Impact of Information Bias Analysis on News Consumption Patterns of Digital Platforms in Indonesia

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Abstract. Digital platforms have become the main source of news for Indonesians, with internet penetration reaching over 77% by 2024. However, the shift to digital news consumption has brought challenges, particularly the presence of analytical information bias such as emotional language, one-sided framing, and the blending of facts with opinions. This study explores how such bias impacts public news consumption behavior in Indonesia. Using a qualitative approach, this research collected data through in-depth interviews with active digital news consumers. Participants were selected purposively to represent different age groups, professions, and digital literacy levels. Data were analyzed thematically to understand patterns in how people perceive and respond to biased news. The study found that many users consume news quickly and uncritically, often influenced by headlines or emotional tone. Analytical bias in news affects how people interpret information, leading to polarized opinions, mistrust in media, and low information literacy. Only a small group of users with higher digital literacy showed efforts to verify and balance the information they receive. Information bias on digital platforms has a complex impact on how Indonesians consume news. It shapes public opinion, weakens critical thinking, and contributes to societal divisions. To address this, collaboration is needed between media, educators, and policymakers to strengthen media literacy and create a healthier information ecosystem. This study is limited by its qualitative scope and sample size; future research could involve broader data collection and mixed methods to deepen the findings.

Keywords: News Consumption; Digital Platforms; Media Literacy; Misinformation; Democracy

1. Introduction

News consumption patterns in Indonesia have experienced a profound transformation (Haugsgjerd & Karlsen, 2024; Klopfenstein Frei et al., 2024; Schmidt et al., 2017). With increasing internet penetration, reaching over 77% of the population by 2024 digital platforms such as social media, online news portals, and aggregator apps have

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become the dominant sources of information (Casero-Ripollés, 2020; Strasser et al., 2022). This shift marks a significant departure from traditional media like newspapers and television. People, especially younger generations such as millennials and Gen Z (Blandi et al., 2022; Haenschen & Tedesco, 2020), now interact with news in a more dynamic, real-time, and personalized digital ecosystem. However, the convenience of accessing news through these platforms comes with a critical downside, the heightened risk of information bias and the rapid spread of misinformation and disinformation. These challenges have become particularly evident during moments of national tension, such as elections or crises, where biased news narratives can easily escalate into public misunderstanding and even social conflict.

Empirical studies have underscored the severity of this issue. Ali Rasyid & Marta (2020) argues that the lack of a proactive government role in providing timely and accurate information has contributed to the uncontrolled circulation of hoaxes. Similarly, Wu et al. (2023) found that the increasing reliance on digital news, particularly among youth, has amplified the effects of information bias on their perceptions and behaviors. Research by Schwaiger et al. (2022) further reveals that young users tend to consume news based on personal habits, algorithmic suggestions, and emotional responses rather than critical evaluation. Additionally, Li and Yu (2022) highlight the role of digital literacy in equipping users with the necessary skills to detect false or manipulated information. Despite various efforts, however, many users remain vulnerable to biased narratives due to limited critical thinking and media literacy skills.

While several studies have addressed media literacy, digital consumption, and misinformation in general, there remains a lack of in-depth analysis that directly connects how information bias specifically shapes news consumption patterns on digital platforms within the Indonesian context. Most previous research tends to separate media content analysis from user behavior studies, thereby missing the intricate interplay between algorithm-driven content delivery and user interpretation. Moreover, limited attention has been given to how sociocultural diversity and regional disparities in digital access and literacy impact the public's ability to recognize and respond to bias in the news they consume.

This research aims to fill that gap by analyzing the impact of information bias on digital news consumption patterns in Indonesia, while also examining how varying levels of digital and media literacy influence these patterns. Given Indonesia's complex socio-political environment, marked by political polarization, ethnic diversity, and uneven educational infrastructure understanding these dynamics is crucial. Biased information not only distorts public opinion but also risks deepening societal divisions and undermining democratic values.

The significance of this study lies in its contribution to the ongoing discourse on media literacy in the digital age. From a practical standpoint, the research offers insights that are relevant for governments, media platforms, educators, and civil society actors. It reinforces the need for targeted media literacy education that goes beyond basic information consumption, promoting critical thinking, verification skills, and an awareness of algorithmic influence. Furthermore, it highlights the urgent necessity for more transparent and responsible digital media regulation that safeguards information integrity without infringing on freedom of expression.

Therefore, this study aims to (1) investigate the influence of information bias on news consumption patterns across various digital platforms in Indonesia; (2) identify the key behavioral and cognitive tendencies of users in interpreting and sharing digital news; and

(3) explore the implications of these patterns for digital media literacy development. Through a qualitative approach, the research provides a nuanced understanding of how individuals interact with biased information and how these interactions affect broader societal outcomes such as trust, cohesion, and informed citizenship.

2. Methods

This study adopts a qualitative research approach to deeply explore how information bias shapes news consumption patterns among Indonesian digital media users. The qualitative paradigm is suitable for understanding complex, context-specific phenomena, particularly when the focus is on personal experiences, perceptions, and meaning-making processes in everyday life (Creswell, 2003). As digital media consumption involves not only exposure to content but also subjective interpretation shaped by cultural, social, and technological factors, a qualitative lens offers a rich avenue to analyze this interaction in depth.

The research is designed as an exploratory case study, a method appropriate for investigating contemporary issues within their real-life contexts, especially when the boundaries between the phenomenon and the context are not clearly defined (Lupo & Stroman, 2020). The study focuses on individual cases involving frequent consumers of digital news in Indonesia, drawn from various platforms including online news websites, social media such as Instagram, Twitter/X, and Facebook, as well as news aggregators like Google News (Evans et al., 2023) and BaBe (Salvatore et al., 2022). Participants were selected using purposive sampling, targeting diverse demographic backgrounds including age, region, education, and digital media habits to ensure a comprehensive view of how information bias operates across different segments of society .

Data collection was carried out through semi-structured in-depth interviews with 18 participants across five major provinces in Indonesia. Interviews were chosen as the primary method because they allow flexibility and depth, enabling respondents to narrate their experiences with minimal constraint. The interview protocol was designed to elicit insights on how users recognize, ignore, or respond to biased news content, as well as how algorithms, headlines, and social influences affect their consumption habits. Interviews were conducted face-to-face and via video calls, depending on location and accessibility, and lasted between 45 to 90 minutes. All interviews were audio-recorded with informed consent and later transcribed verbatim for analysis.

The data were analyzed using thematic analysis following the six-phase framework developed by Braun and Clarke (2022), which includes familiarization with data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. Thematic analysis was chosen for its flexibility in identifying patterns of meaning that emerge across a qualitative dataset, particularly when analyzing subjective accounts of media use. The analysis process was iterative and recursive, involving continuous reflection and memo-writing to refine categories and ensure consistency in interpretation.

Throughout the process, analytic rigor was maintained by incorporating strategies to enhance credibility and validity. Member checking was conducted by sharing interview summaries with selected participants to ensure the accuracy of interpretations (Candela, 2019). Peer debriefing sessions were held with fellow researchers in the field of media and communication to critically examine emerging themes and challenge researcher assumptions. In addition, triangulation of data sources including social media content and

news article examples shared by participants was used to enhance the trustworthiness of the findings.

Ethical considerations were carefully addressed throughout the research process. All participants were provided with detailed information about the study's aims and their rights, including anonymity, confidentiality, and the voluntary nature of participation. Ethical clearance was obtained from the institutional review board of the university where the study was conducted.

3. Result and Discussion

3.1. News Consumption Patterns on Digital Platforms

Indonesia is experiencing a fundamental shift in news consumption behavior, primarily among Generation Z. This cohort, born into the digital age, demonstrates unique preferences favoring visual and audiovisual formats over traditional text-heavy content (Afdholy et al., 2022; Bigwanto et al., 2023; Mazahir et al., 2023). Their habits are shaped significantly by platforms such as Instagram, TikTok, and YouTube, where content is algorithmically curated for maximum engagement, not necessarily accuracy. Informants in this study echoed this pattern, with many admitting to consuming news passively, allowing algorithmic timelines to determine their informational diet. Such patterns introduce the risk of algorithmic bias, which can prioritize sensational or emotionally charged content, leading to echo chambers and selective exposure.

Table 1 Key digital platforms

Platform	Preferred Content Type	Verification Behavior
Instagram	Infographics, Stories	Rarely verify with other sources
TikTok	Short videos, Commentary	Never verify
YouTube	Vlogs, News segments	Occasionally verify
Twitter/X	Threads, Memes	Selective verification
Online News Apps	Summarized Articles	Trusted if familiar media outlet

Table 1 presents five key digital platforms frequently used by respondents for news consumption, highlighting both the preferred content types and typical verification behaviors associated with each. On Instagram, users favor infographics and stories due to their visual appeal and brevity; however, they rarely cross-check information with other sources. TikTok stands out for its short videos and user commentary, but respondents almost never verify the content they consume on the platform. YouTube, offering vlogs and news segments, encourages occasional verification, particularly among users seeking more in-depth explanations. Twitter (now X) is popular for threads and memes, with users engaging in selective verification depending on their trust in the content creator or topic relevance. Meanwhile, online news apps, which provide summarized articles, are generally trusted especially when the content originates from well-known media outlets leading users to skip further verification. This table illustrates how each platform's format and content style significantly influence user behavior, particularly in how critically or uncritically they engage with the news.

The digital divide continues to influence these patterns. Access to fast internet and smart devices is uneven across Indonesia, with urban areas like Java dominating digital news engagement, while rural and remote regions are underserved. This disparity fuels informational inequality and increases vulnerability to misinformation. During political

events, such as regional elections, the manipulation of news through digital platforms intensifies, underlining the urgency for widespread digital literacy.

3.2. Understanding and Identifying Information Analysis Bias

Many informants in the study revealed difficulty distinguishing between factual content and analytical bias. Often, they accepted information at face value, unaware of the editorial and linguistic cues that signal opinionated content. This situation highlights a lack of media literacy, especially in recognizing emotional diction, framing, and the blurring of fact with commentary (Yulianti & Setiawan, 2022; Maulana et al., 2024).

For instance, emotionally charged words tragedy, disaster, betrayal are often used to evoke strong reactions rather than inform objectively. This is especially prevalent in political reporting and social issues. Informants frequently encountered such language but were unaware of its persuasive intent. Similarly, framing techniques, where a story is presented from a particular ideological or emotional perspective, often skew perceptions. Informants tended to retain only the dominant narrative provided, unable to deconstruct it critically.

Table 2 Information bias and their psychological impacts

Bias Type	Manifestation Example	Psychological Impact
Emotional Diction	Use of outrage, heroic, etc.	Triggers empathy, anger, bias recall
Framing	Emphasis on victim narrative	Encourages one-sided understanding
Fact-Opinion Blurring	Mixed objective info with opinions	Confuses facts with beliefs

Table 2 outlines three prominent types of information bias commonly found in digital news content, along with examples of how these biases manifest and their corresponding psychological impacts on audiences. The first type, emotional diction, involves the use of loaded words such as outrage or heroic, which are designed to evoke strong emotional responses. This kind of language can trigger empathy or anger, and often leads to biased recall, where audiences remember emotionally charged content more vividly than neutral information. The second type, framing bias, is illustrated by the emphasis on a victim narrative, which subtly guides the audience to interpret events from a particular angle, often at the expense of nuance. This encourages a one-sided understanding, making it harder for individuals to critically assess alternative perspectives. The third, fact-opinion blurring, occurs when news content mixes factual reporting with subjective commentary, creating confusion between what is objectively true and what is merely an interpretation or belief. This often leads to a psychological effect where audiences struggle to distinguish facts from opinions, which can skew their perception and reduce critical engagement. Altogether, the table demonstrates how subtle linguistic and structural choices in digital news can significantly shape public perception and emotional responses.

The findings resonate with Stewart (2021), who argue that the inability to distinguish fact from opinion hinders critical evaluation of news content. With students and young professionals forming the bulk of digital consumers, this knowledge gap contributes significantly to the spread of misinformation. Strengthening media literacy to include bias identification, especially within higher education, is thus critical.

3.3. Impact of Bias on News Consumer Perceptions and Decisions

Informants' perceptions were deeply influenced by exposure to biased reporting. Particularly on political topics such as elections or international conflicts informants often developed strong opinions after consuming a narrow range of reports, leading to entrenched viewpoints and reduced openness to alternative perspectives. This illustrates the phenomenon of opinion polarization, where people surround themselves with confirmatory content, a behavior often amplified by social media algorithms.

Moreover, the inability to critically evaluate news sources led to growing distrust in media institutions. Informants reported skepticism, expressing confusion over what constitutes neutral reporting. Some began avoiding news altogether, citing information fatigue or distrust phenomena. This undermines the democratic function of the press in informing citizens and enabling meaningful civic participation.

Table 3 Impacts of information bias

Impact Type	Description	Illustrative Example
Opinion Polarization	Reinforced existing beliefs, ignored dissenting	Supporting candidate without critique
Media Distrust	General skepticism towards all outlets	Belief that all media are biased
Literacy Decline	Inability to verify or contextualize information	Mistaking satire or hoax as real news

Table 3 presents the impacts of information bias on digital news consumers, categorizing them into three major types: opinion polarization, media distrust, and literacy decline. Each impact reflects a broader social and psychological consequence of unchecked bias in digital content. The first, opinion polarization, refers to the tendency of individuals to reinforce their existing beliefs while rejecting opposing viewpoints. For example, a person may continue to support a political candidate without any critical evaluation, simply because the news they consume consistently affirms their stance and filters out dissenting information. This creates echo chambers and deepens ideological divides in society. Second, media distrust emerges when people become skeptical of all news sources, often believing that all media are inherently biased or agenda-driven. This general cynicism undermines the role of journalism as a watchdog and diminishes trust in credible reporting, making people more vulnerable to misinformation and conspiracy theories. Lastly, literacy decline describes a reduced ability to verify, contextualize, or critically assess information. A common example is when individuals mistake satire or hoax content for real news, highlighting a troubling gap in digital media literacy. This decline hampers informed decision-making and can lead to the widespread circulation of false narratives. Collectively, these impacts show that information bias does more than distort news it reshapes how people think, trust, and engage with information in the digital age.

This trend is concerning, especially considering the volume of disinformation proliferating across Indonesian digital spaces. Even tech-savvy Gen-Z users are not immune. Disinformation campaigns thrive when users are passive recipients of content, untrained in digital verification skills (Elmer & Ward-Kimola, 2023).

3.4. Responses and Strategies for Dealing with Information Bias

Despite the challenges, some informants showcased effective coping strategies. A few actively cross-checked news from different sources, followed reputable fact-checking accounts, and consciously avoided media known for bias. These strategies mirror the findings of Hoffman and Wallach (2007), who argue that exposure to diverse viewpoints mitigates the effects of media bias.

Table 4 Response strategies used by informants

Strategy	Description	Observed Benefit
Multi-Source Comparison	Read from at least 2-3 different outlets	Reduced confirmation bias
Following Fact-Checkers	Subscribed to CekFakta, TurnBackHoax	Higher trust in verified information
Media Avoidance	Avoided sensationalist/partisan outlets	Less emotional reactivity to headlines

Fact-checking organizations play a vital role in this ecosystem. Platforms like *Mafindo* (Maqruf, 2021) and *CekFakta* (Indo & Sujoko, 2023) work tirelessly to debunk hoaxes and clarify misreported facts. Knowledge of such platforms empowers citizens to evaluate viral claims critically. Informants who followed these accounts exhibited more confidence in navigating contentious news stories.

Avoidance of known biased outlets, while not ideal as a long-term strategy, serves as a protective measure for users lacking advanced literacy. However, complete avoidance may reinforce filter bubbles if not complemented by exposure to diverse content.

Integrating these strategies into digital literacy curricula both formal and informal is vital. Empowering citizens through structured learning about media systems, political economy of news, and rhetorical analysis can create a more resilient, critical public. Furthermore, policy-level responses from regulators, platforms, and educators must synergize to combat disinformation holistically.

4. Conclusion

This study reveals that analytical information bias has a significant impact on news consumption patterns across digital platforms in Indonesia. With over 77% internet penetration by 2024, digital media has become the primary source of information for the majority of Indonesians. The findings indicate that many users particularly those active on social media and online news platforms tend to consume news quickly, selectively, and uncritically. This pattern increases vulnerability to biased content, especially in forms such as emotionally charged language, one-sided framing, and the blending of facts with opinions. These practices have shaped public perception in an imbalanced way, contributing to opinion polarization, growing distrust in media, and a decline in digital information literacy. While a small portion of users with higher digital literacy has begun adopting strategies such as cross-checking and source verification, general awareness of bias remains low and inconsistent.

The discussion of the findings highlights that the challenge of information bias is not only technical but deeply social and cultural. Respondents often showed a tendency to trust only media outlets aligned with their personal beliefs, creating echo chambers that reinforce preexisting opinions. This underscores the need for a multi-stakeholder response that includes digital platforms, the media, educators, policymakers, and the

public. Building a resilient digital information ecosystem requires integrated efforts: comprehensive media literacy education, responsible and transparent content moderation by platforms, fair and balanced digital regulation, and the promotion of inclusive public discourse. The digital transformation of news consumption is not just a matter of technology it is a structural shift that calls for collective action to ensure the integrity of information and the vitality of democracy.

However, this research is not without limitations. The scope of participants remains geographically and demographically narrow, limiting the generalizability of the findings to the broader Indonesian population. Furthermore, the qualitative nature of the study provides in-depth insight but does not quantify the extent of bias impact across different user groups. Future research should consider adopting mixed-method approaches, combining in-depth interviews with large-scale surveys to better map behavioral trends. Expanding the demographic scope to include diverse age groups and regional contexts would enrich the understanding of how bias operates across digital news ecosystems. Additionally, further exploration into the role of algorithms and digital platform architecture in amplifying or mitigating bias is essential for designing more effective mitigation strategies and promoting a more balanced and informed digital society.

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