

# **News consumption patterns during the coronavirus pandemic across time and devices: The Cyprus case**

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## **Abstract**

The coronavirus pandemic sparked a renewed interest in news consumption patterns. When major crises occur, people experience an increasing need for information and sense-making; given the extraordinary impact of this health crisis on people's social and work life, relevant work support a 'rally around the news' effect, news fatigue and news avoidance, doomscrolling and a trend toward mainstream and trusted news outlets. This study explored how the coronavirus pandemic shaped news consumption patterns in Cyprus. The results show that news use hit record levels at the onset of the crisis, followed by corona news fatigue in the following months. Increased news consumption levels and greater engagement with the news were recorded again in the last couple of months of 2020 when the second wave of the pandemic hit Cyprus. Direct traffic to widely used and trusted sources doubled while a crisis boosting effect on mobile access to the detriment of computers was recorded.

## **Keywords**

News consumption; news use; news fatigue, news avoidance, doomscrolling, Cyprus.

## **Introduction**

Within a constantly evolving news media ecosystem the coronavirus pandemic apart from being a public health emergency comprises a communications crisis

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(Lewis, 2020). The COVID-19 pandemic created an unprecedented situation for journalism severely affecting the economic and labour situation of many news outlets around the world (Nielsen, Cherubini & Andi, 2020; Posetti, Bell & Brown, 2020). In their book *Critical incidents in journalism*, Tandoc et al. (2021) consider COVID-19 a pivotal moment for journalism for triggering deep reconsideration of its practice and boundaries. In the context of this crisis, academic work has shown a renewed interest in news consumption patterns (see Nielsen et al., 2020; Van Aelst et al., 2021). News consumption is a central aspect of everyday life in modern societies (Thompson, 1995) enabling citizens to comprehend and analyse social reality. In the present situation of the coronavirus pandemic, news consumption also pertains to understanding the disease itself and being aware of preventive steps and actions taken by governments (Fletcher et al., 2020). When major crises occur, people experience an increasing need for information and sense-making (Lowrey, 2004); more specifically, the perception of threat boosts the rate of news consumption and interpersonal communication (*ibid*). Westlund and Gheretti (2015) found that during a crisis, people experience a need for additional information ‘turning both daily and more seldom users into news omnivores’. However, it is argued that information needs may vary depending on the nature of the crisis; sudden and acute crises create a need for immediate news about safety, whilst slowly evolving economic crises or insidious epidemics call for in depth information on underlying causes and long-term consequences. However, the peculiarity of the coronavirus pandemic seems to have created a need for both: people experienced growing informational needs about the immediate dangers of this ‘external threat’ while looking for a deeper understanding of the virus and its impact on society (Bento et al. 2020; Van Aelst et al., 2021).

There is ample evidence pointing to increased news consumption during unexpected events, yet some countries are understudied. This study examines how people in Cyprus consumed news during the first and second phase of the coronavirus pandemic and sheds light how the evolution of this health crisis shaped news consumption, and what the trends identified might reveal about broader patterns of news use.

## **Patterns of news consumption in a high-choice media environment during crises**

In today’s high-choice media environment, people can access news via diverse media channels and platforms. Legacy media no longer enjoy the monopoly of news production and distribution as the presence of multiple players in the

news media ecosystem modify traditional relations of power (Chadwick, 2013) and create conditions of hyper-competition for audience attention (Myllylahti, 2020). With abundant media choice, people's demands have become increasingly important in determining how people consume news (Napoli, 2011). Such fundamental developments have marked a renewed interest in news consumption patterns.

Literature on news consumption revolves around three main threads of inquiry. The first one is based on the news-knowledge-democracy nexus. The assumption behind this normative perspective is that in order for citizens to comprehend social reality and make informed decisions they need a substantial amount of accurate, relevant and explanatory news (Schudson, 2008). From this perspective 'a **HEALTHY** news media is often claimed to be the life-blood of democracy' (Fenton, 2016, p.81). Despite long-standing and widespread criticism about the quality of news offered to the public, research suggests that the effects of news media use on knowledge and participation are rather 'virtuous' (de Vreese & Boomgaarden, 2006). Recent work (Woodstock, 2014) found that even in the case of 'news resisters', who purposefully endorse habits of limited news consumption, there is a positive correlation between news use and meaningful political participation. However, not all media seem to have a beneficial effect in terms of knowledge gain; while traditional and online news outlets contribute to higher levels of knowledge on political affairs, social media have no or even negative effects on political or current affairs knowledge (Beckers et al., 2020).

The second strand of research focuses on news habits (see LaRose, 2010); in this case, scholars attempt to investigate the cues, both external (e.g. time, events) and eternal (e.g. mood, goals) that lead to habit acquisition, habit activation and reformation. In this vein, Broesma and Swart (2021) explored how COVID-19 affected news habits; they conclude a continuum of news use ranging from 'news avoiders' to 'news 'junkies''. The stability of people's everyday life during the pandemic reinforced existing habits, whilst exposure to social cues increased news consumption. The level of stress people encountered during the pandemic had diverging effects. For frequent news users and news junkies increased stress levels resulted in a bigger intake of news. For followers turned avoiders the stress they experienced had the opposite effect. Finally, dissatisfaction with journalism led to avoiding news use.

News avoidance is a growing phenomenon; an important distinction is made between intentional avoidance which is a conscious and active choice and unintentional which is the result of one's relative preference for other content vis-à-vis news (Skovgaard & Andersen, 2020). Discussions on news avoidance bring

to the fore larger questions regarding factors affecting news use. Trust (Andersen et al. 2021) and interest (Lecheler & de Vreese, 2017) in news have been found as strong predictors of news consumption. Conversely, negative and depressive news content causing feelings of anxiety and powerlessness has a negative correlation with news consumption (Kalogeropoulos, 2017). Recent studies on news consumption during the COVID-19 pandemic provide evidence for two main trends in news use which are closely related with claims for a dominant negative narrative emphasizing statistics of infected, hospitalized and deceased, collapsing health systems and drastic counter-pandemic measures. On one hand, findings (Ytre-Arne & Moe, 2021) confirm previous studies that during crises people depend on news to satisfy their need for orientation and sense-making and increase their intake of news; additionally, the severity of the health crisis along with negative coverage are said to have contributed to the phenomenon of ‘doomscrolling’ which is defined as ‘the act of consuming an endless procession of negative online news, to the detriment of the scroller’s mental wellness’ (*ibid*, 2). On the other hand, negativity, repetitive reporting and information overload make some people feel overwhelmed and emotionally drained and thus choose to switch off from the news or avoid it overall (Nguyen et al., 2021).

The third, and most recent strand of research, concerns how people access the news. Obviously, this add-on to scholarly work relates to technological and structural changes of the news ecosystem and the concomitant changes in news consumption patterns creating ‘a critically important area for future research’ (Westlund, 2013). The shift to mobile devices is steadily increasing widening the gap between mobiles and computers (Newman et al., 2018). As mobile news consumption increases, so do concerns of ‘snacking’ or ‘grazing’ on the news connoting that people use their mobile devices to grab bits of news here and there (Molyneux, 2018). Push notifications used to attract news consumers are shown to create an incidental, sometimes serendipitous, news exposure (Stroud et al., 2020).

## **Data and methods**

This study attempts to explore how the coronavirus pandemic affected news consumption in Cyprus. More specifically, the aim is to investigate the (changing) usage of news consumption in terms of a) traffic, b) acquisition channels (e.g. direct traffic, search engines, social media), and c) the devices used to access the news.

In order to explore how consumption usage evolved during the pandemic in Cyprus we retrieved data from the market leader of the online news publishers

in the country. According to statistics published by the Cyprus Online Publishers Association (COPA), Sigmalive (<https://www.sigmalive.com>) leads the market; in March 2020, Sigmalive ranked first with 2,4m unique visitors and 36m page views (COPA, 2020).

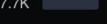
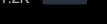
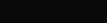
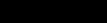
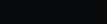
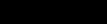
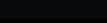
*Table 1*  
**Ranking of news websites, March 2020**

MEMBERS	PARENT	UNIQUE VISITORS	VAR %	PAGEVIEWS	VISITS			SOCIAL MEDIA TRAFFIC %	AVERAGE MINUTES PER VISIT
					'DESK %	MOB. %	TOTAL		
SIGMALIVE.COM	Sigmalive (p)	2.402.289	68,15.	36.001.231	19,17	80,81	13.978.505	23,56	05:30
PHILENEWS.COM	philenews.com (p)	2.047.728	91,32.	23.391.183	18,17	81,83	8.141.106	23,93	04:07
CYPRUSTIMES.COM	McMedia (p)	1.397.791	77,68.	19.982.793	12,28	87,72	5.003.482	47,09	03:56
OFFSITE	Digital Tree (p)	1.150.095	78,36.	10.468.912	10,48	89,50	3.489.092	44,79	02:00
REPORTER.COM.CY	lmh (p)	1.055.737	65,99.	19.285.052	22,83	77,17	6.646.669	48,30	02:34
IN-CYPRUS.COM	philenews.com (p)	1.039.553	216,69.	3.694.967	9,79	90,21	2.352.305	12,79	01:22
ALPHANEWS.LIVE	Alpha TV Cyprus	982.326	82,63.	4.683.001	9,75	83,80	2.647.415	31,21	02:16
KERKIDA.NET	Digital Tree (p)	728.811	27,18.	14.139.922	14,43	85,57	3.661.709	22,64	04:32
POLITIS.COM.CY	Politis Online (p)	721.489	64,72.	5.197.670	30,02	69,98	2.389.990	27,20	02:38

*Source: COPA, 2020*

Sigmalive is part of the DIAS Publishing House Ltd which is one of the biggest media groups in Cyprus including traditional and digital media channels, including one television station, one newspaper, two radio stations and a number of magazines and other publications. DIAS operates on the basis of a very competitive convergent newsroom offering extensive coverage of political and current affairs, both national and international. Additionally, Sigmalive is very active on social networks; its Facebook page ranks first among rivals with more than 140.000 page likes (see *Table 2*).

*Table 2*  
**Ranking of Facebook pages**

Page		Total Page Likes
YOU 1	 <b>Sigmalive</b>	141.8K 
2	 <b>ANT1.com.cy</b>	130.3K 
3	 <b>Phileleftheros ('Ο Φιλέλ...)</b>	127.7K 
4	 <b>Cyprus Times</b>	101.2K 
5	 <b>Reporter</b>	91.4K 
6	 <b>Tothemonline</b>	80.5K 
7	 <b>Offsite Cy</b>	68.8K 
8	 <b>newsbomb.com.cy</b>	59K 
9	 <b>AlphaNews.Live</b>	46.6K 
10	 <b>H Καθημερινή Κύπρου -...</b>	39.8K 

*Source: Facebook, 2020*

Given the prominent position of Sigmalive in the Cypriot media landscape and the small size<sup>2</sup> of the country, the data are deemed adequate to reach reasonable conclusions regarding news usage during the pandemic. The data used for the study are retrieved from Google Analytics. Although the market provides a large number of web analytics tools, Google Analytics is used by an

<sup>2</sup> Cyprus has an estimated population of 888.000 in the Government controlled area (Greek speaking) and 90,8% of individuals aged 16-74 accessed the internet in the first quarter of 2020 (Statistical Service of the Republic of Cyprus, 2020a and 2020b).

estimated 50% of all websites in Cyprus (Built With, 2021) and by all members of the COPA. The application of the snippet code on the websites of the COPA members, and the data provided every month are validated and certified by OJD (Informacion y Control de Puplicaciones) in Spain, which is a third-party Google Analytics expert, and a member of the International Federation of Audit Bureau of Certification (IFABC).

In order to explore the (emerging) patterns of news consumption during the first and second phase of the pandemic, we compared data regarding *Users*, *Sessions* and *Pageviews*, within three periods of time: before the coronavirus pandemic, during its first phase and during its second phase. More specifically, we analysed data regarding the number of users who visited Sigmalive on a day-by-day basis from March 1, 2020 until December 31, 2020; then we compared these findings with data of the same timeframe in 2019.

## Measures

- *Users* is a metric that indicates how many users (in practice unique devices) engaged with a website. Every time a device enters a website an identifier called client ID is sent and stored as a first-party cookie in the device of the user. Although the measurement is not totally accurate, for various reasons<sup>3</sup>, it provides measurement data enabling comparison and reasonable assumptions (Google, a).
- *Sessions* refer to the number of times the total number of users entered (or re-entered) and explored a website. Visits that take place within a 30-minutes period are counted as one session (Google, b).
- *Pageviews* refer to all pages that are loaded (or re-loaded) in the browser of a user. This means that the total number of pageviews, per month for example, amount to the total number of pages that have been loaded (or re-loaded) by the total number of users in every single session they had within this particular month (Google, c). It is important to note that for all members of COPA the auto refresh functionality is permitted only in the cases of the main page and the category pages after ten minutes of inactivity during a session.
- The traffic acquisition channels are presented and compared based on data that measure *Organic Search*, *Direct*, *Social*, *Referral* and *Other acquisition channels*. Users that enter through *organic search* are considered to be those who initially enter a website through search

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<sup>3</sup> See CLIFTON, B. (2010). *Accuracy whitepaper for web analytics*. Available from: <https://brianclifton.com/pro-lounge-files/accuracy-whitepaper.pdf>

engines (e.g. Google, Bing, Yahoo, Baidu, etc). *Direct traffic* refers to the traffic acquired when users enter the website directly by typing the domain name. *Social traffic*, as the name indicates, is the traffic generated through social media platforms (e.g. Facebook, Twitter, Instagram, etc). *Referral* is the traffic achieved through aggregators or any other website that links to any page of the website's domain. The term *Other traffic* in the case of Sigmalive pertains to grouped traffic through various sources from internal linking. The strongest internal linking source is the 'Read More' widget, which uses Artificial Intelligence technology to recommend more news stories to the user in order to continue his/her session, and thus retain the user to the website.

Regarding our final question exploring potential shifts in the devices people used to access the news during the pandemic, we explore data that detect the various types of devices people use to access the news (Mobile, Desktop, Tablet). The aforementioned metrics are compared against a timeline of events (see *Table 3*) compiled by using a) publicly available information regarding COVID-19 from the Cyprus Press and Information Office (PIO), b) data from the most popular articles of Sigmalive, and c) input from journalists that covered the progress of the pandemic in Cyprus.

*Table 3*  
**Timeline of events**

<b>09/03/2020</b>	The first two COVID-19 cases are detected in Cyprus
<b>10/03/2020</b>	Council of Ministers - Decisions for emergency measures to reduce the spread of the COVID-19 virus
<b>11/03/2020</b>	The operation of schools is suspended
<b>13/03/2020</b>	A total of 14 COVID-19 cases have been detected in Cyprus
<b>15/03/2020</b>	The President of the Republic of Cyprus addresses the nation following an extraordinary meeting of the Council of Ministers
<b>22/03/2020</b>	The first death in Cyprus due to COVID-19 is announced
<b>23/03/2020</b>	The President of the Republic addresses the public announcing the implementation of a strict lockdown
<b>30/03/2020</b>	The Minister of Health issues new decree under the Quarantine Law Act
<b>10/04/2020</b>	A call centre service for citizens who cannot use the 8998 text messaging service for movement by way of exception is set up
<b>12/04/2020</b>	A sharp rise of COVID-19 cases in China is announced
<b>14/04/2020</b>	12 people are arrested for sharing the same house

<b>15/04/2020</b>	The government puts into effect extraordinary measures to limit the spread of COVID-19 in Citizen Services Centres
<b>19/04/2020</b>	Easter Sunday (Orthodox)
<b>29/04/2020</b>	The President of the Republic addresses the nation announcing a gradual easing of COVID-19 preventive measures
<b>08/05/2020</b>	The President of the Republic addresses the nation announcing the operation of all levels of education
<b>19/05/2020</b>	The Council of Ministers affirms the second phase of restrictions easing with minor modifications
<b>12/10/2020</b>	Further restrictive measures are imposed in Nicosia and Limassol for the next 10 days
<b>22/10/2020</b>	The Council of Ministers decides the implementation of island-wide restrictive measures; stricter in Limassol and Paphos Districts
<b>04/11/2020</b>	The Minister of Health addresses the public to announce extraordinary measures for handling the pandemic
<b>11/11/2020</b>	The President of the Republic addresses the public to offer explanation for the measures decided
<b>27/11/2020</b>	Additional measures are taken to prevent further diffusion of the pandemic
<b>09/12/2020</b>	Further measures are decided to handle diffusion of the coronavirus with effect from 11/12/2020 until 31/12/2020
<b>15/12/2020</b>	A national Vaccination Plan for COVID-19 is decided
<b>29/12/2020</b>	Only permanent residents are allowed in houses; Remote working for public/wider public sector is imposed

## Findings

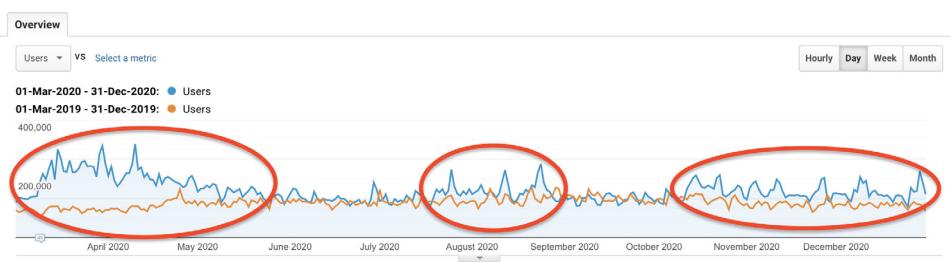
### News usage

A first noteworthy observation concerns a significant surge of traffic spotted in three periods of time (see *Graph 1*). More specifically, the first wave of increased traffic is noted at the onset of the crisis in Cyprus which officially began on March 9, 2020 when the first two COVID-19 cases were traced on the island. During March and April traffic peaks, and then gradually fades to reach normal rates in June 2020. Since the first COVID-19 cases were detected in Cyprus a series of events and government decisions took place culminating in a full lockdown in less than two weeks' time. Obviously, as elsewhere, the pandemic itself and the restrictive measures taken to prevent the spread of the coronavirus affected how Cypriots work, lead their everyday lives and communicate (Fuchs, 2021).

## News consumption patterns during the coronavirus pandemic across time and devices: The Cyprus case

*Graph 1*

### Number of users who visited Sigmalive per day - Comparison with 2019

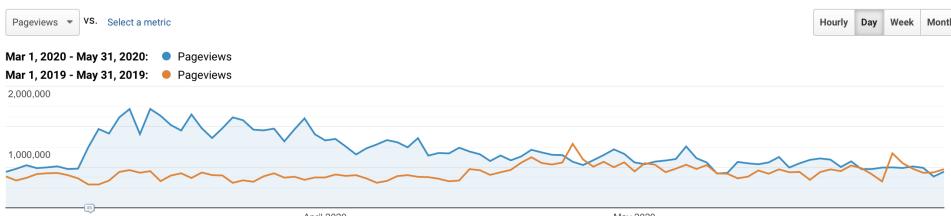
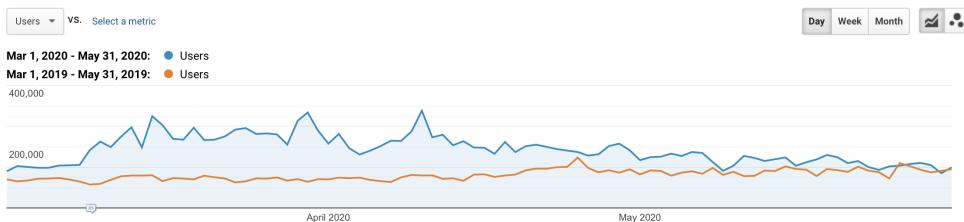


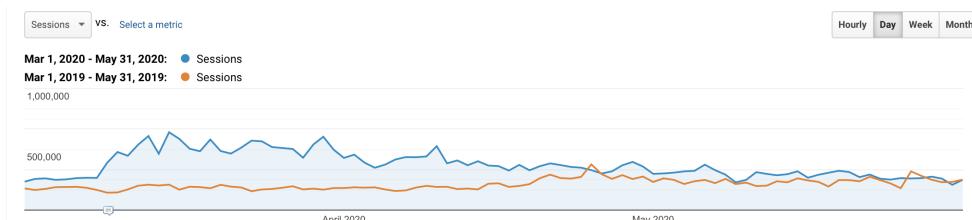
*Source: Sigmalive*

Taking a closer look at the comparative data between the trimester in question (March-May 2021) (blue line) and the same trimester of the previous year (orange line), a substantial increase is recorded along all three measures: Users, Pageviews and Sessions (see *Graph 2*). In other words, during the pandemic trimester both traffic and engagement were on the rise; not only the number of users increased, but news consumption was greater both in terms of stories read and time spent on the website.

*Graph 2*

### Users, Pageviews and Sessions recorded during the 1<sup>st</sup> wave of the pandemic – Comparison with 2019





Source: Sigmalive

In order to get a clearer grasp of the increase of Users, we compared each month separately, as in a period of 30 days existing cookies on the users' devices might be purged. This comparison indicates that Users in March and April 2020 more than doubled (see *Table 4*). News usage reached unprecedented rates with the total number of users amounting to approximately 2.402.000; in May the interest in news is still high, yet the steadiness of the pandemic situation resulted in diminished interest in news in comparison to the two previous months.

*Table 4*

#### Users per month

	March 2019	March 2020	
<b>Users</b>	1.032.888	2.402.289	↗ 132,58%
	<b>April 2019</b>	<b>April 2020</b>	
<b>Users</b>	1.182.394	2.383.974	↗ 101,62%
	<b>May 2019</b>	<b>May 2020</b>	
<b>Users</b>	1.246.711	1.758.754	↗ 41,07%

Source: Sigmalive

Our results are in line with relevant work (Nielsen et al., 2020; Van Aelst et al., 2021) indicating an overall rise of news use during the first peak of this health crisis, especially in the case of television and online media. The findings also confirm previous studies showing that during crisis which cause feelings of threat and anxiety, media dependency rates go up (Lowrey, 2004) and the use of online media also increase (Westlund & Gersetti, 2015).

The second wave of increased traffic is recorded between mid-July and late August. Two observations are worth mentioning here. First, that the traffic increase is lower compared to the one noted during the first wave. Second, that this increase is not related with COVID-19 news stories. When exploring data pertaining to the most popular news stories driving traffic during this period,

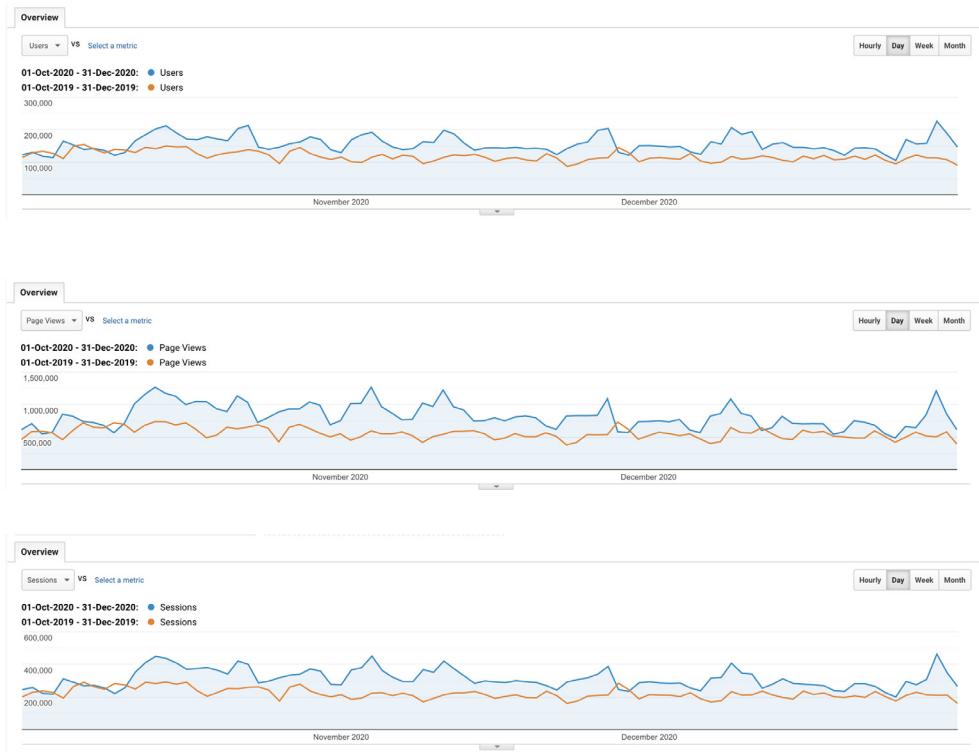
we found that this content was not associated with the coronavirus nor political and economic affairs; rather it concerned more tabloid-style stories about the abandoned country house of a deceased businessman facing criminal charges and two Koreans that sing Greek songs in a talent show in Korea. Such stories resulted in a significant stream of traffic which exceeded the normal rates encountered in the case of Sigmalive.

Our findings confirm previous studies (Newman et al., 2021) showing indications of news fatigue; while many news outlets enjoyed record traffic at the beginning of the pandemic, this heightened interest in news gave way to fatigue in the following months (June-July). Additionally, the findings corroborate with research claiming ‘Corona-fatigue’ due to informational and emotional overload leading people to either dosing their intake of news (Kormelink & Gunnewiek, 2021) or looking for lighter and entertaining topics.

According to our analysis, news fatigue related to the coronavirus was reversed in the case of Cyprus when the second wave of the pandemic hit the country; the data show that traffic towards Sigmalive went up again from mid-October until the end of 2020 as people once again tried to make sense of the worsening situation. Thus, this surge may well be associated with the announcement of new restrictive measures to prevent the spread of the coronavirus as rising numbers of COVID-19 cases were recorded in Nicosia and Limassol (Press and Information Office, 2020). A main difference between the first and second phase of the pandemic in Cyprus is the gradual implementation of constraining measures during the second phase as opposed to the sudden and unexampled lockdown imposed in March 2020. This element may explain why during the second phase of the pandemic the increase in traffic is significantly lower compared to the one recorded during the first phase. Yet, overall, all three measures (Users, Sessions, Page Views) are significantly higher when comparing the equivalent pro-pandemic period with this one.

*Graph 3*

### Users, Pageviews and Sessions recorded during the 2<sup>nd</sup> wave of the pandemic – Comparison with 2019



*Source: Sigmalive*

More specifically, the percentage of Users increased by more than 40% during the last two months of the year as restrictive measures became gradually stricter and the Christmas holidays were approaching. Taking a closer reading of the data, four observations are worth mentioning. First, the imminent impact of the second wave of the pandemic on people's daily lives renewed their interest in relevant coverage (see *Graph 1*). Second, interest in news and subsequent news usage followed the pace of the virus diffusion and the relevant measures imposed; the more the situation aggravated and the government put restrictions into effect, the more news consumption increased (see *Table 5*). Third, despite the significant increase recorded in both Sessions and Pageviews during the second wave of the pandemic, the overall rise when compared with the pre-pandemic period is smaller than the rise documented during the first wave of the pandemic (see *Table 6*).

*Table 5*

**Users per month**

	<b>October 2019</b>	<b>October 2020</b>	
<b>Users</b>	1.402.225	1.714.551	↑ 22,27%
	<b>November 2019</b>	<b>November 2020</b>	
<b>Users</b>	1.192.099	1.718.855	↑ 44,19%
	<b>December 2019</b>	<b>December 2020</b>	
<b>Users</b>	1.289.291	1.807.260	↑ 40,17%

*Source: Sigmalive*

*Table 6*

**Comparison of Sessions and Pageviews growth  
during the pandemic and 2019**

	<b>Sessions %</b>	<b>Pageviews %</b>
<b>09/03/2020 – 31/05/2020 (1st wave of the pandemic)</b>	↑ 77,43%	↑ 64,47%
19/07/2020 – 26/08/2020	↑ 42,05%	↑ 39,05%
<b>12/10/2020-31/12/2020 (2nd wave of the pandemic)</b>	↑ 46,10%	↑ 52,30%

*Source: Sigmalive*

Fourth, although the number of Users by month increased less than the first period, the engagement of the Users with the content was higher; when comparing Pageviews per User Session and the Average Session Duration between the two phases, the data show a five and ten percent increase respectively. On the other hand, the Number of Sessions per User remained almost the same (see *Table 7*). Taken together these findings may very well suggest that during the second phase some users started avoiding news or limited their news consumption. This explanation corresponds with previous studies pointing to news avoidance (Damstra et al., 2021) or news resistance (Woodstock, 2014). In the case of the coronavirus health crisis, it seems that the initial shock which drove news traffic high, gave way to reduced news usage mainly as a result of news distrust (Nielsen, Fletcher, Kalogeropoulos & Simon, 2020), perceived biased and overwhelmingly negative coverage of the health crisis which made people feel anxious and emotionally drained (Bernal-Trivio, 2020; Ytre-Arne & Moe, (2021)). At the same time, our analysis corroborates with Van Aelst's et al. (2021) findings that avid users of news or people that were concerned about the impact and evolution of the pandemic maintained a high appetite for news.

Table 7

**Engagement of Users – Comparison of 1<sup>st</sup> and 2<sup>nd</sup> wave of the pandemic**

	First wave 1/3/2020- 31/05/202	Second wave 1/10/2020- 31/12/2020	
Pageviews/ Session	2,50	2,64	↑5,38%
Avg Session Duration	00:05:00	00:05:31	↑10,30%
Number of Sessions per User	6,66	6,65	↓0,17%

*Source: Sigmalive*

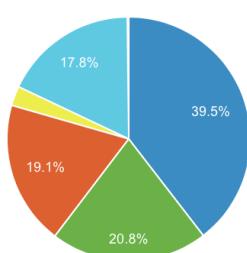
**Traffic acquisition**

Traffic acquisition is used in order to understand how users end up visiting a website. Within a high-choice news environment, traffic acquisition has gained prominent importance, especially due to increased news consumption through social media (Shearer & Mitchell, 2021). Comparing the acquisition channels during the first phase of the pandemic with the same period of the previous year, the data show an increase in Direct traffic, which rose from approximately 21 to 29 percent and a reduction of traffic coming from search engines (Organic) and social media; more specifically, organic traffic diminished by approximately five percent while social by two percent (see Table 8). These data provide evidence that people in their effort to make sense of the crisis, sought news in legacy and trusted sources. The findings are in line with Newman's et al., 2020 conclusion that the coronavirus reminded people of the value of legacy outlets while levelling off the use of social media for news after a steady rise.

Table 8

**Traffic acquisition by channel (1<sup>st</sup> wave of the pandemic)**

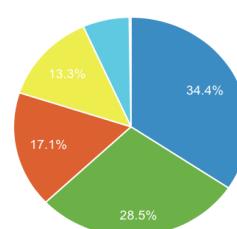
Mar 1, 2019 - May 31, 2019



Top Channels

Mar 1, 2020 - May 31, 2020

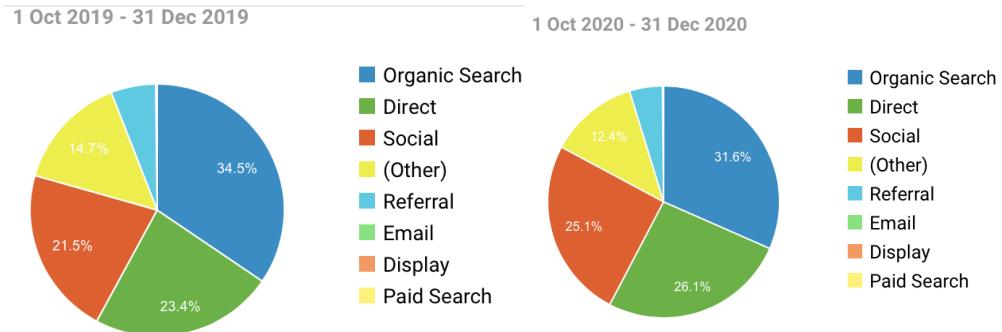
- Organic Search
- Direct
- Social
- (Other)
- Referral
- Display
- Email
- Paid Search



- Organic Search
- Direct
- Social
- (Other)
- Referral
- Display
- Email
- Paid Search

When comparing the three top acquisition channels during the second wave of the pandemic in Cyprus, the data reveal a similar pattern; Direct traffic rose by approximately three percent, Organic Search was reduced by also three percent, whilst Social traffic went up by 4 percent amounting to one quarter of the total traffic (see *Table 9*). This increase of Social traffic -between 2019 and 2020, and also between the first and second phase of the pandemic (17 vs 25%) reveal not only the prominent position of social media as news drivers but also point to a ‘back-to-normal’ trend; as the initial shock faded away and the restrictive measures imposed was not a brand new thing, people (re)discovered their news habits.

*Table 9*  
**Traffic acquisition by channel (2<sup>nd</sup> wave of the pandemic)**



A closer look in the growth figures of the three main acquisition channels during the first and second phase of the pandemic reveals the popularity and strength of legacy brands during crises. During the first phase, when the need for COVID-19 related information hit record levels, direct traffic rose by 156% (see *Table 10*). Social and Organic Search also increased substantially by 67,50% and 63 percent respectively. However, during the second phase of the pandemic this trend is significantly reduced paving the way for pre-crisis news habits (see *Table 11*). Traffic through social media went up by almost 55 percent, whilst Direct traffic increased by 48 percent.

Table 10

**Main acquisition channels (1<sup>st</sup> phase) - Comparison with 2019**

<b>First phase of the pandemic 1/3/2020 - 31/05/2020</b>	
Acquisition Channels	
1. Organic Search	⬆ 62,81%
2. Direct	⬆ 156,01%
3. Social	⬆ 67,50%

Source: Sigmalive

Table 11

**Main acquisition channels (2<sup>nd</sup> phase) - Comparison with 2019**

<b>Second phase of the pandemic 1/10/2020 - 31/12/2020</b>	
Acquisition Channels	
1. Organic Search	⬆ 21,20%
2. Direct	⬆ 47,97%
3. Social	⬆ 54,64%

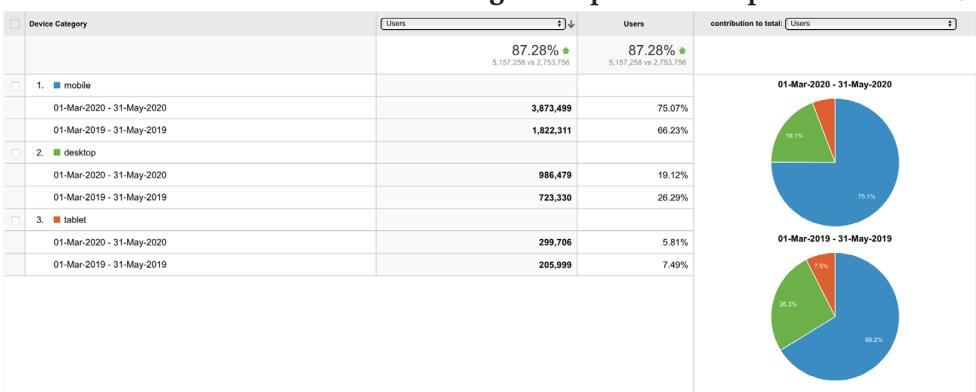
Source: Sigmalive

**Devices used during the pandemic**

During the pandemic and the acute lockdowns people were forced to work from home while their ability to move from place to place was significantly limited. During the first phase of the pandemic, the data show a sharp drop in desktop devices, from approximately 26 percent in 2019 to 19 percent. Conversely, news access through mobile devices increased from 66 to 75 percent (see Table 12).

Table 12

**Use of devices to access the news during the 1<sup>st</sup> phase – Comparison with 2019**



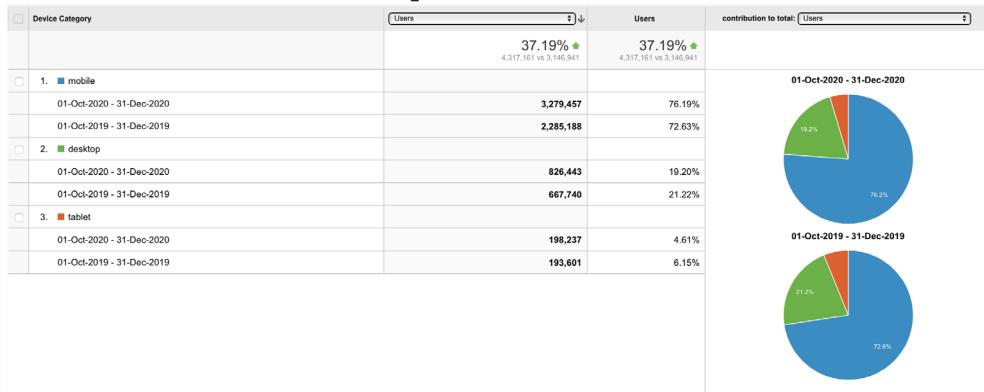
Source: Sigmalive

## News consumption patterns during the coronavirus pandemic across time and devices: The Cyprus case

During the second phase of the pandemic the study provides evidence of a limited drop on desktop access (from 21 to 19 percent), whilst the use of mobile devices increased by approximately four percent (from 72 to 76) (see *Table 13*).

*Table 13*

### Use of devices to access the news during the 2<sup>nd</sup> phase – Comparison with 2019



*Source: Sigmalive*

In order to test whether the steady increase of smart phones to access the news was a game-changing trend or if the corona crisis reinforced a pre-existing trend, we explored relevant data from 2019 and 2020 divided in quarters. The analysis indicates that from Q1 2019 to Q4 2020 the use of mobile is up by almost 13 percent (from 63 to 76) while computer use to access the news is down by approximately 9.5 percent (from 28.5 to 19). Declining trends are also documented in the case of Tablets as news access was reduced by almost half (from 8 to 4.6) (see *Table 14*).

*Table 14*

### Percentage of devices used per quarter

	2019				2020				2021	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Mobile (%)</b>	63,44	67,30	72,20	72,63	74,31	75,88	77,95	76,19	75,29	74,02
<b>Desktop (%)</b>	28,65	25,36	20,50	21,22	20,14	18,35	17,33	19,20	20,31	21,98
<b>Tablet (%)</b>	7,91	7,34	7,30	6,15	5,55	5,77	4,72	4,61	4,40	4,00

*Source: Sigmalive*

Data from Q1 and Q2 2021 indicate that the use of mobile and desktop devices to access the news are similar to the level recorded in Q1 2020. Thus, we may assume a crisis boosting effect on mobile access to the detriment of desktops. Tablets, on the other hand are steadily losing ground. The findings corroborate with relevant research showing that smartphones have become critical for discovering and consuming news whilst computer news access by contrast has fallen, yet less in countries which had fewer restrictions on movement (Newman et al., 2021).

## Conclusions

The present study explored how the coronavirus pandemic shaped news consumption patterns in Cyprus. During the first phase of the pandemic the need for information and orientation was high and Cypriots en masse turned to news media, as could be expected based on previous research (Nielsen et al., 2020; Van Aelst et al., 2021). The tremendous growth of traffic to Sigmalive, a well-established mainstream website and leading player in the Cypriot landscape indicates that people looked for widely used and broadly trusted news media (Fletcher et al., 2020). However, the ‘rally around the news’ effect, recorded early on in the crisis (March-May 2020) gave way to news fatigue (Kormelink & Gunnewiek, 2021); as the perceived severity of the health crisis diminished, movement restrictions became the new reality, and people achieved a basic level of understanding, news usage returned to pro-crisis levels. Relevant research (Nguyen et al., 2021) suggests that during this health crisis mainstream media around the globe endorsed an ultimately negative narrative causing distress and anxiety to news consumers who chose to either dose their intake of news or even avoid it. Evidence of negative coverage has also been documented in Cyprus (Hatzimilti, 2021). Our findings show that news usage increased again significantly during the last couple of months of 2020 when the second wave of the pandemic hit Cyprus. The intensification of restrictive measures to control the spread of the virus along with a new surge of anxiety as the enemy returned resulted in a flux of traffic toward Sigmalive. During the second phase of the pandemic traffic figures were lower when compared with those at the onset of the crisis, yet engagement metrics were slightly higher; relevant studies support the phenomenon of ‘doomscrolling’ as a divergent effect to news avoidance (Ytre-Arne & Moe, 2021).

Disruptions in social and work life also affected how news consumers access the news. Despite evidence showing that people prefer organic and social gateways to reach news (Newman et al., 2018), direct traffic to Sigmalive,

especially during the first phase of the pandemic, hit record levels indicating that information and monitorial needs drive users directly to legacy outlets. Finally, the study found that the pandemic conditions reinforced the trend towards mobile news consumption confirming displacing effects over other devices (Westlund & F rdigh, 2015), especially the Tablet, raising questions of how the affordances of the smartphone impacts news use and knowledge gain.

The study adds to the literature concerning news consumption habits at times of crises in Cyprus, a country usually left out from comparative research. Despite its merits, it comes with limitations stemming from the limited sample. Future research should use a more extensive sample and include the third wave of the pandemic to offer more comprehensive insights.

## References

- ANDERSEN, K., JOHANSSON, J., JOHANSSON, B., & SHEHATA, A. (2021). Maintenance and reformation of news repertoires: A latent transition analysis, *Journalism & Mass Communication Quarterly*. DOI: 10.1177/10776990211019750
- BECKERS, K., VAN AELST, P., VERHOEST, P., & D'HAENENS, L. (2020). What do people learn from following the news? A diary study on the influence of media use on knowledge of current news stories. *European Journal of Communication*, 36(3), pp. 254–269. DOI: 10.1177/0267323120978724
- BERNAL-TRIVI O, A. (2020). Habits and feelings regarding COVID-19 news coverage during lockdown in Spain. *Tripodos*, 49, pp. 169–183.
- BROERSMA, M. & SWART, J. (2021). Do novel routines stick after the Pandemic? The formation of news habits during COVID-19. *Journalism Studies*. DOI: 10.1080/1461670X.2021.1932561
- Built With* (2021). Analytics usage in Cyprus. Available from: <https://trends.builtwith.com/analytics/country/Cyprus>
- CHADWICK, A. (2013). *The hybrid media system: Politics and power*. Oxford University Press.
- COPA (2020). Στατιστικά Μελών. Available from: <http://copa.com.cy/μέλη/στατιστικά-μελών/>
- DAMSTRA,A., VLIEGENTHART, R., BOOMGAARDEN, H., GLÜER, K., LINDGREN, E., STRÖMBÄCK, J., & TSFATI, Y. (2021). Knowledge and the news: An investigation of the relation between news use, news avoidance, and the presence of (mis)beliefs. *The International Journal of Press/Politics*. DOI: 10.1177/19401612211031457
- DE VREESE, C. & BOOMGAARDEN, H. (2006). News, political knowledge and participation: The differential effects of news media exposure on political knowledge and participation. *Acta Politica*, 41, pp. 317–341.

- FENTON, N. (2016). Post-democracy, press, politics and power. *The Political Quarterly*, 87(1), pp. 81–85.
- FLETCHER, R., KALOGEROPOULOS, A., SIMON, F., & NIELSEN, R. (2020). Information inequality in the UK coronavirus communications crisis, Reuters Institute for the Study of Journalism. Available from: <https://reutersinstitute.politics.ox.ac.uk/information-inequality-uk-coronavirus-communications-crisis>
- FUCHS, C. (2021). *Communicating COVID-19: Everyday life, digital capitalism, and conspiracy theories in pandemic times*. Emerald Publishing Limited.
- Google [no date, a]. How users are identified for user metrics. Available from: <https://support.google.com/analytics/answer/2992042?hl=en>
- Google [no date, b]. Session. Available from: <https://support.google.com/analytics/answer/6086069?hl=en>
- Google [no date, c]. Pageview. Available from: <https://support.google.com/analytics/answer/6086080?hl=en>
- HATZIMILTI, M. (2021). How COVID-19 affected trust levels in journalism: A qualitative analysis in Cyprus. A thesis submitted in partial fulfilment of the requirements of Staffordshire University for the Degree of BA in Communication and Internet Studies, Cyprus University of Technology. Available from: <http://eprints.bournemouth.ac.uk/35631/1/Pandemic%20News%20Experience%20Pre-Print%20v6.pdf>
- KALOGEROPOULOS, A. (2017). News avoidance, digital news report 2017, Reuters Institute for the Study of Journalism. Available from: <https://www.digitalnewsreport.org/survey/2017/news-avoidance-2017/>
- KORMELINK, T-G. & GUNNEWIEK, A-K. (2021). From ‘far away’ to ‘shock’ to ‘satigue’ to ‘back to normal’: How young people experienced news during the first wave of the COVID-19 pandemic. *Journalism Studies*. DOI: 10.1080/1461670X.2021.1932560
- LAROSE, R. (2010). The problem of media habits. *Communication Theory*, 20, pp. 194–222.
- LECHELER, S. & DE VREESE, C. (2017). News media, knowledge, and political interest: Evidence of a dual role from a field experiment. *Journal of Communication*, 67, pp. 545–564.
- LEWIS, S. (2020). The objects and objectives of journalism research during the coronavirus pandemic and beyond. *Digital Journalism*, 8(5), pp. 681–689. DOI: 10.1080/21670811.2020.1773292
- LOWREY, W. (2004). Media dependency during a large-scale social disruption: The case of September 11. *Mass Communication and Society*, 7(3), pp. 339–357. DOI: 10.1207/s15327825mcs0703\_5

- MOLYNEUX, L. (2018). Mobile news consumption. *Digital Journalism*, 6(5), pp. 634–650. DOI: 10.1080/21670811.2017.1334567
- MYLLYLAHTI, M. (2020). Paying attention to attention: A conceptual framework for studying news reader revenue models related to platforms. *Digital Journalism*, 8(5), pp. 567–575.
- NAPOLI, P. M. (2011). *Audience evolution: New technologies and the transformation of media audiences*. Columbia University Press.
- NEWMAN, N., FLETCHER, R., KALOGEROPOULOS, A., LEVY, D., & NIELSEN, R-K. (2018). Reuters digital news report 2018. Reuters Institute for the Study of Journalism. Available from: <http://media.digitalnewsreport.org/wp-content/uploads/2018/06/digital-news-report-2018.pdf>
- NEWMAN, N., FLETCHER, R., SCHULTZ, A., ANDI, S., & NIELSEN, R-K. (2020). *Digital News Report 2020*, Reuters Institute for the Study of Journalism, [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-06/DNR\\_2020\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-06/DNR_2020_FINAL.pdf)
- NEWMAN, N., FLETCHER, R., SCHULZ, A., ANDI, S., ROBERTSON, C., & NIELSEN, R-K. (2021). Digital news report 2021. Reuters Institute for the Study of Journalism. Available from: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital\\_News\\_Report\\_2021\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf)
- NGUYEN, A., SMITH, A., JACKSON, D., & ZHAO, X. (2021). Pandemic news experience: COVID-19, news consumption, mental health, and the demand for positive news. Project Report. Bournemouth University, in collaboration with Newsquest Media Company, the Solutions Journalism Network, and the Association of British Science Writers.
- NIELSEN, R-K, FLETCHER, R., KALOGEROPOULOS, A., & SIMON, F. (2020). Communications in the coronavirus crisis: Lessons for the second wave. Reuters Institute for the Study of Journalism. Available from: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-10/Nielsen\\_et\\_al\\_Communications\\_in\\_the\\_Coronavirus\\_Crisis\\_FINAL\\_0.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-10/Nielsen_et_al_Communications_in_the_Coronavirus_Crisis_FINAL_0.pdf)
- NIELSEN, R-K., CHERUBINI, F., & ANDI, S. (2020). Few winners, many losers: The COVID-19 pandemic's dramatic and unequal impact on independent news media. Reuters Institute for the Study of Journalism. Available from: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-11/Nielsen\\_et\\_al\\_COVID-19\\_Pandemics\\_Impact\\_on\\_Independent\\_News\\_Media\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-11/Nielsen_et_al_COVID-19_Pandemics_Impact_on_Independent_News_Media_FINAL.pdf)
- POSETTI, J., BELL, E. & BROWN, P. (2020). Journalism and the pandemic – a global snapshot of impacts. Available from: [https://www.icfj.org/sites/default/files/2020-10/Journalism%20and%20the%20Pandemic%20Project%20Report%202020\\_FINAL.pdf](https://www.icfj.org/sites/default/files/2020-10/Journalism%20and%20the%20Pandemic%20Project%20Report%202020_FINAL.pdf)

- Press and Information Office (PIO) (2020). Press releases. Available from: <https://www.pio.gov.cy/coronavirus/eng/categories/press-releases>
- SCHUDSON, M. (2008). *Why democracies need an unlovable press*. Polity Press.
- SHEARER, E. & MITCHELL, A. (2021). *News use across social media platforms*. Pew Research Center.
- SKOVGAARD, M. & ANDERSEN, K. (2020). Conceptualizing news avoidance: Towards a shared understanding of different causes and potential solutions, *Journalism Studies*, 21(4), pp. 459–476. DOI: 10.1080/1461670x.2019.1686410
- STROUD, N., PEACOCK, S., & CURRY, A. (2020). The effects of mobile push notifications on news consumption and learning. *Digital Journalism*, 8(1), pp. 32–48. DOI: 10.1080/21670811.2019.1655462
- TANDOC, JR. E., JENKINS, J., THOMAS, R., & WESTLUND, O. (2021). *Critical incidents in journalism*. London, Routledge.
- THOMPSON, J. B. (1995). *The media and modernity*. Cambridge, Polity Press.
- VAN AELST, P., TOTH, F., CASTRO, L., T TKA, V., DE VREESE, C., AALBERG, T., CARDENAL, A. S., CORBU, N., ESSER, F., HOPMANN, D.-N., KOC-MICHALSKA, K., MATTHES, J., SCHEMER, C., SHEAFER, T., SPLENDORE, S., STANYER, J., ST PI SKA, A., STR MB CK, J., & THEOCHARIS, Y. (2021). Does a crisis change news habits? A comparative study of the effects of COVID-19 on news media use in 17 European countries. *Digital Journalism*. DOI: 10.1080/21670811.2021.1943481
- WESTLUND, O. (2013). Mobile news. *Digital Journalism*, 1(1), pp. 6–26.
- WESTLUND, O. & GHERSETTI, M. (2015). Modelling news media use: Positing and applying the GC/MC model to the analysis of media use in everyday life and crisis situations. *Journalism Studies*, 16(2), pp. 133–151.
- WESTLUND, O. & F RDIGH, M. (2015). Accessing the news in an age of mobile media: Tracing displacing and complementary effects of mobile news on newspapers and online news. *Mobile Media & Communication*, 3(1), pp. 53–74.
- WOODSTOCK, L. (2014). The news-democracy narrative and the unexpected benefits of limited news consumption: The case of news resisters. *Journalism*, 15(7), pp. 834–849.
- YTRE-ARNE, B. & MOE, H. (2021). Doomscrolling, monitoring and avoiding: News use in COVID-19 pandemic lockdown. *Journalism Studies*. DOI: 10.1080/1461670X.2021.1952475