



INTELIGÊNCIA ARTIFICIAL E JORNALISMO MÓVEL

CONTEXTOS, TENDÊNCIAS, PRÁTICAS E PERSPECTIVAS

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[ORGS]



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NEWS IN THE POCKET: A STUDY OF YOUNG ADULTS' PERCEPTIONS OF THE USES AND RELEVANCE OF NEWS APPS

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Introduction: Today's news ecosystem

There is nothing new about how the news ecosystem has undergone significant changes in recent years, especially with the rise of digital media and the consequent growth of news apps and social media platforms. This has led to an increasingly more complex and more fragmented media landscape, with both challenges and opportunities for journalism and the public. News apps have become more popular among consumers, particularly younger audiences who are more likely to access news through mobile devices (Madden, Lenhart and Fontaine, 2017; Eddy, 2022; Forman-Katz and Matsa, 2022).

These apps offer a convenient and personalized way to access news content, with features such as push notifications, personalized recommendations, and curated feeds. While digitalization faced media organizations with new challenges and upsets even in their financial stability, there is also an argument in favour of the new opportunities that emerged with such technological developments, in particular with mobile apps. As a matter of fact, by providing new opportunities for media

organizations to reach audiences and monetize their content, through subscription models, targeted advertising, and data analytics. However, the use of news apps also raises several concerns. Namely, on one end, about the quality and diversity of news content, while on the other regarding the impact on traditional media organizations. News apps often prioritise popular and viral content, which may lead to a focus on sensationalism and entertainment-based approaches rather than serious news coverage. Such may be a simplified way of explaining the phenomenon of clickbait. Those apps also rely on algorithms and personalization models, which may reinforce filter bubbles (Pariser, 2011; Curran, 2019) and limit exposure to a broader array of perspectives (Pariser, 2015; Groshek and Koc-Michalska, 2017; Dutton et al., 2017).

An example of a news-related application currently particularly popular is *Flipboard*¹ which is known for its personalised news feeds and visually appealing magazine-style layout. Users can select their topics of interest and *Flipboard* curates news stories from various sources. *Google News* and *Apple News apps*, both aggregate news stories around the web, using algorithms to prioritize and personalize content based on a user's preferences. Brand media outlets are also quite common in the news diet of young adults, such as *Reuters News*² which covers breaking news from around the world, although mainly focused on the topics like business, finance, and sports news. This app also includes customizable alerts and notifications. The *CNN app*³ features live streaming of the *CNN* news network, as well as breaking news alerts and access to *CNN*'s top stories. That app also includes video clips, photo galleries, and interactive content. The *BBC News* mobile app⁴ provides comprehensive coverage of global news stories, as well as in-depth analysis and feature articles. The *New York Times* app⁵ features breaking

1. <https://flipboard.com/@flipboard>

2. <https://www.reuters.com/tools/mobile/us>

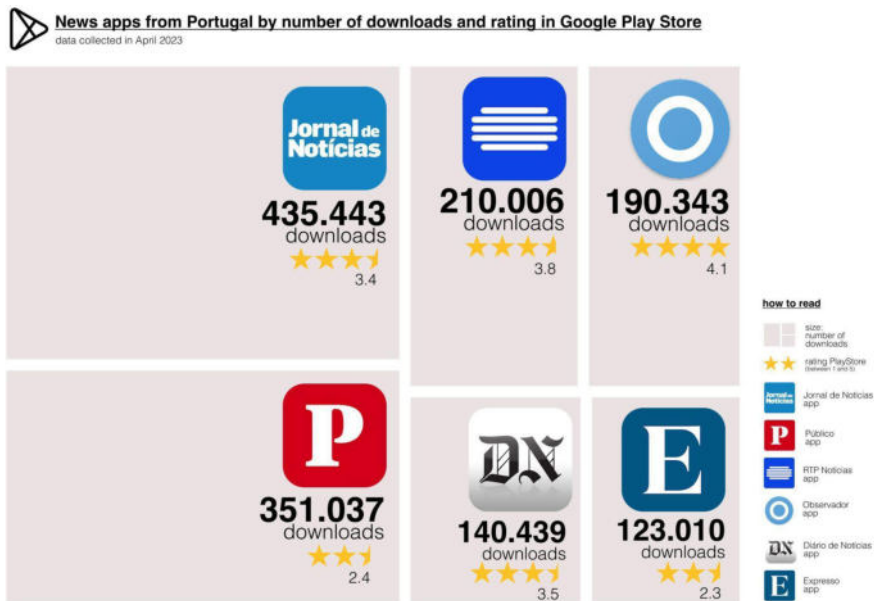
3. <https://edition.cnn.com/specials/mobile-apps>

4. <https://www.bbc.com/news/10628323>

5. <https://help.nytimes.com/hc/en-us/sections/115003859548-Apps>

news alerts, access to top stories and in-depth coverage, as well as multimedia content like videos and podcasts. Users can also save articles for offline reading. In the specific case of the Portuguese landscape, by analysing data retrieved from the *Google Play Store*, the most downloaded apps are *JN - Jornal de Notícias*, *Público*, *RTP Notícias*, *Observador*, *DN - Diário de Notícias*, and *Expresso* (fig. 1). Those six apps are not aggregators of news with different news outlets as sources. In fact, they correspond with some of the higher-prestige news media outlets in the country. *Jornal de Notícias* and *Público* are both daily newspapers in Portugal that also offer news apps. Both apps feature breaking news alerts, access to top stories and in-depth coverage, as well as multimedia content like videos and photo galleries. *RTP* is the Portuguese state public radio and television broadcasting, *RTP Notícias* app features breaking news alerts, access to top stories as well as live streaming of the *RTP* news network. *Observador* is a digitally native news outlet which has an app that provides coverage of national and international news stories, opinion pieces and analysis. The app also includes multimedia content like videos and podcasts. *Diário de Notícias* is a daily newspaper (from the same company as *Jornal de Notícias*, Global Media Group). The *DN* app provides access to the latest news stories from Portugal and the world, including politics, business, sports, and culture. Users can customise their feeds by selecting their preferred topics and receive push notifications for breaking news. The app also includes multimedia content such as photos and videos, and opinion articles from columnists. Finally, *Expresso* is a weekly newspaper in Portugal that also has a news app. The app features coverage of national and international news stories, as well as opinion pieces and analysis. Users can also access multimedia content like videos and podcasts.

Figure 1 - News apps from Portugal by number of downloads and rating in Google Play Store.



Source: Authors (2023).

Social media platforms are just as important as journalism mobile apps in this panorama. *Facebook*, *Twitter*, *Instagram*, *YouTube*, *TikTok* and many more also have a significant impact on the news ecosystem, with the majority of consumers now getting their news directly from social media feeds (Hermida et al., 2012). In fact, quite sometimes a newsworthy subject goes viral on social media platforms before news media outlets are able to carefully write about it and create news content of such regard, thus challenging and imposing reflections on the validity of the notion of ‘breaking news’ (Ekström et al., 2021). Social media platforms such as *Facebook* and *Twitter* have faced criticism for their role in spreading fake news and disinformation, particularly during political campaigns and major events. The platforms have taken steps to address this issue, through fact-checking, labelling, and reducing the visibility of false content (Spohr, 2017; Iosifidis and

Nicoli, 2020). However, the effectiveness of these measures is still debated, and concerns remain about the impact on public trust in media and democracy. In addition, social media platforms have also been criticized for their algorithms and recommendation systems, which may prioritize viral and sensational content over reliable and informative news. This can reinforce filter bubbles and echo chambers, as users tend to be exposed to content that confirms their existing beliefs and biases. The news ecosystem today is characterized by a complex and dynamic interplay between traditional media organizations, digital media platforms, and news apps. This presents both challenges and opportunities for journalism professionals and their audiences, as new technologies and business models reshape the way news is produced, distributed, and consumed. In this short paper, the aim is to better understand how mobile applications are entangled in the daily lives of young adults in Portugal. By understanding preferences and perceptions about their use of various apps, we will take a closer look at the relationship of this audience with journalism or news apps.

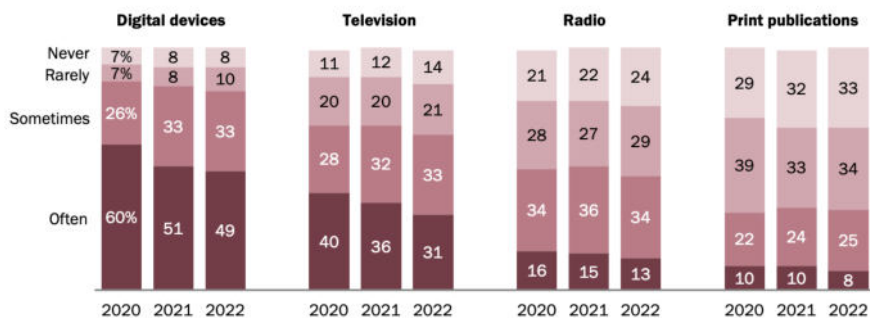
Young adults as an audience

The state of the art regarding young adults and the consumption of news suggests that there have been significant changes in the way this demographic group accesses and engages with the news. In the United States, research has shown that young adults are more likely to consume news through digital devices (Fig. 1), through news apps and social media, rather than traditional forms of media like television, radio and print newspapers (Forman-Katz and Matsu, 2022).

Figure 2 - News consumption across platforms for adults in the United States.

News consumption across platforms

% of U.S. adults who ___ get news from ...



Note: Figures may not add up to 100% due to rounding.
 Source: Survey of U.S. adults conducted July 18-Aug. 21, 2022.

Source: Pew Research Center (2022)

Reuters Institute for the Study of Journalism found that young people prefer to access news on their smartphones and that the use of social media for news consumption is more prevalent among younger age groups. In terms of specific news apps, the report found that *WhatsApp* is the most popular (re)appropriated app worldwide, with 32% of respondents saying they do use it for news consumption. Other popular news-utilized apps include *Facebook* (29%), *YouTube* (28%), *Instagram* (20%), and *Twitter* (17%) (Newman et al., 2020). The study also found that young people are less likely to use news brands as a trusted source of news and are more likely to rely on personal networks and influencers for information.

Another aspect to be considered is that young adults are more likely to engage with news that is presented in a visually appealing and interactive way, such as through multimedia content like videos and infographics (Švecova, 2017; Ksiazek et al., 2017). This suggests that news media organizations that prioritize multimedia content may be more successful in attracting younger audiences. News apps continue to be an important source of news for many people as a survey of over 90.000 people in 46 countries shows (Newman

et al., 2022). According to the *Reuters Digital News Report* (Newman et al., 2022), 59% of respondents said they use news apps on their smartphone or tablet to access news, up from 52% in 2021. In contrast, the use of social media for news has remained stable, with 51% of respondents saying they use social media for getting to the news. The report also found that younger people are more likely to use news apps than older people. Among those aged 18-24 years old, 69% said they use news apps, compared to 43% of those aged 55 and over. Across countries, social media (39%) have overtaken websites and apps (31%) when considering their news diet and behaviours to get informed, followed by the smartphone home screen (12%) and aggregator apps such as *Apple News* (9%) (Newman et al., 2022).

Another issue that cannot be ignored when critically reflecting on the news ecosystem today is the role of algorithms and personalization in news consumption among users. News apps and social media platforms often use algorithms to personalise content based on a user's browsing history and preferences. While personalization can lead to a more tailored and engaging news experience, there are concerns that users are only exposed to information that reinforces their existing beliefs and perspectives (Flaxman, Goel, and Rao, 2016).

Accordingly, globally, young people are generally less interested in news and access it less frequently than older audiences do, even with more than one out of every sample of three young adults in such a study affirming that news has a negative effect on their mood (34%). This also leads to expressing lower interest in most news topics, especially in what they consider traditional journalism editorials like politics, international, and crime. Also, the younger audience tends to be less inclined to consume COVID-19-related news coverage. Instead, this group is more likely to be interested in what may be referred to as 'softer' news topics, such as entertainment and celebrity news (with 33% being interested), culture and arts news (37%), and education news (34%) (Newman et al., 2022). The hierarchy of interest by news genres among the younger population in Portugal, however, exhibits a markedly different distribution. Of the respondents surveyed by the

Portuguese team for the Digital News Report, 46,6% expressed a keen interest in news stories about the pandemic, followed closely by science and technology topics at 42,8%. The subjects of culture (41,7%), mental health and wellness (40,6%), local news (40,4%), crime and safety (39,5%), and sports (38,6%) also raised substantial interest. These findings suggest that younger consumers are inclined to direct their attention towards these themes (Cardoso, Paisana and Pinto-Martinho, 2022).

Methodology

To explore and have a broader overview of how young adults use apps in Portugal, an online questionnaire survey was applied. The study was operationalized through a quantitative-extensive methodological strategy. The research involved a set of questions grouped into a structured questionnaire composed mainly of closed-ended questions and had an approximate duration of 30 minutes. The questionnaire was divided into six parts: sociodemographic characterization, media consumption, use of mobile apps, personal and mediated experiences and self-representation, digital literacy, and intergenerationally.

The sample was composed of young adults (18 to 30 years old) living in Mainland Portugal and the islands, according to Portugal's latest available population distribution data, at the time of the sample elaboration (CENSOS, 2011). By understanding that considering young people as a single generation with similar ways of experiencing life and technology is problematic, we argue that it is relevant to acknowledge its variety. Furthermore, frequently it is assumed that the generational uses of technology are homogeneous, which tend to create and perpetuate (Loos et al., 2012; Amaral et al., 2020) unique and hegemonic perspectives of the growth process, ignoring the complexity of personal life experiences. This methodological option aims to represent the Portuguese young adult population, considering age, gender, and education aspects.

The final sample consists of 49,8% young adults between 18 and 24 years old, and 50,2% between 25 and 30 years old. Regarding education, 53,1% of respondents have at least one level of higher education. The survey was carried out by a contracted external entity between October 8th and 17th, 2021. The sampling process guarantees a margin of error of $\pm 2,53\%$ for a 95% confidence level. Data were analysed using IBM SPSS statistical analysis program and using descriptive and inferential (bivariate) statistical analysis.

Findings and discussion

The highlighted results focus on a double perspective: 1) the apps that young adults say they use most in their daily routines and 2) the apps they consider most important in their lives. It is also important to inform a broader context of these young people, in relation to media consumption in general terms: more than 75% of those polled have access to a mobile phone, laptop computer and cable TV. They use these types of equipment daily. In turn, newspapers are the least consumed means of communication: 62,9% rarely or never read newspapers and only less than one out of every 10 young adults (9,3%) state that they do so on an everyday basis. This result relates to several studies that contend young people as having a lack of interest in topics that are deemed as 'important' in society and the world in general, as well as a lack of motivation to remain updated on such topics (Johnson and Kaye, 2014; Brites et al., 2017; Silveira and Amaral, 2018). Other studies report two noteworthy trends in youth information consumption: incidental news consumption through social media (Gil de Zuñiga et al., 2018; Boczkowski et al., 2018; Fletcher and Nielsen, 2017), and media avoidance and resistance (Schrøder and Blachørsten, 2016; Syvertsen, 2017; Brites and Ponte, 2018).

Respondents showed a substantial preference for social media apps, gathering 68,53% of the answers for the most used type of m-apps. In fact, answers that include social media apps between the three types of m-apps more

utilized total a number of 1350 out of all the 4500. Email apps gathered the highest percentage of second places (31,93%) in this answer ranking of the three most used types of mobile apps and are also the second type of app with the most overall references (957) in the total of 4500 mentions. The category of apps that most answered third place usage was email (22,80%). We should also highlight the messaging/video conference apps as the third type of app with the most mentions (612) out of the total of 4500 mentions. This type of app was chosen by 8,20%, 17,80% and 14,80% regarding answers as the first, second and third, respectively, most used type of app. The type of apps less utilized was the miscellaneous category of “other” apps, which only got 7 mentions out of the 4500 possible. Utility apps got similar results with 12 mentions; transportation/travelling apps and dating apps also showed low results in this ranking, with 22 and 25, respectively.

Table 1. Question: “Please indicate in order the three mobile applications you use the most: - 1st, 2nd and 3rd place”

Type of Apps	1st %	2nd %	3rd %
Social Media	68,50%	14,60%	6,90%
Email	9,10%	31,90%	22,80%
Messaging/Videoconference	8,20%	17,80%	14,80%
Saúde	3,90%	5,30%	3,50%
Entertainment/Gaming	3,80%	7,00%	9,40%
Mindfulness/Meditation	1,20%	2,10%	1,70%
Fitness	1,00%	4,40%	3,90%
Saúde Mental	1,00%	2,60%	2,60%
Home banking/Finances	0,90%	4,30%	13,60%
Self-tracking	0,70%	2,60%	2,60%
Productivity	0,50%	0,70%	0,90%
Maps/Navigation	0,30%	1,40%	4,90%

Type of Apps	1st %	2nd %	3rd %
News	0,30%	1,10%	3,20%
Nutrition	0,30%	1,50%	2,70%
Shopping	0,10%	1,60%	3,30%
Transportation/Travelling	0,10%	0,20%	1,20%
Utilities	0,10%	0,10%	0,50%
Dating	0,00%	0,50%	1,20%
Other	0,00%	0,20%	0,30%

Source: Authors (2023)

Regarding specifically news apps, the results show that regular use is significantly higher in men (25,72%) than in women (18,84%) in Portuguese young adults. It is also noteworthy that women rarely or never (37,69%) use these apps, which is statistically significant considering that men who never or rarely use them have a percentage of 27,58%. Previous studies in the Portuguese context have also documented gender differences in news consumption, with men showing more likelihood of seeking political news (ERC, 2015). Feminist audience research has always recognised how media consumption is profoundly gendered (Press & Livingstone, 2006). What these results show is that it is necessary to study media users within the complexity of the unequal spaces of everyday life to understand how gender intersects with other axes of social differentiation.

In relation to the perceived 2) importance of m-apps for this audience, respondents were asked to answer based on a Likert scale measuring how essential such apps are in their everyday lives (Table 2). The applications considered most relevant in the personal lives of young adults are email (72,87%), messaging/videoconference (69,93%), map/navigation (65%), home banking/finance (63,40%) and news (52,27%). These five types of apps are the only ones with which more than half of the sample agrees that they are essential in their lives.

Table 2. Question: To what extent do you agree or disagree that these applications are indispensable in your life?

	Completely disagree	Disagree	Neither disagree nor agree	Agree	Completely Agree	Agree + Completely Agree
Type of Apps	%	%	%	%	%	%
Email	8,50%	7,10%	11,50%	30,50%	42,30%	72,90%
Messaging/ Videoconference	8,50%	7,00%	14,50%	31,20%	38,70%	69,90%
Maps/Navigation	8,50%	8,80%	17,70%	33,10%	31,90%	65,00%
Home banking/ Finances	8,00%	9,40%	19,20%	34,10%	29,30%	63,40%
News	8,40%	12,60%	26,70%	34,90%	17,40%	52,30%
Social Media	10,30%	15,50%	24,90%	33,80%	15,60%	49,40%
Transportation/ Travelling	9,10%	13,10%	30,60%	33,00%	14,20%	47,20%
Shopping	8,70%	13,00%	31,70%	31,90%	14,70%	46,60%
Health	10,70%	16,10%	29,50%	30,10%	13,60%	43,70%
Entertainment/ Gaming	11,60%	15,20%	31,30%	27,80%	14,10%	41,90%
Utilities	9,50%	11,60%	39,90%	26,70%	12,30%	39,00%
Self-tracking	13,50%	17,10%	31,20%	27,90%	10,30%	38,30%
Productivity	11,10%	13,60%	37,50%	24,90%	13,00%	37,90%
Mental Health	14,10%	17,90%	31,70%	25,10%	11,20%	36,30%
Fitness	14,00%	18,70%	31,80%	26,60%	8,90%	35,50%
Nutrition	14,80%	18,90%	32,50%	26,00%	7,90%	33,90%
Mindfulness/ Meditation	18,30%	20,50%	32,90%	19,90%	8,40%	28,30%
Other	11,50%	9,10%	51,50%	18,30%	9,50%	27,90%
Dating	34,10%	17,10%	29,10%	12,60%	7,10%	19,70%

Source: Authors (2023)

The apps that are considered to be less relevant in their daily life are dating (51%), mindfulness/meditation (38.80%), nutrition (33,67%), fitness (32,73%) and mental health (32%). Dating apps stand out as more than half of the respondents disagreed with their importance in their life. Dating apps stand out as more than 50% of the respondents disagreed with their importance in their life. These data also show that when asked about the use they make of the applications, young people give different indications of their perceptions of the relevance in their lives, as shown in Table 2.

Conclusions

This short paper explored the panorama of news apps in the uses and perceived importance of apps in the routines of young adults in Portugal. It is known that the use of news applications has become increasingly popular among young adults in recent years, as they offer a convenient way to access news content on the go. However, our study suggests that there may be a discrepancy between young adults' app use and their perceived relevance or importance. The study found that while certain types of news apps are highly prevalent among this demographic group, they may not necessarily be considered the most important or relevant. This suggests that young adults may be using news apps out of habit or convenience, rather than a genuine interest in the content. Results also show how news consumption through mobile apps is, as it was in traditional contexts, a gendered practice, encouraging the study of news' digital uses from a gender perspective. The study also highlights the importance of understanding how young adults engage with news apps in their daily lives. By identifying the uses and perception of importance by users, researchers and developers can better tailor news apps to meet the needs and interests of young adults. This can help promote a more informed and engaged citizenry, as well as improve the overall user experience of news apps.

One potential explanation for the discrepancy between actual app use and perceived relevance or importance is the impact of social media. Many young adults may be getting their news from social media platforms, which

can be a more passive and incidental way of consuming news content. This can lead to a lack of engagement with news apps, as social media platforms often prioritize content based on popularity rather than relevance or importance. Another potential reason for this difference is the quality and accuracy of news content on some news apps. If young adults perceive the content on these apps to be biased, inaccurate, or irrelevant to their interests, they may be less likely to engage with them regularly. This highlights the importance of ensuring that news apps provide high-quality, accurate, and diverse content that appeals to a wide range of interests and perspectives.

Predominantly, the findings of this study provide a starting point for understanding how young adults engage with news apps in their daily lives. To address the current and upcoming challenges, there is a need for collaboration between media organizations, technology companies, and policymakers, to promote a diverse and vibrant news ecosystem that serves the public interest. To engage younger audiences on issues beyond entertainment and “soft” news, newsrooms must prioritize diversity and inclusion. The rise of citizen journalism has also had an impact on traditional journalism models, with individuals empowered to report on events and share news through social media channels (Hermida, Lewis, & Zamith, 2014). Some emergent technologies with a great potential for growth such as blockchain for enhancing transparency and trust in news reporting is also an area of interest for the future of journalism (Shin & Chun, 2018). Artificial intelligence (AI) is another technology that has the potential to transform news production and consumption. AI can be used to automate tasks like fact-checking and content curation, freeing up journalists to focus on more in-depth reporting (Boczkowski & Mitchelstein, 2020). However, Artificial intelligence also raises concerns about the potential for bias and the impact on job security for journalists (Brennen, Simon, & Howard, 2018). All the spectrum in the contemporary news ecosystem is impacted by the rise of mobile-first news apps in transforming the way younger audiences consume news (Kümpel, Karnowski, & Keyling, 2015). With shorter attention spans and an expectation for on-demand content, news organizations

have had to adapt to meet the needs of this demographic. As already discussed, best practices for reaching younger audiences through social media platforms are crucial to keep the relevance of news, especially as this group is more likely to consume news through social media than through traditional news sources (Pew Research Center, 2020).

However, all this tech and new approaches in news must include initiatives such as media literacy education, transparency and accountability measures for digital platforms, and support for independent and investigative journalism. Certainly, the results in this research focused on Portugal do not necessarily represent a global conjuncture but can be applied in new ways of reflecting the development and consumption of apps among the younger audience. With an emphasis on news apps, we realize that the development of new digital products must consider data explored in this short article, namely the effective and perceived uses by audiences. This representative data of the country suggests it is of utmost importance to invest in new opportunities for journalism in an era of fragmented news consumption.

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