Characteristics of highly mentioned academic papers in news outlets

Majid Nabavi
Department of Knowledge and Information Science,
Shiraz University, IRAN
e-mail: m.nabavi@shirazu.ac.ir
ORCID ID: M. Nabavi: 0000-0002-2955-5259

ABSTRACT

The primary objective of this paper was to provide insights into papers that garnered significant attention in news outlets. A sample of seventy academic papers, each with over 500 mentions in news outlets, was chosen for this study via Dimensions. Comprehensive data for each paper was extracted from diverse sources, encompassing the Journal Citation Report (JCR), Scopus, SCImago, Altmetric.com, as well as analyses of the titles and abstracts. Findings concerning the characteristics of these papers revealed that those highly referenced in news outlets tend to be predominantly published in open access within prestigious specialized journals, with a primary focus on medical and health-related topics. The majority of these papers have been published within the last three years, with each accumulating more than 100 citations in Scopus. Additionally, the results indicated that the number of authors and international collaboration does not exert a substantial influence on the frequency of news posts dedicated to highly mentioned papers in news outlets. However, the journal's impact factor, paper citation count, and the alignment of the paper's affiliation country with that of the news outlets displayed a notable correlation with the frequency of news posts pertaining to these papers. Based on the study's findings, it can be inferred that science journalists place higher emphasis on considerations such as proximity, prestige, timeliness, and relevance in their coverage, prioritizing these factors over other news values.

Keywords: Citation analysis; Highly cited papers; Altmetrics; News citation; News mentions.

INTRODUCTION

Discovering the characteristics of highly cited papers in scholarly publications has been one of the interesting research topics in various academic fields (Aksnes 2003; Chen et al. 2021; Persson 2009; Van Noorden 2014; Wang, Yu and Yu 2011). Several scholars have examined citations of academic papers within social contexts, employing altmetrics data and data on academic outputs' mentions in digital platforms such as news and social networks (Eysenbach 2011; Moorhead, Krakow and Maggio 2021; Moriarty, Jensen and Stryker 2010; O'Connor et al. 2017; Zhang and Wang 2018). Citations of an academic paper measure its various quality aspects, including impact, importance, and correctness (Bornmann and Haunschild 2019). Citations or mentions of research output can be found in different contexts, such as academic literature, patents, policy documents, news stories, social media, and clinical trials.

Altmetrics, which tries to represent the societal impact of research output, have focused on citation contexts other than academic literature (Bornmann and Haunschild 2019). Two major altmetric providers, i.e. Altmetric.com and PlumX, record citations to research outputs in the news media. Previous research has shown that Altmetric.com has more coverage of news than PlumX does (Gong, Liu and Wu 2022; Ortega 2018). Based on the

data provided in Altmetric explorer, Altmeric.com covers 7491 news outlets from 175 countries. From different altmetric data sources (such as news, Twitter, Facebook, Wikipedia, and policy documents), news have more weight in calculating the Altmetric Attention Score (AAS) in Altmetric.com, as a dominant altmetric data provider (Altmetric 2021). Kiernan (2016) believes that popular news media report routinely research findings published in scientific journals about the scientific news media and researchers learn about the scholarly research results through these media. Some studies already have approved the citation privilege of academic papers mentioned in mass media (Dumas-Mallet et al. 2020; Fanelli 2013). Therefore, it can be inferred that news mentions are not just about measuring societal impact; they can be regarded as a primary way of increasing the citations of research output in academic publications.

Considering the profound impact of academic research on medical topics on people's lives, several studies have delved into the status of papers that receive substantial attention in the news media. Moriarty, Jensen and Stryker (2010) conducted an examination of highly mentioned sources in cancer news using content analysis of 3656 news stories. Their findings revealed that research institutions and medical journals garnered more citations than notable entities such as the National Cancer Institute (NCI), the American Cancer Society (ACS), and pharmaceutical companies. Research institutions were cited over twice as frequently as medical journals and more than three times as frequently as pharmaceutical companies, demonstrating their prominence in news coverage. Moorhead, Krakow and Maggio (2021) in a cross-sectional study explored the US government-funded research frequently mentioned in the news. They analyzed 642 news stories mentioning at least one time one of the 11,436 papers funded by the US government. The results showed that only 1.88 percent of research outputs were mentioned at least one time in the news. They observed a discrepancy between cancers dominating news coverage and those with the highest prevalence and mortality rates.

In a similar study, Stryker, Emmons and Viswanath (2007) explored the difference between mainstream and ethnic newspapers in covering cancer-related news. They analyzed the content of 5,327 mainstream newspapers alongside 565 ethnic newspapers. Their findings unveiled that breast cancer was the primary focus, with 27 percent of mainstream newspapers and 35 percent of ethnic newspapers featuring stories on this topic, predominantly centered around cancer treatment. Another relevant study conducted by Yettick (2015) delved into the news media's treatment of education research, utilizing a mixed-method approach. The results of this study indicated a discrepancy in how education reporters, as opposed to their counterparts in the fields of science or medicine, cite peer-reviewed research findings. One of the contributing factors identified was the reporters' limited comprehension of the value and definition of peer review and their tendency to inappropriately apply news values to social science research.

Several researchers have investigated the extent of news coverage for specific journals. Kiernan (2016) investigated news coverage of papers published in four prominent journals, namely *Nature, Science, New England Journal of Medicine (NEJM), and Journal of the American Medical Association (JAMA)* across 24 daily newspapers. The findings revealed that *NEJM* and *Science* have more citations in the news. In a separate study, O'Connor et al. (2017) explored the newsworthiness of the top 50 urology papers, as indicated by their Altmetric scores. The results showed a weak positive correlation between citation counts and Altmetric scores. Their conclusion emphasized that publications receiving the most media attention may not necessarily align with the highest scientific rigor, implying that

different subject matter may hold more value for the general public compared to the scientific community.

Understanding the various facets of extensively featured papers in news outlets can assist researchers in structuring and presenting their research to increase the likelihood of media coverage. Previous research on media coverage of academic papers has mainly focused on specific journals (Kiernan 2016) or particular fields, particularly in the realm of medicine (Moorhead, Krakow and Maggio 2021; Moriarty, Jensen and Stryker 2010; O'Connor et al. 2017). However, there is a noticeable gap in studies regarding papers that garner substantial attention in the news, irrespective of their field or journal. Thus, this study seeks to bridge this gap by identifying the attributes of papers that attain significant media recognition, with the central objective of delineating their distinguishing features. To achieve this objective, the study investigates the following inquiries:

(a) Which international news outlets and their respective countries are more inclined to prominently feature academic papers?
(b) What are the primary bibliographic characteristics of papers that receive high levels of media coverage?
(c) What is the relationship between journal impact factor, citation count, number of authors, international collaborations, affiliation country, and the number of news articles related to a highly mentioned paper?

METHOD

As depicted in Figure 1, the first step of this study involved identifying papers that received significant attention in the news. Given the conventional approach of gauging scientific impact through citations, the study chose to equate the number of news outlets mentioning papers to citations in the news, as opposed to counting individual news posts. This methodology quantifies the frequency with which academic papers are cited across various news outlets, regardless of how many times a single paper is mentioned within a specific news outlet. Consequently, the count of news posts tends to be higher than the count of news outlets.
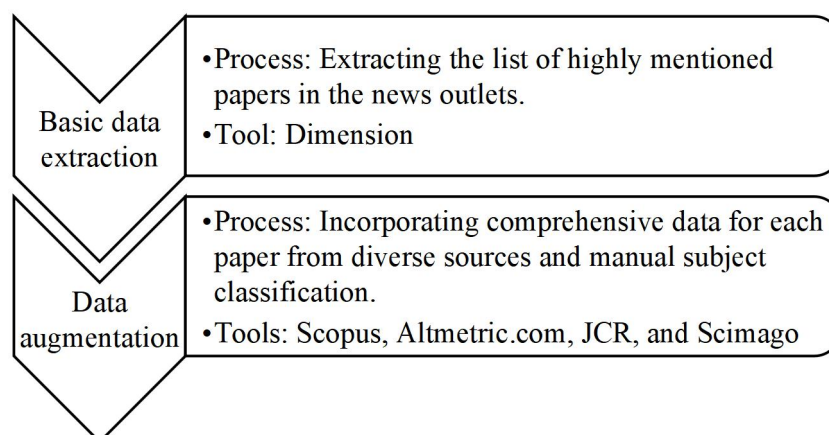

Figure 1: Selection Process for Highly Mentioned Papers in News Outlets

Initially, papers that received significant attention in the news were identified using Altmetric. Unfortunately, the feature to sort papers based on their news outlet count was lacking in the Altmetric Explorer (https://www.altmetric.com/solutions/altmetric-explorer/). As a consequence, Dimensions (https://app.dimensions.ai/discover/publication) was turned to in order to identify papers with the highest number of news outlets. Initially, Dimensions displayed coverage sorted by publication date as the default setting. However, given the heightened importance of news in determining the AAS (as explained in *How is the Altmetric Attention Score calculated*? 2021) and for the sake of making it easier to identify papers with the highest number of news outlets, the study opted to change the sorting criterion to 'Altmetric Attention Score'.

A manual review of the result pages was conducted, selecting papers that had garnered significant attention in the news. Due to the challenges of manually verifying this data and the fragmented distribution of news outlet information, a threshold of 500 or more news outlets was set to classify papers as highly mentioned in the news. In order to enhance the efficiency of the manual review process, the focus was directed solely towards papers with AAS surpassing 4000. A preliminary study conducted by the author on a sample of papers revealed that those with lower scores typically were associated with fewer than 500 news outlet. The first phase of this process concluded on August 14, 2022, resulting in the retrieval of a total of 70 papers in a Microsoft Excel file from Dimensions. In the subsequent step, detailed data for each paper was collected from various sources:

(a) Scopus: To obtain information related to document type, citation count, and affiliation data.
(b) Altmetric Explorer: For news post data.
(c) Journal Citation Report (JCR): For details about the journals' publication country, publisher, and impact factor.
(d) Scimago Journal Rank: For data on affiliated countries and organizations' rankings.
(e) Titles or Abstracts: To categorize the subjects of the papers.

For subject categorization, the author, taking on the role of a general reader, examined paper titles and extracted notable and recognizable sections. These extracted portions were subsequently classified under specific subject codes. In cases where titles were exceptionally specialized, abstracts were referenced to ascertain the subject matter. Each paper was assigned a single subject code. The data collection process was completed on January 31, 2023.

RESULTS

News Outlets Mentioning Highly Mentioned Papers in the News
Seventy highly mentioned papers in the news have been mentioned 92161 times in the 3438 news outlets from 134 countries. The majority of these news outlets are published in the US (n=56,247, 61%) followed by the UK (n=83, 9.1%) and Australia (n=5945, 6.5%). The top ten news outlets and countries are shown in Table 1. The top ten news outlets and countries are presented in Table 1. As illustrated in the table, seven out of the top ten news outlets that feature highly mentioned papers are based in the US.

Table 1: The Top Ten News Outlets and Their Associated Countries

News outlet	Country	Count	Percentage
MSN	United States	2885	3.1
Yahoo News	United States	2860	3.1
New York Times	United States	1508	1.6
The Conversation	Australia	985	1.1
Newsbreak	United States	953	1.0
Yahoo!	United States	747	0.8
Foreign Affairs New Zealand	New Zealand	538	0.6
MedicalXpress	United Kingdom	516	0.6
Pressfrom	United States	491	0.5
Yahoo! Finance USA	United States	429	0.5

Characteristics of Highly Mentioned Papers in the News

This section offers insights into the origins of highly mentioned news articles, including their publication source, publication year, format or type, subject matter, accessibility status, and affiliations. Additionally, it presents an analysis of the relationship between these characteristics and the number of news articles associated with highly mentioned papers.

The results indicate that 70 highly mentioned papers in the news have been published across 27 different sources. Table 2 displays the top 11 sources, each having more than two highly mentioned papers in the news. Of the 27 sources, 26 sources are journals and one of them is an open online repository (https://www.biorxiv.org/). Of 26 journals, 13 journals (48.15%) are published in the US, 11 journals are published in the UK, and two journals are published in the Netherlands. The mean and median impact factors of journals that have published highly mentioned news papers are 47.133 and 19.346, respectively. Out of the 26 journals, seven (26.92%) are affiliated with publishers under the Springer Nature umbrella, which includes Nature Portfolio and BMC. Following Springer Nature, Elsevier (5, 19.23%) and Oxford University Press (4, 11.11%) occupy the second and third positions, respectively. Spearman's rank correlation was calculated to evaluate the association between the count of news posts and the JIF. A positive correlation was observed between these two variables, indicated by a correlation coefficient of r = 0.558 and a p-value of 0.003.

(a) Publication Year and Citation Counts of Highly Mentioned Papers in the News

The distribution of publication years for the highly mentioned papers in the news, as well as the mean and median Scopus citation counts for each year, is presented in Table 3. However, citation data were unavailable for one article published in bioRxiv in 2021. The total number of papers considered in this analysis is 69. As indicated in the table, a significant majority of the papers (64, or 92.75%) have been published within the last three years, from 2020 to 2022. The mean and median citation counts in Scopus for the highly mentioned paper in the news for the papers published before 2021 exceed 900 and for those published after 2021 is more than 100. Spearman's rank correlation was computed to assess the relationship between the count of news posts and the citation count of papers. A positive correlation was observed between these two variables, with a correlation coefficient of r = 0.596 and a p-value of 0.

Table 2: Top Sources with More Than Two Highly Mentioned Papers in the News

Source Title	No. of papers	Source subject	Impact Factor*	Publishing country	Publisher
The Lancet	15	Medicine	202.731	United Kingdom	Elsevier
New England Journal of Medicine (NEJM)	10	Medicine	176.082	United States	Massachusetts Medical Society
MMWR Morbidity and Mortality Weekly Report	8	Medicine	35.301	United States	Centers for Disease Control & Prevention
Science	5	Multi-disciplinary	63.832	United States	American Association for the Advancement of Science
Nature	3	Multi-disciplinary	69.504	United Kingdom	Nature Portfolio
Nature Medicine	3	Medicine	87.244	United Kingdom	Nature Portfolio
JAMA Journal of the American Medical Association	2	Medicine	157.375	United States	American Medical Association
Science Advances	2	Multi-disciplinary	14.98	United States	American Association for the Advancement of Science
Proceedings of the National Academy of Sciences (PNAS)	2	Multi-disciplinary	12.779	United States	National Academy of Sciences
The Lancet Infectious Diseases	2	Medicine	71.421	United Kingdom	Elsevier
Nature Astronomy	2	Physics & Astronomy	15.647	United Kingdom	Nature Portfolio

*Based on JCR 2021

Table 3: Publication Years and Corresponding Scopus Citation Counts for Highly Mentioned Papers in the News

Publication year	Number of papers	Mean citation count	Median citation count	Mean News post count	Median News post count
2015	1	5660	5660	1189	1189
2016	1	911	911	1421	1421
2017	2	3202	3202	1283.5	1283.5
2018	1	2934	2934	1323	1323
2020	28	3532.36	1339	1663.96	1560
2021	22	530.18	329	1111.63	1027
2022	14	252.07	129.50	990.93	918

(b) Types of Highly Mentioned Papers in the News and Accessibility Status

Different paper types have received mentions in the news. As expected, articles make up the majority of highly mentioned papers in the news, accounting for 79 percent, followed by letters at 9 percent and reviews at 6 percent. Paper types that receive less attention include note (4%), short survey (1%), and preprint (1%).

Regarding accessibility, the data presented in Table 4 highlights that 91.4 percent (64) of the highly mentioned papers, are designated as open access. The remaining six papers, constituting 8.6 percent, fall under the category of closed access.

Table 4: Accessibility Status of Highly Mentioned Papers in the News (n=70)

Types of access	Count	Percentage
Bronze open access	24	34.3
Gold open access	15	21.4
Green open access	11	15.7
Hybrid open access	14	20.0
Closed Access	6	8.6

(c) Subject and Affiliation Analysis of Highly Mentioned Papers in the News

A content analysis of the titles and abstracts of the highly mentioned papers in the news indicated that 86 percent of them are related to the medical and health field (see Table 5). Within the medical subjects, various aspects of COVID-19 have the highest frequency, accounting for 51 papers (72.86%), particularly focusing on topics such as COVID-19 transmission and vaccines. Additionally, there are mentions of environmental issues, such as those related to the planet and climate change.

Table 5: Content Analysis of Highly Mentioned Papers in the News by Subject (n=70)

Macro subject	Micro subject	Count	Percentage
Medical and health	Antimicrobial resistance	1	1.4
	Cancer treatment	1	1.4
	Cardiovascular disease	1	1.4
	Monkeypox Virus	1	1.4
	Covid-19 immunity	5	7.1
	Covid-19 origin	2	2.9
	Covid-19 outcomes	8	11.4
	Covid-19 risk factors	1	1.4
	Covid-19 stability	2	2.9
	Covid-19 symptoms	2	2.9
	Covid-19 transmission	10	14.3
	Covid-19 treatment	5	7.1
	Covid-19 vaccine	15	21.4
	Covid-19 variants	1	1.4
	Environment pollution	4	5.7
	Reproduction	1	1.4
Total		**60**	**86.0**
Environment	Planets	4	5.7
	Climate change	2	2.9
	Virus transmission	1	1.4
Total		**7**	**10.0**
Social aspects	Online news	1	1.4
	Racial difference	1	1.4
	Population	1	1.4
Total		**3**	**4.0**

Table 6 highlights papers with the highest number of news posts. Notably, out of the seven journals publishing these extensively covered papers, five are multidisciplinary. The paper related to COVID-19, published in the *New England Journal of Medicine* in 2020, received the highest news post count.

Table 6: Papers with the Highest Number of News Posts

Title	Source Title	Publication year	News post count
Plastic waste inputs from land into the ocean	*Science*	2015	1189
Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites	*Proceedings of the National Academy of Sciences (PNAS)*	2016	1421
Production, use, and fate of all plastics ever made	*Science*	2017	1598
The spread of true and false news online	*Science*	2018	1323
Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1	*The New England Journal of Medicine*	2020	3688
Investigate the origins of COVID-19	*Science*	2021	1806
Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis	*The Lancet*	2022	1385

The analysis of the various aspects of affiliation for the highly mentioned papers in the news, as presented in Table 7, indicates that the US is affiliated with 49 papers (70.0%), followed by UK (21, 30.0%) and Australia (10, 14.3%). Table 7 also presents information about the top three funding organizations and affiliated organizations, across the 69 highly mentioned papers in the news indexed in Scopus.

Table 7: Analysis of Top Three Affiliation Aspects for Highly Mentioned Papers in the News

Top three countries			Top three funding organizations		Top three affiliated organizations		
Name	Doc. count	Rank (SJR)	Name	Doc. count	Name	Doc. count	Rank (SJR - overall %)
United States	49	1	National Institutes of Health	10	Imperial College London	9	1
United Kingdom	21	3	National Institute of Allergy and Infectious Diseases	9	Centers for Disease Control and Prevention	8	4
Australia	10	10	Wellcome Trust	6	University of Oxford	8	1

From various aspects of authorship and affiliation, the results indicate a significant positive association between the papers and the news outlet affiliations in the same countries (Spearman's rho = 0.596, P-value = 0). Papers that receive substantial mentions in news outlets frequently exhibit affiliations from the same countries as those news outlets.

Additionally, the results show that the number of authors (papers with less than nine and papers with more than ten authors) (Sig = 0.366, Mann-Whitney U = 514, Z = -0.905) and international cooperation (Sig = 0.856, Mann-Whitney U = 570, Z = -0.182) does not significantly impact the news post counts of highly mentioned papers in the news outlets.

DISCUSSION

One of the important questions for researchers to be answered is the factors affecting news mentions of the papers or, in journalistic words, the newsworthiness of research output (Mellor 2015). Previous studies centered on factors influencing the citation count (research worthiness) of academic papers within the scholarly realm. To begin, the findings from this study revealed that all the extensively referenced papers in news outlets were authored in the English language, with the majority of authors are affiliated with English-speaking nations, such as the US, the UK and Australia.

Regarding the data provided by Altmetric.com, at the time of writing this article, of about 7758 news outlets covered by Altmetric.com, the U.S. (25.5%), the U.K. (11.2%), and Australia (4.2%) have a significant share. Therefore, it is evident that the language and affiliation (organization and country) similarities between papers and news outlets become one of the most important factors affecting the news citation of the papers. Similarity, as a news value, is known as proximity in journalistic language (Mellor 2015). Proximity is defined as the distance or similarity between an event and a news outlet's publication country; it has different aspects, such as geographical, economic, cultural, political, and scientific (Badenschier and Wormer 2012). The results of this study proved that geographical and cultural proximities affect the news mention of academic papers. Regarding geographical proximity, the results showed that there is a significant correlation between the affiliation country of the papers and their news post count. To increase their visibility in the global research landscape, non-English-speaking countries should concentrate on enhancing the inclusion of their news media coverage in alternative metrics data providers, such as Altmetric.com. Science journalists should also prioritize featuring national research outputs in news media. Furthermore, researchers from non-English speaking countries can expand the coverage of their research outputs in news by collaborating with researchers from English-speaking countries who have greater news media indexed in Altmetric.com. Additionally, previous research has demonstrated that utilizing diverse media channels to promote a paper can lead to an increase in its mentions in news outlets (Peres, Braschinsky and May 2022).

"Eliteness" represents one of the many facets of news values, as outlined by Mellor (2015). It encompasses multiple dimensions, such as national, regional, personal (Badenschier and Wormer 2012), journal (Mellor 2015), citation counts of papers, and affiliations with organizations. Given the results of this study, it is evident that the top three countries contributing to the prominence of papers featured in the news correspond to the nations listed within the top ten positions of the country ranking in science as provided by the SCImago Journal & Country Rank. Additionally, the top three affiliated organizations are members of the top five in the overall ranking of organizations provided by SCImago.

Sixty-nine of 70 sources publishing highly mentioned papers in the news are journals indexed in the Web of Science core journal collection and their impact factors fall within the range of 15 to 202, which is a remarkable range. On the other hand, the majority of these journals are published in the US and the UK often affiliated with professional organizations (e.g. American Medical Association), and well-established private publishers (e.g. Elsevier). It is interesting that traditionally well-known big four journals (*Science, Nature, NEJM, and JAMA*), as the dominant sources of news in science journalism, have published 29 percent (20 out of 69) of highly mentioned papers in the news and this can be a good reason for updating big-four list with adding other prestigious journals. Science journalists' concern about the big-four family is evident in the papers with the highest

mentions in the news post counts; *Science* and *NEJM* are among the four journals publishing these papers. Spearman's correlation test showed that the journal's impact factor has a strong association with the news post count of its papers. Regarding the results of this study, it is noteworthy that papers that receive substantial attention in news outlets also tend to garner high citation counts within the scientific community. There exists a discernible and significant correlation between the citation count of these papers and the extent of their coverage in news sources. This finding has been corroborated by prior research conducted by Chapa, Haq and Chifu (2017) and Djulbegovic et al. (2022). One important reason for the increased citation of the papers mentioned in the news posts may be attributed to their exposure and promotion through these news outlets. This phenomenon is substantiated by previous research conducted by Dumas-Mallet et al. (2020) and Fanelli (2013), which underscores the citation advantage enjoyed by papers that have been prominently mentioned in the news. Researchers should consistently take into account multiple dimensions of quality, such as collaborating with researchers from reputable countries and institutions, as well as considering journal metrics like impact factor when planning and publishing their research. By doing so, they can enhance the likelihood of their work being featured in news outlets.

Relevance (Mellor 2015) or importance (Badenschier and Wormer 2012) is another news value considered by science journalists. According to the results of this study, relevance can be considered at the macro and micro levels. At the macro level, in line with findings from Torres-Salinas, Robinson-Garcia, and Arroyo-Machado (2022), the outcomes indicate that topics closely tied to human life and concerns, such as medical and health, environmental issues, and social aspects, comprise the predominant subjects of papers that receive substantial coverage in news outlets. In the past, Bauer (1998) employed the concept of the "medicalization of science news" thesis to describe the prevalence of medical and health-related topics in news coverage. At the micro level, papers associated with the Coronavirus pandemic, including topics like COVID-19 transmission and vaccines, which are of paramount concern to the public, exhibit the highest frequency in the news. In line with this investigation, prior research has also demonstrated the significance of medical areas such as treatment, prevention, detection, and survivorship (Moriarty, Jensen and Stryker 2010). Hence, identifying and aligning research findings with the most pressing national or international priorities have the potential to enhance their visibility in news outlets.

Timeliness or recency (Mellor 2015) is one of the values that is considered by journalists while choosing a source or subject for the news. The results of this research suggested that the majority of highly mentioned papers in the news have been published in the last three years; this indicates that papers related to current incidents can gain the attention of science journalists. Despite the citation count that is sensitive to time and increases during the time, it is expected that the news posts count for a paper decreases during the time with decreasing the importance of the subject of the paper (Nabavi 2022). In light of these findings, researchers should adopt a deliberate strategy to promote their research on various social media platforms, increasing the likelihood of news coverage.

This study discovered that a substantial portion of the highly mentioned papers in the news were on open access, allowing a widespread accessibility, particularly for science journalists. Previous research has already demonstrated the citation advantage of open access papers in academic contexts (Tahamtan, Safipour Afshar and Ahamdzadeh 2016). Similarly, in line with this study, researchers have suggested the news citation privilege of

open access papers in some academic fields (Dehdarirad and Karlsson 2021; Holmberg et al. 2020).

It is essential to emphasize that articles are not the sole document type showcased in news coverage. The findings reveal that letters and notes have also been incorporated in news content. As per Science journal's description, "letters" typically delve into materials published in journals, while "notes" encapsulate the researchers' ideas or opinions (see https://www.science.org/content/page/science-information-authors).

Contrary to findings in the academic context, where previous research, as exemplified by Tahamtan, Safipour Afshar and Ahamdzadeh (2016), has underscored the citation advantage of papers with multiple authors over single-author works and international papers over national ones, the findings of this study align with the conclusions presented by Peres, Braschinsky and May (2022). They indicate that there exists no discernible association between the number of authors on a paper and the extent of its coverage in news outlets. It is essential to acknowledge that the study's primary limitation is its relatively small sample size. Consequently, further research is warranted to replicate it on a larger scale.

CONCLUSIONS

The results of this study revealed that highly mentioned papers in the news, with a minimum of 500 news outlet mentions, were featured across 3,438 news outlets spanning 134 countries. Additionally, the results also suggested that highly mentioned papers in the news are primarily published in open access within prestigious specialized journals focusing on medical and health-related subjects. A significant portion of these papers has been published in the last three years and garnered over 100 citations in Scopus. Furthermore, the study highlights that the JIF, citation count, and the shared affiliation country between the paper and news outlets are strongly associated with the frequency of news post count. Future research on this topic can investigate larger sample sizes while emphasizing the influence of various factors on the news coverage of papers. These factors may include the presence of press releases in journals, the scientific expertise of science journalists, news media policies, and the scientometric attributes of authors or affiliated organizations associated with the papers.

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