalists from the private sector expressed having encountered censorship challenges. Self-censorship, on the other hand, was identified in 10% of the total cases as a phenomenon affecting media coverage. This category was reported in 6.67% of the cases by private media journalists. These results provide in-depth insights into the specific challenges related to freedom of press that Moroccan journalists faced during their coverage of Covid-19 information.

Moving on to the last theme, Table 9 below outlines the main categories identified in relation to the psychological and emotional challenges faced by Moroccan journalists during their coverage of the Covid-19 pandemic.

Table 9. Categories related to the theme psychological and emotional challenges

Psychological and Emotional Challenges	Public	Private	SUM
Challenges of Understanding and Uncertainty	3.33%	6.67%	10%
Emotional Burden of the Profession	0.00%	3.33%	3.33%
Fear of Being Contaminated	0.00%	6.67%	6.67%

The results of Table 9 indicate that 10% of journalists from both the public and private sectors faced challenges in handling the high degree of uncertainty, which affected their understanding of the situation. However, a higher percentage of emotional responses was observed among private media journalists, with 3.33% expressing the emotional burden of the profession and 6.67% reporting a fear of being contaminated, compared to 3.33% of journalists from the public sector.

In order to answer our research question and provide an in-depth analysis of the results, it is important to discuss our findings within the theoretical framework and related research. Our results indicated a number of challenges that journalists from both public and private media faced during their coverage of the Covid-19 pandemic.

#### 4. Discussion

From a theoretical perspective, the findings of this research align with the theoretical framework discussed previously. Moroccan journalists from both public and private media have faced significant challenges related to information overload when covering facts about Covid-19, which influences their ability to provide clear, timely, and consistent information to the public. This awareness demonstrated by Moroccan journalists aligns with SCCT principles of reducing uncertainty and maintaining public trust through clear communication (Chon et al., 2022). These challenges have also been discussed by other researchers. Perreault and Perreault (2021) found in their study that U.S. journalists faced similar issues, explicitly highlighting challenges caused by the flow of misinformation.

Journalists' attempts to rely on official and reliable sources align with SCCT's recommendation to ensure message legitimacy (Wong & Meng-Lewis, 2023). Additionally, the agenda-setting theory by McCombs (2002) explains how media shapes public opinion through the selection of important news to cover. However, our results emphasize that information overload and lack of access to governmental information influence journalists' ability to properly prioritize news that aligns with the public's needs.

The comparative analysis, in fact, showed that private media journalists more frequently reported challenges related to accessing governmental information, causing delays at an organizational level and ambiguities in terms of alternative online sources. This reflects journalists' concerns about fake news and misinformation. SCCT suggests that a lack of transparency influences public trust (Holland et al., 2021), which might exacerbate public fear and anxiety. A possible interpretation of this self-censorship practiced by governmental institutions can be drawn from research by Seungho Cho and Sook-Yeong Hong, who analyzed how journalists evaluated governments withholding information during a crisis. Their results indicate that journalists' perceptions differed, with some approving such practices as necessary for national security while others did not agree with this approach (Cho & Hong, 2016). This helps us understand how, in our case, private media journalists perceived government measures limiting their access to information more negatively than public media journalists.

Another significant challenge faced by Moroccan journalists relates to press freedom, particularly for private sector journalists. Research on a similar topic shows that governments around the globe have utilized the Covid-19 pandemic to impose restrictions that threaten press freedom (Papadopoulou & Maniou, 2021). A study conducted by Holtz-Bacha (2022) argues that restrictions such as lockdowns and curfews have had detrimental effects on the media. His research also emphasized that these challenges were faced even in well-established democracies around the world. From another perspective, our results show differences between public and private media in terms of press freedom, which must be interpreted with caution. The absence of emphasis on press freedom challenges by public media journalists in our results may be caused by self-censorship biases during their coverage. For instance, public media journalists, being directly government-affiliated, may engage in self-censorship without explicit external pressure or awareness of it (Abbasi & Al-Sharqi, 2015).

Moroccan journalists acknowledged the importance of digitalizing the media landscape and how the Covid-19 pandemic, through its unique characteristics, exacerbated the limitations of traditional journalism practices while accelerating the digitalization of media outlets. In line with these findings, previous studies have shown that crises can create opportunities for experimenting with new digital technologies, particularly at an organizational level and through dissemination via digital platforms (Gkeredakis et al., 2021). However, the same study argues that the implementation of these technologies can be accompanied by challenges related to coordination and over-dependence. These findings also align with the implications of the technological determinism theory, which highlights the organizational and social changes driven by technological advancements (Azam et al., 2020).

From a different perspective, our study highlights how Covid-19 reporting influenced journalists on a psychological and emotional level, particularly those from the private sector. During the pandemic, stress, work overload, and fear of contamination affected journalists on both personal and professional levels. This translated into their negative perceptions of the emotional burden of their occupation and their fear of being contaminated. These results resonate with the stress coping theory, which recognizes the influence of stress factors in high-stakes environments (Kruger et al., 2007). Evidence from the literature also describes this phenomenon as the emotional toll on journalists, associating it with the mental health impact of covering crises (Feinstein & Storm, 2017).

To answer our research question, the finding of this research confirms that journalists form public and private media commonly faced issues regarding the information overload and organizational difficulties. However, differences emerged between public and private media in terms of access to governmental information, freedom of press and emotional responses. Our analysis showed that private media journalists expressed more concerns about censorship, self-censorship and access to governmental informations which was not the case for public media journalists. Taken together, these results contribute to a deeper understanding of the Moroccan media sector in terms of crisis reporting, media practices and organizational dynamics.

#### 5. Conclusions

Overall, this research reveals significant differences between two types of media, highlighting structural disparities and limitations that affect the quality of news reporting in Morocco, particularly during times of crisis. These findings have important implications for media policy and the well-being of journalists.

The issues of censorship, self-censorship, and evasive language underscore structural weaknesses that compromise the quality of coverage and media freedom during crises. This indicates the need for structural reforms and a reassessment of the legal framework governing Morocco's media sector. Furthermore, the findings emphasize the crucial role of independent journalism in upholding democratic functions and fulfilling its societal responsibilities, particularly during periods of crisis.

Developing guidelines and crisis communication protocols that balance national security with public health is a strategic approach to preventing overregulation while ensuring media accountability and responsibility at both social and political levels. Such guidelines would promote transparency and facilitate access to reliable information, enabling journalists to carry out their roles effectively without undermining public trust or democratic principles. These protocols could also enhance collaboration between governmental institutions and the media, creating a framework to mitigate misinformation and ensure clear, consistent communication during crises.

Given the significant mental health challenges faced by journalists, this study highlights the necessity for media organizations to address the psychological impact of work overload and prioritize the well-being of their staff, particularly in high-risk and crisis scenarios. Media organizations should consider offering mental health support services for journalists working in such contexts. Additionally, training on stress management and crisis reporting could serve as an organizational strategy to help journalists manage their emotional and psychological well-being more effectively.

The findings of this research also point to broader sociopolitical implications. For instance, strengthening collaboration between media and authorities is essential. Policymakers must prioritize transparency, especially during crises, to maintain public trust and prevent disengagement caused by perceived opacity.

Moreover, the pandemic underscored the growing consumption of social media platforms, which highlights the need for professional digital journalism. This is crucial for achieving broader reach and fostering greater interactivity with the public. However, the lack of digital literacy among journalists and media literacy among the public exacerbates the risks of misinformation and the spread of fake news. This calls for targeted training initiatives to improve digital media skills on both sides, ensuring ethical dissemination of information.

It is important to acknowledge several limitations of this research that should be addressed in future studies. First, the study focused solely on a thematic analysis, which lacks the quantitative rigor necessary for generalizing the findings. Additionally, although the sampling strategy aimed to include diverse opinions from journalists across various media types, the sample of 30 interviews limits the generalizability of the results. It may not fully represent journalists working in different regions, nor does it account for individual experiences. Furthermore, as the data were based on interviews, potential biases—particularly among public media journalists—might have influenced their responses due to internal pressures or self-censorship. Lastly, while this study analyzed the challenges Moroccan journalists faced during the Covid-19 pandemic, it did not explore the long-term effects of the crisis, including the evolving impacts of digitalization on the Moroccan media landscape.

To conclude, the practical implications of this study are essential not only for future pandemic preparedness but also

for safeguarding the integrity and functionality of both public media and private media as a cornerstone of democratic societies.

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#### **Authors contributions**

Anoire El Attari and Chaimae Bouchala were responsible for study design, manuscript writing and data analysis. Anoire El Attari and El Mehdi Salim were responsible for data collection. Dr Abderrahman Tenkoul and Chaimae Bouchala revised and edited the paper. All authors read and approved the final manuscript.

Anoire El attari and Chaimae Bouchala equally contributed to the study as first authors.

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# Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

# Data sharing statement

No additional data are available.

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